

PORTS *and* HARBORS

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Port of Montréal

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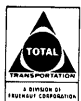
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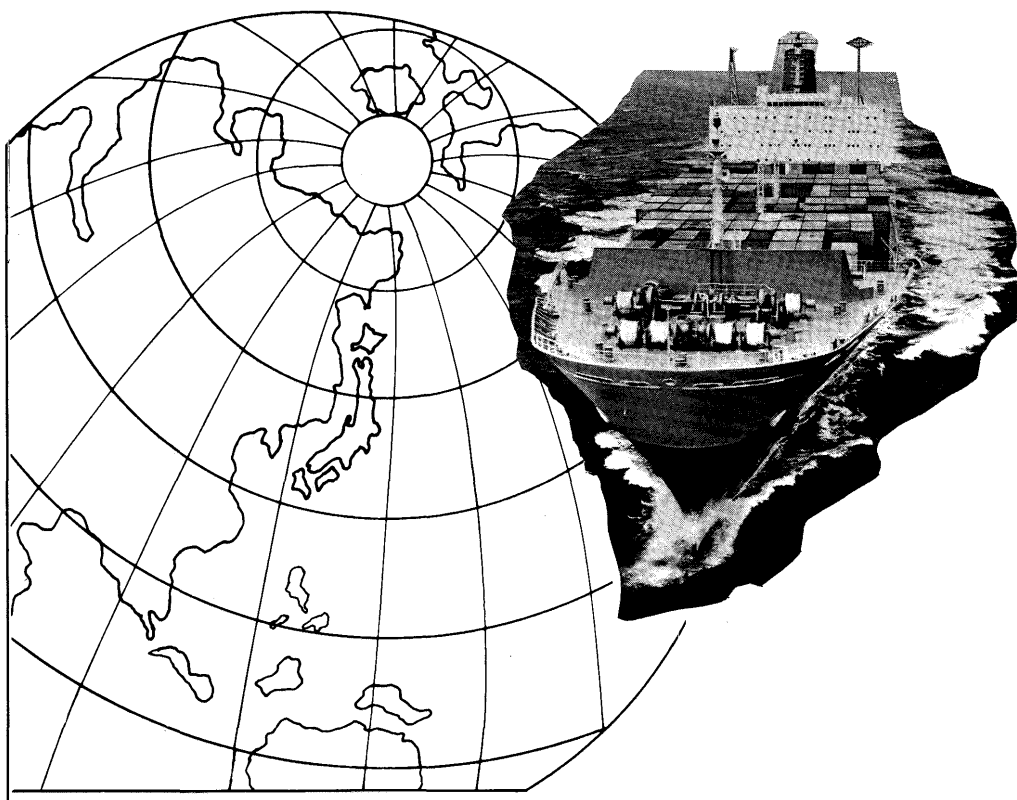
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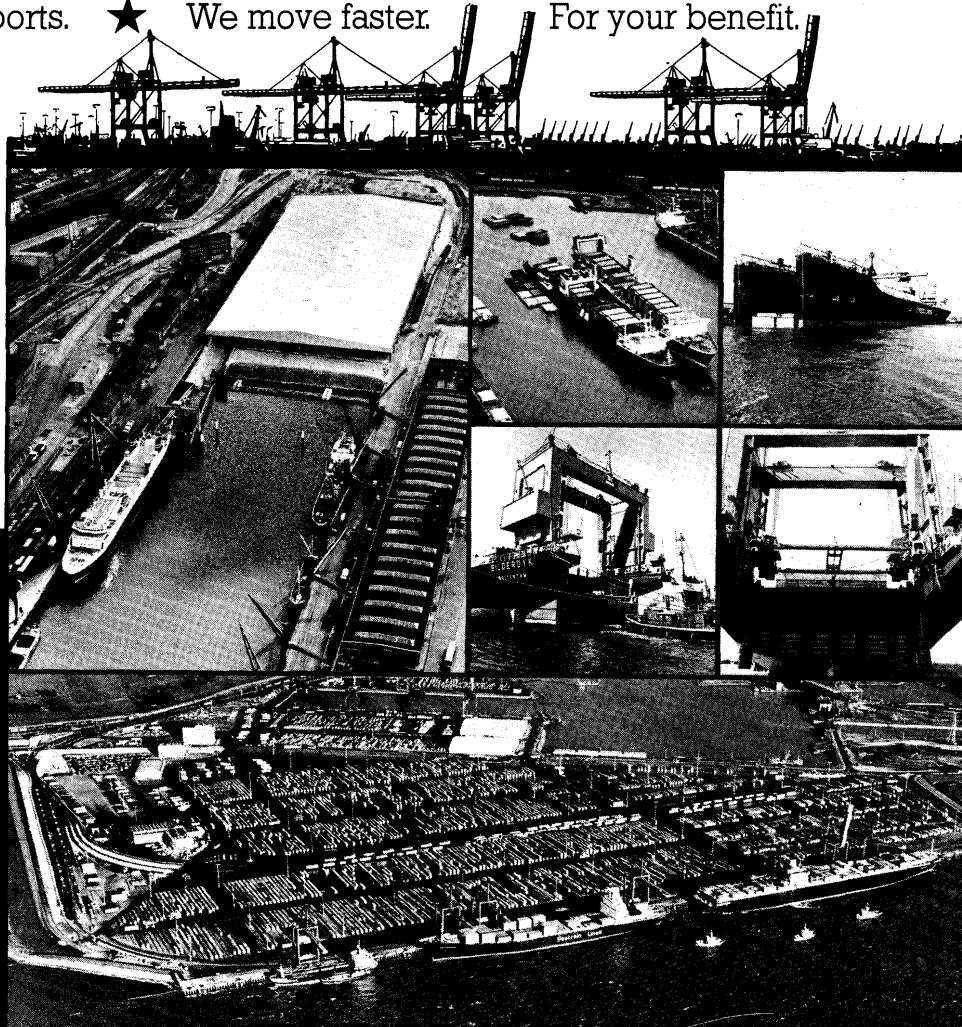


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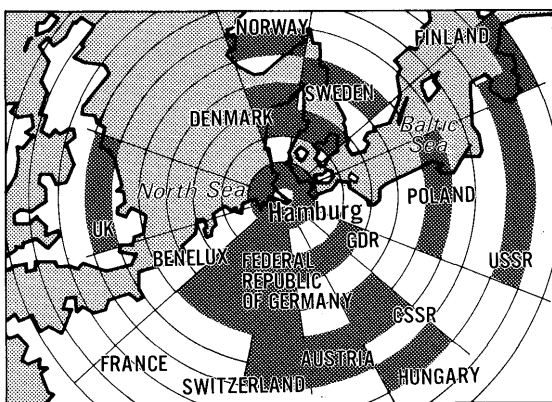


This is Wilhelm Meyer-seen privately.

(He swears by the Free and Hanseatic way of life)

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Editor: Yoshio Hayashi

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October, 1976 Vol. 21, No. 10

CONTENTS

| | Page |
|---|-------|
| IAPH Head Office Announcements | 7~14 |
| IAPH Cooperation with IMCO Questionnaire on Oil Pollution Damage—Our Liaison-man Reports on Latest IMCO Undertakings—Board Approved the Revision of Section 5 of By-Laws—Board Contributes to the Revision of 1957 Convention—Board Approves IAPH Study on Acts of Sabotage and Terrorism in Ports—UNCTAD Studies on Technical Assistance for Ports and Merchant Marines—Port Engineering Training Course in Japan—Visitor—Membership Notes | |
| Topics: | |
| ICHCA's Role in Advancing Transport Technology | 15 |
| N.P.C. Bulletin No. 9—"Port Perspectives 1976" | 18 |
| Vancouver Economic Impact Study | 40 |
| Safe Boarding Week conducted by Panama Canal Company | 41 |
| The Sixth Meeting of the National Association of Foreign-Trade Zones (Charleston, S.C.) | 43 |
| Ports: | |
| Bremen News | 21 |
| Flows of goods in Rotterdam harbours will grow further (Port of Rotterdam) | 25 |
| Port of Long Beach—Pictorial | 28 |
| The Port of Le Havre-Antifer Is Officially Opened | 31 |
| Port of New Orleans Has A Major New Rebuilding Program | 44 |
| PSA Symposium 1976 (Port of Singapore) | 56 |
| Orbiter Probe (International News) | 37~60 |
| The Cover: Port of Montréal, Canada | |

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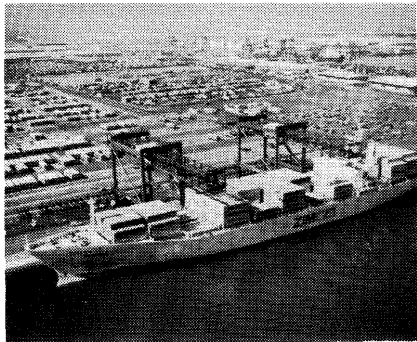
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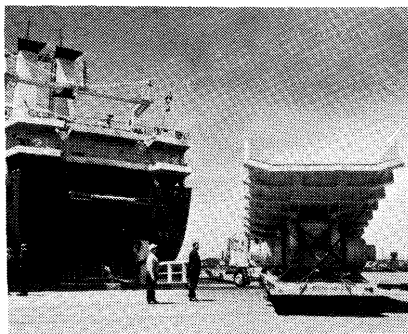
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IAPH Head Office Announcements: Pages 7 ~ 14

IAPH Cooperation with IMCO Questionnaire on Oil Pollution Damage

As reported in the reports on IMCO activity by our Liaison Officer with IMCO, Mr. A.J. Smith of British Ports Authority, the IMCO Legal Committee was deliberating on the regime of civil liability for certain damage not contemplated by the 1969 International Convention on Civil Liability for Oil Pollution Damage. And, the Secretary-General of IMCO, in the light of findings by the Legal Committee, asked those Governments and other interested bodies, including this Association, for information on the matter.

IAPH Secretary-General, based upon the advice given by Mr. Smith, circulated the IMCO questionnaire among members of the Board of Directors for reply, in his letter of August 26, 1976.

Hereunder is the reproduction of the IMCO Questionnaire together with the letter of IAPH Secretary-General. (rin)

No. 8-76/IMCO August 26, 1976
To: Members of the Board of Directors of
the International Association of Ports and Harbors

Dear Sirs:

As you see in a series of IMCO reports appeared in the journal of the Association, the IMCO Legal Committee is now studying the furtherance of the "1969 International Convention on Civil Liability for Oil Pollution Damage", and the study on the coverage as to the "oil" in the Convention is being brought forward to the attention.

The Secretary-General of IMCO, in the light of the necessity revealed by the Committee, decided to solicit further factual information on the matter from Governments and from other interested bodies, including this Association, for the purpose of determining how to proceed in preparing a régime of civil liability for certain damage not contemplated by the 1969 Convention.

Mr. A.J. Smith, our Liaison Officer with IMCO, recently advised me that IAPH members be asked for reply on the matter setting the target date of reply at SEPTEMBER 24, 1976, since the IMCO Legal Committee found it imperative to collect the information as soon as possible so that the matter be placed for deliberation by the members of the Committee.

Now, I would like to ask you to give your kind cooperation with the questions raised by the Committee, and return your answers to the undermentioned address by not later than the above said date, so that Mr. Smith can submit them to IMCO accordingly.

Mr. A.J. Smith, Secretary, British Ports Authority

3/5 Queen Square, London WC1N.3AR, England
Mr. Smith advised that Points 1 and 9 should be answered among others, but your answering to other items would be most appreciated.

I thank you very much in advance for your kind cooperation on the matter.

With my best regards,

Your very truly,
Hajime Sato
Secretary-General

Encls: Questionnaire

IMCO: A1/H/3.05 (NV. 2)

IAPH: No. 8/76-76/IMCO (Aug. 26, 1976)

QUESTIONNAIRE ON SUBSTANCES CARRIED BY SEA AND CAPABLE OF CAUSING INJURY OR DAMAGE RESULTING IN CIVIL LIABILITY

Governments and certain interested organizations are requested to collect and make available to the IMCO Legal Committee factual data and comment in answer to the questions set out in this enquiry.

Background

1. The IMCO Legal Committee is soliciting further information from Governments and from other interested bodies, including inter-governmental and non-governmental entities, for the purpose of determining how to proceed in preparing a régime of civil liability for certain damage not contemplated by the 1969 International Convention on Civil Liability for Oil Pollution Damage.

2. On the basis of data already acquired, the Committee is now examining whether the purpose to be achieved by a new scheme of civil liability might feasibly result from a limited extension of the scope of the 1969 Convention to encompass forms of "oil" not covered by that treaty, possibly followed by the elaboration of a new international scheme regulating liability for damage arising from as yet un-covered risks, and the substances which cause such risks.

3. Among the reasons for studying the possibility of such a two-fold system of extended liability, the Committee is especially aware of three elements:

- The generic differences between the substances for which the 1969 Convention was originally drawn up and many of those for which a new régime of liability might be needed;
- the difference in the forms of damage caused by substances contemplated in the 1969 Convention and those which are not covered by that treaty;

- the inter-relationship between the 1969 Civil Liability system and the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971, which together concern pollution damage connected with commerce in oil but not other hazardous commodities.

4. The Committee decided that it must acquire, on the one hand, further data on the substances (and effects thereof) to which the 1969 Treaty might be extended without departing from its essential function of regulating liability for oil pollution, and, on the other hand, data elucidating the risks and liabilities of maritime commerce in substances different from oil and giving rise to consequences other than marine pollution.

5. The Committee recognized that difference forms of data would emanate from different sources and an enquiry addressed to questions about chemical substances might not elicit a response, for example, from the insurance industry. On the other hand, it wished to make the purpose of its questions clear, and to encourage a comprehensive view of the possible need for an international response to the problems involved. Therefore it has prepared the list of questions which appears below, arranged in three parts:

I. SUBSTANCES AND SCIENTIFIC INFORMATION

II. INSURANCE AND COMMERCIAL INFORMATION

III. OTHER INFORMATION OR OBSERVATIONS

6. The questions have been framed by the Legal Committee with the intention of submitting them to all Member Governments of IMCO and to certain interested bodies named below, which are thought to be in possession of some part of the information needed:

Marine Environment Protection Committee (IMCO)

Sub-Committee on Bulk Chemicals (IMCO)

Sub-Committee on the carriage of Dangerous Goods (IMCO)

Joint Group of Experts on the Scientific Aspects of Marine Pollution

INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS

International Chamber of Shipping

International Chamber of Commerce

International Union of Marine Insurance

European Committee of Underwriters

Oil Companies International Marine Forum

International Association of Producers of Insurance and Reinsurance

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7. The Secretary-General and the IMCO Legal Committee will be grateful for responses to all questions on which the individual Government or body is able to obtain information, and it will also appreciate an early reply in order to pursue its own work programme without delay.

IMCO

A1/H/3.05 (NV. 2)

QUESTIONS

I. SUBSTANCES AND SCIENTIFIC INFORMATION

1. What oils not covered in the 1969 Convention pose a substantial risk of pollution to the marine environment?*

- (a) which of these oils when being carried by sea give rise to serious risk of:

(i) fire, or

(ii) explosion?

2. What substances chemical or otherwise, additional to the oils referred to in 1 above, may pose a substantial risk of pollution of the marine environment?

- (a) which of these substances when being carried by sea give rise to serious risk of:

(i) fire, or

(ii) explosion?

3. What other substances, chemical or otherwise, may pose a substantial risk of fire when being carried by sea?

4. What other substances, chemical or otherwise, may pose a substantial risk of explosion when being carried by sea?

5. What other substances, chemical or otherwise, may pose a substantial risk of toxicity (apart from marine pollution) when being carried by sea?

* The answer to this question is urgently needed by the Committee and should be forwarded to the Secretary-General (of IMCO) even in advance of the completed questionnaire if circumstances so dictate. The period of the last five years may be used for making the determination of volume requested.

IMPORTANT NOTE: For each of the questions above, please describe in detail and in non-technical language:

(a) the seriousness of the risk arising from each substance carried separately or in conjunction with other cargoes;

(b) the circumstances which have in the past or might in the future result in injury or damage from each substance, and

(c) whether the risk is unique to transport by sea or whether it also arises in other forms of transport;

(d) annual volumes carried in respect of each substance by sea.

II. INSURANCE AND COMMERCIAL INFORMATION

6. What substances are considered in commercial and insurance practice to pose special risks when carried by sea, and are therefore subject to special commercial and insurance arrangements?

— what are those arrangements?

— what incidents have occurred which gave rise to those arrangements?

— are there additional customs of the trade in carriage of noxious and hazardous substances and what part do indemnities play?

7. With respect to liability for pollution of the sea resulting from oils not covered in the 1969 Convention, what amounts and levels of insurance can currently be purchased or otherwise be obtained?

8. With respect to liability for either marine pollution, toxicity other than to marine life, or fire or explosion, resulting from other substances (chemical or otherwise) that are carried by sea, what amounts and levels of insurance can currently be purchased or be otherwise obtained?*

* The answer to this question is urgently needed by the Committee and should be forwarded to the Secretary-General (of IMCO) even in advance of the completed questionnaire if circumstances so dictate. The period of the last five years may be used for making the determination of volume requested.

Our Liaison-man Reports on Latest IMCO Undertakings

Mr. A.J. Smith, IAPH Liaison Officer with IMCO, reported on the recent activity of the following five committees of IMCO.

1. Maritime Safety Committee (3rd–7th May)
2. Facilitation Committee (10th–14th May)
3. Marine Environment Protection Committee (24th–28th May)
4. Council (8th–11th June)
5. Legal Committee (28th June–2nd July)

Further reports on the sub-committees on Bulk Chemicals (17th–21st May) and on Carriage of Dangerous Goods (5th–9th July) will be forwarded shortly, he says.

His neatly condensed timely reports on IMCO are much looked forward to.

His reports covering the latest meetings of the five committees follows; (DSG)

1. Maritime Safety Committee

The 34th Session of the Maritime Safety Committee was held in London from 3rd to 7th May, 1976, under the Chairmanship of Dr. L. Spinelli (Italy). As is always the case there was a long list of items for discussion. It is possible, however, to extract from the list and report upon those topics which have specific relevance and interest to

the international port community. The writer will be happy to amplify points arising in the reports as may be required.

(a) Carriage of Dangerous Goods

The Committee amended the International Maritime Dangerous Goods (I.M.D.G.) Code in a number of respects. These included reference to Classes of the Code, accessibility of dangerous goods, carriage of dangerous goods in limited quantities, explosives, packing recommendations.

A new edition of the Code will be prepared by the I.M.C.O. Secretariat in loose-leaf form incorporating the amendments adopted by the Committee in the past and contained in the Supplements 1972, 1973, 1974/1975 and 1976.

To ensure uniformity it was agreed that the approved amendments, revisions and additions to the I.M.D.G. Code should be implemented six months after the new edition of the Code has been published by I.M.C.O., Member Governments are being informed accordingly.

(b) Standards of Training and Watchkeeping

National manning requirements are to be examined by the Committee as also are national required qualifications and experience for the licensing of pilots.

9. If the 1969 Convention were extended to other "oil", would it be possible to develop adequate insurance to cover this liability?
10. How would the insurance market provide for the problems of:
 - large-scale cover for small carriers?
 - the attachment of liability in cases of multiple consignors?
 - harmonization of sea carriage with other modes of transport?
 - the adjustment of premiums to categories of substances and the risks of juxtaposed chemicals in sea transport?
11. If liability were imposed on the cargo, would it be possible to develop an adequate insurance scheme to cover this liability?
12. An indication is desired of the maximum insurance coverage available in respect of claims for damage to third parties by noxious and hazardous substances in sea transport assuming:
 - (a) that liability is placed on the carrier?
\$
 - (b) that liability is placed on the cargo?
\$
13. Of the above two alternatives which provides the wider spread of cover?
14. Would it affect the insurance coverage available for the global limitation under the proposed Convention on Limitation of Liability for Maritime Claims if the carrier, according to a new or extended treaty, were to be held liable up to a certain limit,

in addition to the global limitation?

III. OTHER INFORMATION OR OBSERVATIONS

15. In view of the questions raised in the report of the Legal Committee's twenty-ninth session, are there any other facts or observations which may be relevant to the Legal Committee's consideration of this subject?

Notes from IAPH Secretariat:

Article I of the International Convention of Civil Liability for Oil Pollution Damage provides the following definitions:

1. "Oil" means any persistent oil such as crude oil, fuel oil, heavy diesel oil, lubricating oil and whale oil, whether carried on board a ship as cargo or in the bunkers of such ship. (Paragraph 5)
2. "Pollution damage" means loss or damage caused outside the ship carrying oil by contamination resulting from the escape or discharge of oil from the ship, wherever such escape or discharge may occur, and includes the costs of preventive measures and further loss or damage caused by preventive measures. (Paragraph 6)
3. "Preventive measures" means any reasonable measures taken by any person after an incident has occurred to prevent or minimize pollution damage. (Paragraph 7)
4. "Incident" means any occurrence, or series of occurrences having the same origin, which caused pollution damage. (Paragraph 8)

(c) Standard Marine Navigational Vocabulary

The Committee examined and agreed the final text of the Vocabulary which had been prepared following a period of experimental use and tests conducted in a number of Member States. Some amendments were agreed.

The amended Vocabulary is intended for use between ships and between ships and shore services and the Committee has asked that it be brought to the attention of all Governments, prospective users and maritime education authorities.

An appropriate amendment procedure for the Vocabulary will be considered by the Committee at its next session.

The writer considers that I.A.P.H. can take a justifiable pride in witnessing the successful completion of a project with which its members have been closely associated since its inception.

(d) Collision Regulations, 1972

The Committee approved a recommendation dealing with the visibility of all-round lights prescribed by Annex 1—Section 9(b) of the 1972 Collision Regulations and have arranged its circulation to all concerned.

(e) Regional Harmonization of Buoyage System

The Committee approved the final text of the "Combined Cardinal and Lateral Buoyage System (Red to Port)" and commended it to Member States.

The System, which is intended to be progressively introduced in the N.W. European Area from 1st April, 1977, will be considered at a later date in relation to the development of an alternative System "Lateral System Only (Red to Starboard)", so that Administrations will have the choice of adopting either of the Systems on a regional basis or seek an alternative harmonization of both Systems.

(f) Tonnage Measurement

The Committee considered certain difficulties and problems which might possibly arise when the Convention on Tonnage Measurement, 1969, comes into force in the near future.

The view was expressed that the 1969 Convention should not be amended to take account of certain types of ship such as shelterdeck ships. It was realised, however, that a certain flexibility might well be needed for sometime to come concerning the tonnage parameters in the existing conventions.

The Committee decided to establish an ad hoc group at the next session to deal with the questions raised in more detail.

The next session of the Maritime Safety Committee will take place in London, from 27th September to 1st October, 1976.

2. Facilitation Committee

The 10th session of the Facilitation Committee was held in London from 10th–14th May, 1976, under the Chairmanship of Captain J.L. MacAngus (Canada).

There has for some time been a desire to prepare one aligned declaration for all modes of transport of dangerous goods. Progress towards this end, therefore, can always be greeted with satisfaction.

Harmonization and standardization was brought closer by the Committee's approval of a layout for a Dangerous Goods Declaration, aligned to the E.C.E. Layout Key.

The possibility also arises of the attachment of a Certificate of Compliance to the Dangerous Goods Declaration to meet the requirement of a new Section 18 on the transport of dangerous goods in limited quantities in the International Maritime Dangerous Goods Code.

The Committee considered that an initial preparation of a draft manual on implementation of I.M.C.O. Model Forms (or corresponding documentation) in various countries, would enable it at the next session to determine the value of such a manual and whether it should be further progressed.

The Committee also considered, amongst other things, a detailed outline of a manual on a Maritime Port Operations System prepared by the Government of Canada. On balance, however, it was thought that the elaboration of such a manual would at this stage prove to be an unacceptably excessive charge on available resources. It was therefore left out of the Committee's Work Programme for the time being.

3. Marine Environment Protection Committee

The 5th session of the Marine Environment Protection Committee was held in London from 24th to 28th May, 1976, under the Chairmanship of Mr. P. Eriksson (Sweden).

Between sessions of the Committee there are many marine pollution activities being carried out all over the world and it is the task of the Committee to take note of all data from these activities, pertinent to its discussions. By so doing, the Committee seeks to provide all regions with the best and latest anti-pollution information and procedures. The Committee welcomed, for example, the outcome of a conference of Plenipotentiaries of the Coastal States of the Mediterranean Region on the Protection of the Mediterranean Sea, held in Barcelona from 2nd to 16th February, 1976, which established a Regional Oil-Combating Centre for the Mediterranean in Malta the manning and operation of which would be entrusted to I.M.C.O.

The Committee considered the results of the Acapulco Symposium (held from 22nd to 31st March and reported upon previously) and agreed that the main objectives had been successfully achieved. These were the acceleration of the entry into force and implementation of the 1973 Convention and the 1969 Amendments to the 1954 Convention, and assisting developing countries to assess and deal with problems of marine pollution effectively. The Committee is continuing to pursue both objectives actively.

In the course of discussions attention was drawn to the continuing occurrence of tanker accidents and, in particular, their threat to countries which may lack contingency plans, equipment and trained personnel to respond to such situations. It was agreed however that before regional and global contingency plans could be drawn up it was first necessary for countries to have developed national plans which would provide the basis for cooperative agreements. Arising from this, developing countries were asked to make a written statement of their specific problems in formulating plans so that, at the next session, the Committee may decide how best to deal with these needs.

No clear consensus emerged from the Committee as to whether a proposal for ballast segregation on existing tankers should be pursued. The matter will be considered

further at the next session.

A report prepared by an ad hoc Working Group of the Committee containing draft guidelines on means for ensuring the provision and maintenance of adequate reception facilities in ports (Port 1—Oily Wastes) was considered and amended in certain respects. Final approval of the draft guidelines will be given at the next, session when governments have been able to study them in detail.

The Committee considered a revised draft Recommendation on International Performance Specifications for Oily-Water Separating Equipment and Oil Content Meters. There was an appreciable body of opinion in favour of the view that the revised specifications could not be substantially improved upon until more experience was obtained in this field. It was agreed, however, that Member States should be prepared to adopt the Specifications finally at the next session.

I.A.P.H. members are keenly interested in the Committee's preparation of a Comprehensive Anti-Pollution Manual. It was therefore pleasing to note that there will be an early publication of Section 1 (Prevention) of the Manual. This section will include a note to the effect that it had been prepared on the basis of the 1954 Convention as amended in 1962 and that certain changes would be required when the 1969 Amendments enter into force.

Section II (Contingency Planning) should be finalised at the next session.

Section III (Salvage) may well be finalised at the next session.

Section IV (Methods of dealing with spillages) which was published in 1972 will be updated.

The Committee noted that the Pollution Prevention Code (Oil Tankers) recently published by the International Chamber of Shipping is now open for acceptance by owners and charterers of oil tankers. The Committee has, therefore, requested governments to encourage their oil and tanker companies to accept the Code as soon as possible.

Finally, the next session of the Committee will be held from 29th November to 3rd December, 1976.

4. Council

The 36th Session of the Council was held in London from 8th to 11th June, 1976, under the Chairmanship of Rear-Admiral R.Y. Edwards, (U.S.A.).

There are now 97 Members of I.M.C.O. plus one Associate Member.

Reports from the following Committees were noted and approved by Council and transmitted as appropriate, in accordance with normal practice, to the 10th regular Assembly:—

34th session of the Maritime Safety Committee

5th session of the Marine Environment Protection Committee

28th session of the Legal Committee

10th session of the Facilitation Committee

The substance of discussions at these sessions has been separately reported upon to I.A.P.H.

Council also approved dates for the following Conferences:—

International Conference on Safety of Fishing Vessels
(7th March—2nd April 1977)

International Conference on Limitation of Liability for Maritime Claims

(1st—19th November 1976)

International Conferences to revise the "Unit of Ac-

count", Provisions of the 1969 "Civil Liability" Convention and the 1971 "Fund" Convention

(1st—19th November 1976)

The next session of Council will be held from 5th to 8th October, 1976.

5. Legal Committee

The 29th session of the Legal Committee was held in London from 28th June to 2nd July, 1976, under the Chairmanship of Mr. G.A. Maslov (U.S.S.R.).

Such is the detailed and intensive nature of the work undertaken by the Legal Committee that it has been necessary to limit the number of items to be discussed at this and future sessions.

This session was devoted, in the main, to consideration of future work on Civil Liability for Pollution Damage from Substances other than Oil covered by the 1969 Convention on Civil Liability for Oil Pollution Damage. Specifically, the basis for discussion were the following questions:—

- (a) Whether it was necessary to await the outcome of the Conference on Limitation of Maritime Claims before starting to consider the matter? This was quickly decided upon; it being agreed that the Conference would be assisted by having the Committee's view on the nature, scope and extent of liability in respect of damage arising from the carriage of noxious and hazardous substances, other than oil covered by the 1969 Civil Liability Convention.
- (b) Whether a step by step approach should be adopted, as for instance, extending the 1969 Convention to non-persistent oils? The consensus in the Committee was that it would be desirable to have a comprehensive convention dealing with liability for substances other than oils. A majority, however, thought it feasible to begin by extending the 1969 Convention to oils not covered so far.
- (c) Whether, on the contrary, a new instrument was needed covering all or most of the hazardous substances carried by sea. In this regard the following matters were considered:—

- (i) **The substances to be dealt with in the Convention**

It was not possible to determine the substances until some definite conclusions had been reached on the types of damage to be included. The two subjects were acknowledged to be inter-related and would be considered together whenever possible.

- (ii) **The type of damage to be covered**

The view was taken that the new Convention should also deal, in addition to pollution damage as defined by the 1969 Convention, with damage by fire, explosion, and toxicity of certain noxious and hazardous substances.

- (iii) **The nature of the liability and the party liable**

In this respect the Committee requested the Secretariat and delegations to collect information. An appropriate questionnaire was devised and will be circulated to Member States and certain Consultative Organisations, including I.A.P.H.

- (iv) **Compulsory insurance or other forms of guarantee**

The Committee took no decision on this matter pending the decisions which might in due course be taken on the issues noted above.

The Committee recognised that sufficient information might not be available before the next session scheduled for September. It therefore decided to devote its 30th session primarily to a discussion of the extension of the 1969 Convention by Protocol to non-persistent oils.

Consideration was given by the Committee to the preparations for the 1976 Conference on Limitation of Liability for Maritime Claims to be held in November 1976. The Committee agreed to recommend that substantive consideration of the Convention Articles be used in the plenary sessions of the Conference. The Committee recommended however that a first reading of the draft Articles be held under the simpler procedural provisions normally applicable to Committee proceedings.

Finally, the Committee decided to allocate time at its 30th session for consideration of Section III (Salvage) of a Comprehensive Anti-Pollution Manual, and a Manual on possible intervention under the 1969 Intervention Convention and the 1973 Intervention Protocol both matters having been referred to it by the Marine Environment Protection Committee.

Board Approved the Revision of Section 5 of By-Laws

As reported in the September issue, the Board was asked to vote on the suggested revision of the Section 5 of the By-Laws which had been recommended by the Executive Committee, and the Board at its meeting by correspondence met on July 25, 1976 approved the matter.

The result of the voting was as follows:

| | |
|-----------------|----------------------|
| Affirmative | 55 2/3 votes (89.8%) |
| Not-Affirmative | 6 1/3 votes (10.2%) |

Thus, the subject matter was duly approved by the Board that it should be presented before the members for approval. (Head Office)

Board Contributes to the Revision of 1957 Convention

As reported in the September issue, the Board was asked for views and comments on the subject matter. This office received from the following gentlemen of their views and comments which were sent to Mr. Pages for further steps in presenting to IMCO. This office is so grateful for their kind contribution. (rin)

European Region

Mr. K.K. Budhwar, Co-Ordinating Officer, Traffic & Commercial Branch, East African Harbours Corporation, Kenya, Tanzania and Uganda

Mr. Eigil Andersen, General Manager, Port of Copenhagen Authority, Denmark

Mr. James B. Maxwell, Secretary and Solicitor, Clyde Port Authority, England

Asian Region

Mr. G.B. Page, Chief Engineer, Papua New Guinea Harbours Board, Papua New Guinea

Mr. A.J. Peel, Director, Department of Harbours & Marine, Brisbane, Australia

Mr. Gengo Tsuboi, Vice-President, the Japanese Ship-owners' Association, Japan

Mr. Fumio Kohmura, Vice-President, Nagoya Port Authority, Japan

Mr. Koichi Yada, Director-General, Port of Tokyo, Japan

Mr. Kiyoshi Fujiwara, President, Hanshin (Osaka Bay) Port Development Authority, Japan

Board Approves IAPH Study on Acts of Sabotage and Terrorism in Ports

As reported in the May issue, the subject matter was being studied by Mr. Andre Pages, Chairman of IAPH Special Committee on Legal Protection of Navigable Waterways. He, based upon the endorsement expressed by the Executive Committee, prepared a memorandum on the matter, and circulated from this office among the Board of Directors asking for views and comments on the furtherance of the study, as of July 22, 1976.

In response to the questionnaire, the following gentlemen kindly contributed their views and comments to this office:

American Region

Mr. Charles R. Clark, Director, Transportation and Terminals Bureau, Corporate Representative, Panama Canal Company, Canal Zone

Mr. Ben E. Nutter, Executive Director, Port of Oakland
Mr. Julio Maymi Pagan, Executive Director, Puerto Rico Ports Authority

European Region

Mr. J.P. Davidson, Managing Director, Clyde Port Authority, England

Asian Region

Mr. A.J. Peel, President, the Association of Australian Port and Marine Authorities (From this Association, the matter was presented.) and Director of Department of Harbours and Marine, Brisbane, Australia

Mr. Cheng Tong Seng, Dy Director (General Services) Port of Singapore Authority, Singapore

Mr. F.M. Williams, General Manager, Port of Tauranga, New Zealand

Mr. G.B. Page, Chief Engineer, Papua New Guinea Harbours Board, Papua New Guinea

Mr. K.R. Trueman, Secretary, Melbourne Harbor Trust Commissioners

Replies were sent to Mr. Pages for his furtherance and possible submission to IMCO Legal Committee. This office express thanks to those gentlemen for their kind cooperation on the matter. (rin)

UNCTAD Studies on Technical Assistance for Ports and Merchant Marines

Mr. Gamani Corea, Secretary-General of UNCTAD, in his letter of August 5, 1976 (TD 609 (Q)), asked IAPH for information on the availability of technical assistance for the development of ports and the merchant marines of developing countries, based upon the resolution 24 of the UNCTAD Committee on Shipping which was adopted at its seventh session.

According to his letter, the UNCTAD secretariat is now examining possible methods of collecting information on the above subject from various donor sources, including IAPH. UNCTAD coverage of the subject particularly includes technical cooperation systems furnished by international organizations outside the United Nations systems dealing with;

- i. provision of both expertise, or consultant services or training facilities, and funds in the context of a technical assistance project;*
- ii. provision of financial support for technical assistance projects for which expertise or consultant services or training facilities may be obtained from other multi-lateral or bilateral sources;*
- iii. provision of expertise or consultant services or training facilities under technical assistance projects which may be funded from other multilateral or bilateral sources.*

In response to the request, IAPH Secretary-General sent him the IAPH report on "International Survey of Port Training, Advisory Facilities and Requirements" which was originally prepared by Mr. John Lunch, the then-Chairman of IAPH Special Committee on International Port Development in November 1974 and up-dated in December 1975, as well as the information about the IAPH Bursary Scheme.

For the interests of IAPH members, we reproduce hereunder the coverage sought after by the UNCTAD, for it will give us some ideas about the possible fields of IAPH cooperation with the development of ports of the developing countries to which many of us are concerned. (rin)

I. Possible fields of technical assistance in shipping and ports in the form of advisory, consultant and managerial services

A. Shipping

- (i) shipping economics and policy
- (ii) shipping management and operations and finance
- (iii) shipping insurance
- (iv) transport technology and cargo unitization
- (v) multimodal transport operations
- (vi) maintenance and repair of ships
- (vii) ship measurement
- (viii) safety of navigation
- (ix) ship design and construction
- (x) maritime radio communication
- (xi) maritime salvage operations
- (xii) maritime meteorology and oceanography
- (xiii) hydrographic operations
- (xiv) protection of sea environment
- (xv) carriage of goods by sea
- (xvi) consultation and negotiation machinery
- (xvii) freight forwarding procedures

- (xviii) terms of shipment
- (xix) maritime legislation and regulation
- (xx) training facilities

B. Ports

- (i) port development and policy
- (ii) port administration and management
- (iii) port planning
- (iv) port statistics
- (v) port operations and procedures
- (vi) port pricing and accounting
- (vii) port engineering
- (viii) dredging operations
- (ix) pilotage
- (x) port legislation
- (xi) port training facilities

II. Possible fields of technical assistance in shipping and ports in the form of maritime training

A. Shipping

- (a) Managerial and operational shore-based personnel
 - (i) shipping economics and policy
 - (ii) shipping management and operations and finance
 - (iii) transport technologies and cargo unitization
 - (iv) marine meteorology, oceanography and hydrography
 - (v) maritime legislation
- (b) Sea-going personnel
 - (vi) deck officers
 - (vii) ships' engineers
 - (viii) wireless operators
 - (ix) ships' crew

B. Ports

- (a) Managerial and operational personnel
 - (i) port economics and statistics and planning
 - (ii) port administration and management and operations
 - (iii) port engineering
 - (iv) port legislation
- (b) Port labour
 - (v) port cargo handling operations

Port Engineering Training Course in Japan

The 13th Port Engineering Training Course by the Japan International Cooperation Agency (JICA) and auspice of the Bureau of Ports and Harbours of Ministry of Transport, is now being conducted in Japan starting from August to December.

Mr. Kiichi Okubo, newly appointed Director-General of the Bureau succeeding Mr. Yoshio Takeuchi, at the welcome reception by the port-related organizations, addressed to sixteen participants from thirteen countries that the importance of the ports and harbours was increasing ever more universally and Japan was prepared to extend its support to assist the improvement works of ports and harbours of those countries which had to face with difficulties in the technical aspects.

Sixteen participants, including two lady engineers are from Bangladesh (The Chittagong Port Trust), Costa Rica (Ministry of Public Works and Transportation), Egypt (Alexandria Port Authority), Ethiopia (Ministry of Transport and Communications), India (Bombay Port Trust), Indonesia (Port of Samarinda), Iran (Port and Shipping Organization of Iran), Iraq (State Organization of Iraq

Ports), Malaysia (Johore Port Authority), Philippines (Philippine Ports Authority, formerly Bureau of Public Works), Sri Lanka (Colombo Port Commission) and Thailand (Port Authority of Thailand). (rin)

Visitor

On the morning of August 26, 1976, Mr. Yoshiro Haraguchi, son of the late Dr. Chujiro Haraguchi, the 7th President of IAPH who deceased on March 22, 1976, visited the Head Office and was met by Mr. Masatoshi Kinouchi, Deputy Secretary General and other staff of the Secretariat.

The purpose of Mr. Haraguchi's visit was to convey the gratitude and thanks of Mrs. Haraguchi and those of the family to IAPH members for the warm thoughts and messages of condolences given to them by IAPH members on the occasion of Dr. Haraguchi's death, through this journal.

According to Mr. Haraguchi, the family's graveyard was constructed on the hillside of Maiko cemetery park from where Kobe Port that Dr. Haraguchi loved is seen very well. The unveiling ceremony of his gravestone was held on the 12th of August with attendance of many of his friends.

Mr. Yoshiro Haraguchi is a Director of the Hanshin (Osaka Bay) Port Development Authority, an IAPH Regular member and now lives in Kobe. (TKD)

Membership Notes

New Members

Regular Members

Cyprus Ports Organization
c/o Ministry of Communications
& Works, Nicosia, Cyprus (temporary)
Office Phone: 402126, Nicosia (temporary)
Cable Address: MINCOMWORKS NICOSIA (temporary)
(Mr. Joseph Bayada, General Manager)

Fraser River Harbours Commission
505-713 Columbia Street, New Westminster
B.C. Canada V3M 1B2
Office Phone: (604) 524-6655
(Mr. Scott McLaren, Port Manager)

Johore Port Authority
P.O. Box 317, Johore Bahru, Johore, Malaysia
Office Phone: Johore Bahru-66601-66605
Telex Number: MA 60717
Cable Address: JOHAN, JOHORE BAHRU

Ports Authority of Fiji
GPO Box 780, Suva, Fiji
Office Phone: 312997, 312815, 312700
(Mr. Loh Heng-Kee, Director-General)

Associate Members

Guy Beaudet & Associates Inc. (Class A)
1130 Sherbrooke St. West, Montreal,
Quebec, Canada
Office Phone: (514)-288. 1740
Telex Number: until Nov. 14, '76: 01-26401/from
Nov. 15, '76: 055-61250
(Mr. Guy Beaudet, President)

UNIC CORPORATION (Class A)
Tomin-Kogyo Shinjuku Bldg.
2-8-7, Shinjuku, Shinjuku-ku, Tokyo, Japan
Office Phone: 03-354-4907
Cable Address: SOFTUNIC TOKYO
(Mr. Minoru Takano, President)

INA Civil Engineering Consulting Co., Ltd. (Class A)
Suido-cho Bldg., 22-1 Suido-cho
Shinjuku-ku, Tokyo 162, Japan
Office Phone: 03-816-5571
(Mr. Tomikazu Takai, President)

Tokushu Shunsetsu Co., Ltd. (Class A)
Akiyama Bldg., No. 25, Akefuncho
Shiba Nishikubo, Minato-ku, Tokyo
Office Phone: (03) 591-8411
(Mr. Hisao Kaiho, President)

The Overseas Coastal Area Development
Institute of Japan (OCDI) (Class B)
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Chiyoda-ku, Tokyo 100, Japan
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(Mr. Yoshio Takeuchi, Director General)

Nicholas M. Samaras (Class D)
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Thessaloniki, Greece
Office Phone: 425418, 526221
Telex Number: 41536 Greece
(Port Research Economist and Professor of
Maritime & Port Economics in Macedonian Educational
Organization of University of Thessaloniki)

ICHCA's Role in Advancing Transport Technology

Presented by R.P. Holubowicz, M.Sc. (Econ),
Chairman Executive Board and Chairman of the Council,
International Cargo Handling Co-ordination Assoc.

Given at the meeting of the Spanish National Committee
held in Tarragona, Spain on 26th May, 1976.

On behalf of the President of ICHCA, Mr. Stanley Turner, and my colleagues who are here to attend the bi-annual meeting of the ICHCA Council, allow me to say how pleased we are to be here participating in the Tarragona meeting of the Spanish National Committee of ICHCA. We are particularly grateful to Sr. Ramon Chapa for his kind invitation on behalf of the Spanish Committee for the ICHCA Council to hold its meeting here in Tarragona.

Sr. Chapa has invited me to use the occasion of the presence here in Tarragona of the ICHCA Executive Board and Council to address the Spanish National Committee's members and guests on the subject of ICHCA and the role ICHCA plays in advancing transport technology.

Perhaps the best illustration of ICHCA's role in advancing transport technology is your technical meeting here in Tarragona.

Just as the Spanish National Committee has assembled its members to discuss the problems and, hopefully, solutions to various cargo handling problems, so too do the 23 other national committees of ICHCA call together their respective members to deal similarly with questions of cargo handling, as seen from their particular vantage point.

Thus, we see ICHCA in action at the "grass roots" level, obtaining a cross sectional view of the world of transport, its problems, and proposals for solutions to these problems.

The name of our association is the "International Cargo Handling Co-ordination Association". The operative word in the name is "Co-ordination". What this means is that ICHCA, as an entity does not originate or create ideas or concepts of technology, but rather looks to its members, as represented in national committees, such as yours, to produce the latest thinking in cargo handling technology, and to bring together the results and a consensus by disseminating this information worldwide.

ICHCA does this by maintaining a specialised cargo handling reference library in its Central Office, by publishing an ICHCA Journal—CARGO SYSTEMS, and by holding an international technical conference and general assembly every two years where the subject matter that has been examined by national committees is distilled into technical papers by internationally recognized personalities. At these biennial meetings—the last being held in Florence, Italy in 1975, and the next in Australia in 1977—members from all parts of the world and all national committees gather not only to hear and discuss the papers being presented but, just as important, to meet on a social and professional level their counterparts from other countries and others who are similarly dedicated to the improvement of international transport through more efficient cargo handling.

Technological Advancement Through Co-ordination

One of the best examples of the effectiveness of ICHCA in advancing transport technology is the way containerization, or at least the knowledge about containerization, spread so quickly throughout the world.

Containerization was a subject of many conferences sponsored by the U.S. National Committee of ICHCA throughout the 1950's and early 60's—much before the word "containerization" was even known elsewhere in the world. The proceedings of the U.S. National Committee meetings were dutifully disseminated to the rest of the cargo handling world by ICHCA, and the transport world was soon aware that something fundamental in the way of new technology was taking shape.

While ICHCA does not take credit for discovering or developing the concept of containerization, ICHCA does certainly take credit for recognizing the importance of this concept at a very early stage, and the performing its worldwide co-ordinating role by disseminating information on this cargo handling technique to its members and the transport world at large through the ICHCA Journal, through publication of proceedings, and follow-up with periodic biennial conferences of the Association as a whole and various national committees.

In fact, ICHCA's role in advancing this particular cargo handling technology has, without question, been the high point of ICHCA's role in advancing transport technology during the first quarter century of its existence. If one looks about and examines the impact of containerization on the world of transport, one can quickly see that this is no mean achievement.

The record is full of such accomplishments, and while possibly not as fundamental and far-reaching as containerization, they have all contributed to advancing transport technology. To name only a few that ICHCA's co-ordinating role has assisted in establishing: palletization, packaged timber, prevention of pilferage, development of the "open" ship, marking of dangerous cargoes, pre-slinging of breakbulk cargo, transmodal transportation—I could go on with other notable achievements in cargo handling technology that ICHCA certainly helped to establish as more efficient means of cargo handling, but these examples are sufficient to demonstrate the substantive contribution made over the years by the Association.

To provide you with an idea of how ICHCA goes about its role of advancing transport technology, I would list for you just the principal organizational structure:

- 1) ICHCA establishes national committees, similar to the Spanish National Committee—to operate on a semi-

autonomous basis with the responsibility for focusing attention on cargo handling problems from a local or national point of view.

- 2) The Association is now encouraging regional groupings of national committees as a means of widening the point of view of cargo handling problems and to take in areas that have problems in common. Such groupings, it is hoped, will result in a greater ability to contribute toward the solution to such problems.
These regional groupings of national committees are not meant to supersede the autonomy of national committees but rather to provide the opportunity for co-operation and co-ordination on cargo handling problems or questions of mutual interest.
- 3) ICHCA organizes biennial conferences and general assemblies where the efforts and deliberations of national committees and regional groupings can be projected on a world screen.
- 4) Participates in and is accredited to various international bodies such as Unctad, I.S.O., I.L.O., and I.M.C.O. By its involvement with these international organizations, ICHCA assures that the subject of cargo handling and views of ICHCA's membership are given their rightful place in the consideration given to transport problems by these international bodies.
- 5) Through its special international sub-committees, such as TASC (Technical Advisory Sub-Committee), ICHCA carries out from time to time specialized studies on subjects that are of general interest to the membership. Examples of these studies are the recently issued report on "Major Theft and Pilferage". In the past, ICHCA has prepared and distributed to its members excellent reports on problems of "Condensation in Containers", "Transport of Meat Products" and many others.
- 6) Publishes an ICHCA Journal—CARGO SYSTEMS—which is circulated worldwide putting forward the substance of ICHCA's activities whenever they occur to a world audience.

ICHCA carries out its role in advancing transport technology not only on the more or less impersonal basis of conferences, publications, committees, etc., but also through personal contact and personal services to members. In fact, ICHCA has been described as a "club" to which only those persons having a professional interest in cargo handling can belong and which constitutes a worldwide fraternity which facilitates business and professional contacts and interests.

This personal aspect of ICHCA's role is carried out by:—

- 1) Making available to members the use of the Central Office reference library either in person or through correspondence by asking Central Office for assistance in compiling library references on specific subjects.
- 2) Making it possible for individual ICHCA members to use the "club privileges" that membership in ICHCA brings by providing introductions, arranging visits, and otherwise bringing ICHCA members together on a worldwide basis and on a person-to-person level.

XIIIth Biennial Conference—Australia—April 17-21, 1977

I have tried to describe for you how ICHCA is organized and set up structurally to advance cargo handling technology and now I should like to address myself to what has been accomplished and what more needs to be done.

Quite frankly, some people are asking now that ICHCA has played the role of midwife at the birth of containeriza-

tion and through-transport, is there anything left for an organization such as ICHCA to do.

Our answer to that is there are still many problems to solve and a great deal that needs to be done.

I think I can best illustrate the continuing importance of ICHCA in advancing transport technology by telling you a little something about the theme and subjects to be treated at its forthcoming biennial conference to be held in Australia in 1977. This should make it clear where the Association feels it is still urgently needed and where it can make useful and important contributions to the advancement of transport technology.

The theme of the conference, is "Cargo Handling in a World of Differing Economies".

The theme reflects the Association's recognition of the fact that certain cargo handling technologies which suit conditions in a country with an advanced or mature economy may be totally unsuitable and counterproductive in a country lacking a transportation infrastructure or with a generally underdeveloped economy. Nevertheless, countries of varying types of economy are often trading partners, and the developments in technology of the one country or the lack of action taken on the part of the other can have a serious and substantial impact on the other. Essentially, therefore, the ICHCA's Australian Conference seeks to explore:—

- 1) Cargo handling problems, and solutions to those problems, in trades where the trading partners represent radically different basic economies.
- 2) The application of efficient and productive cargo handling systems adapted to conditions and circumstances in countries with developing economies.
- 3) The impact of economic policies adopted by raw material-producing countries on cargo handling and methods of transport, e.g., the desire to increase the value of basic raw materials by further processing before their exportation.

These major objectives will be dealt with by the agenda on the:

FIRST DAY—

Three papers will be presented looking at handling bulk cargo, breakbulk cargo, and special cargoes.

In the bulk cargo paper we are asking the author to examine the most recent technological developments in moving large quantities of raw materials from the mine head to overseas destinations. Not only will the advanced technology currently in use, such as conveyor belts, off-shore terminals, and self-discharging ships, be described, but we shall be asking the author to explore the implications of economic policy decisions of third world countries, such as increasing the value of raw materials by further processing before exportation. What will be the impact on cargo handling systems and tonnage requirements, for example, the trend towards changing bauxite to alumina, or iron ore into beneficiated pellets or even slurry, or natural gas into chemical feed stock or even chemical products.

Under any circumstances, the technological developments taking place in the handling and transport of bulk commodities will, we believe, have a significant impact on the transportation industry of the world in the next decade.

In the area of conventional breakbulk cargoes, I would point out that ICHCA was originally founded in the early 1950's to deal with the wasteful and inefficient practices of handling this type cargo. In the rush of highly sophisticated

technologies, such as containerization, the fact is often overlooked that a very large proportion of the world's commerce still moves as breakbulk cargo and that there remains many inefficiencies and problems that ICHCA can effectively assist in overcoming.

While palletization and pre-slinging have opened a way for mechanized handling of breakbulk cargo, there is still great scope for improvement in this form of cargo handling. We are looking forward to reasserting ICHCA's lead and influence in continuing efforts to bring greater efficiency to the handling of those cargoes that are classified as "breakbulk".

As the third paper, the conference committee has nominated one on special cargoes, which is defined as any cargo that requires special handling or treatment because of its inherent character. These cargoes include perishable cargoes, such as meat, fruit and vegetables, dangerous cargoes—in and out of containers, and wool and other cargoes requiring specialized transport, care, or handling.

SECOND DAY—

Having treated with developments and problems of cargo handling from the point of view of cargo characteristics, we focus in the second day on specialized techniques of cargo handling:

Ro/Ro, containerization, palletization, and port development and equipment in the context of these specialized forms of cargo handling.

The three papers will be specifically related to the overall theme of the conference. "Cargo Handling in a World of Differing Economies". In the case of Ro/Ro, the growing trend towards this technique is seen by many as the next major technology affecting world transport. Indeed, the very nature of Ro/Ro technology has special significance in view of its adaptability in trades where countries of differing economies are involved.

The second paper will deal with the latest ramifications of containerization/palletization and will be aimed at examining these two forms of unit load with a view to finding ways of "bridging the gap" in traffic between countries of fundamentally different economic structure.

And finally, on the second day, we shall be looking at the trends in port development in the most general and global sense, taking into account again differing economies and the needs of the various countries that are now planning port and harbour requirements of their infrastructure to meet the demands of increasing imports and exports. Particular emphasis will be placed on port developments apart from the specialized container port, with a view to suggesting future trends for newly developing ports to accommodate the ships and cargo handling technology in the years to come.

THIRD DAY—

Carrying out the Association's policy of involving itself in the cargo handling problems of air cargo, a paper has been scheduled for the Australian Conference on the subject of air cargo developments, with the particular view of projecting the size and nature of air cargo transport and developments in cargo handling systems planned for next generation all-cargo aircraft and to assess its inter-relationship and likely impact on seaborne cargo transport.

The conference will be wound up by a paper that will attempt to assess and project developments in cargo handling and transport in the decade of the 1980's, thus

hopefully providing an outline and background for the various interests involved in transport and cargo handling against which plans and proposed developments can be evaluated.

Just as ICHCA's pre-occupation with containerization and unit load technologies signalled the revolution that has taken place in ocean transport in the last decade, so too the Australian Conference and its theme "Cargo Handling in a World of Differing Economies" is indicative of ICHCA's present pre-occupation and in effect signals to the transport world the developments that will likely dominate the world scene over the next ten years.

Without question, the needs of the third world and their inter-relationships with the world of more developed economy will play an increasingly important part in shaping transport technology, and the need for a world force such as ICHCA is more important than ever. For its part, ICHCA intends to play a most active part in disseminating the information and knowledge concerning technology and in co-ordinating the efforts being made to advance transport technology throughout the world.

Having spoken to you as I have about ICHCA and its role in advancing transport technology, I hope I have not left you with a view that ICHCA is some sort of centralized organisation with its own "think tank" and powerful all-seeing bureaucracy that has power to invent new technology for cargo handling and that can co-ordinate and direct the world in carrying these out.

If you have this impression after listening to me, let me at once straighten this out.

It should be understood clearly that this is not what ICHCA is.

ICHCA is you

ICHCA is the Spanish National Committee holding periodic technical conferences and discussing among yourselves transportation and cargo handling problems and solutions to them.

ICHCA is the individual member asking the Central Office about a specific cargo handling problem, and the Central Office advising whether the same problem has been encountered and solved in some other part of the world by another member. ICHCA is the structure of national committees, regional groupings, and individual members throughout the world thinking about cargo handling solutions as part of their profession or business and sharing these thoughts with the international transportation community through ICHCA; ICHCA is the individual in some corner of the earth devising a new concept of cargo handling; ICHCA is the ship operator, the port authority, the naval architect, the freight forwarder, the stevedore, in short, the entire spectrum of disciplines that can affect or be affected by cargo handling technology.

Finally, if ICHCA is anything it is the accumulation of all these things making up the "critical mass" and a world "force" that results in a steady advancement in cargo handling technology and economy of world transport.

That is what ICHCA is.

N.P.C. Bulletin No. 9— "Port Perspectives 1976"

**National Ports Council
London**

"Port Perspectives 1976" was published by the National Ports Council on 24th June, when it was discussed by Mr. Philip Chappell, Chairman of the Council, at a press Conference.

Designed to record some of the achievements of the ports, particularly in response to the revolution in transport technology over the past decade, "Port Perspectives" sets out to show why the development of an expensive super-port on the Continental pattern is neither necessary nor best suited to British conditions. The main article, entitled "Why No Rotterdam?", explains that Britain's port requirements are best met by exploiting our geographical advantages and providing appropriate facilities where they are likely to be most effective at suitable points around the coastline. In that way this country has obtained the best value for money.

Mr. Chappell writes in a foreword: "Ports perform a unique and vital role in the transport chain but, even in a mercantile nation, they are not something with which the average citizen would normally come into contact. The result has been that British ports have their special share of half-truths with which to contend: the nation depends on them, but a glazed look comes into most people's eyes when anyone seeks to debate their role in the economy".

"Port Perspectives 1976" is published as a special issue of the NPC Bulletin. It contains six articles written by Council staff. "Why No Rotterdam?" sets out the 'British solution' to port requirements; other articles cover specific topics, i.e. the role of the smaller ports, economic and technological forecasting, unitisation and operational research, finance, and the human factor. There are also two articles by outside contributors, Mr. G.W. Hollwey, Managing Director of Bell Lines Limited, in support of the view that size is not necessarily the best measure of a port's effectiveness, and Mr. J.H.H. Gillespie, Managing Director of the Port of Tyne Authority, who explains how that port has adapted to change and in particular to the decline or disappearance of two of its most important traffics, coal and iron ore.

This special edition of the Bulletin "Port Perspectives 1976" is published to coincide with the Council's Annual Report: it would be pointless to try and summarise carefully written articles and this covering statement does no more than point to the themes of each article and emphasise how they may be drawn together.

In looking at British ports, I suggest there are four basic questions to answer:

1. Why does Britain need ports? Because Britain is an island and not even remotely self-sufficient in terms of the needs of its population; but because Britain is an island, there is no reason to assume that the king of port facility construction policies followed by nations competing with one another to serve a very



Mr. Philip Chappell

large Continental hinterland are necessarily appropriate for us.

2. Has Britain invested enough in ports? In real terms, as is clear from our Annual Report, new capital investment in ports is at its lowest level since 1962, the year of Lord Rochdale's Report. But this is not necessarily a bad thing. The situation today is very different from 1962, when there was a huge backlog of necessary work waiting to be done, and a substantial programme for investment in modern facilities was vital. Where new investment in the 1960s was very much a "catching up" operation, investment today is more a question of "topping up" to keep abreast of developments in methodology and changing patterns of trade.
3. Should Britain have a super-port? It is a main theme of the Bulletin that the British solutions are well adapted to our economic geography, our size and trading patterns, and our need to ensure that investment resources are consumed only in the most efficient manner. The result of these solutions is that Britain possesses a heterogeneous group of ports, with differences in organisation and trading patterns, but each capable of responding to different local and national needs. And we tend to forget that at Amlwch or Hunterston, for example, we now have oil and will have ore import facilities that will be able to receive vessels bigger than any now afloat or planned. In an age devoted to the environment, is it a good or bad thing that the effect of the dispersal of ports is that they impinge less upon the senses?
4. Do the British understand seaports? Clearly not, if the exaggerated criticism based on inadequate data represent the sum of British understanding. We certainly do not pretend that there are not major problems remaining—almost inevitably in an industry where dramatic transport changes over the past

decade have involved traffic transfers and changes in port organisation, labour requirements and finance, probably on a greater scale than in the preceding century. It is the aim of this Bulletin to put these criticisms into perspective, to inform generally and to stimulate discussion. Some say we have too many ports (but which would they want to close?) that we have over-invested (but what do they suggest has been built that should not have been built?) or that we have under-invested and our ports do not serve the needs of industry (but what do they suggest should now be built to meet actual requirements of customers?). Our argument is that the need for ports is rooted in economic situations and in that context Britain has a unique natural advantage to exploit. And we hope, above all, that our arguments will stimulate discussion not only among individuals who work in ports, but also among those for whom ports are the "necessary hiccough", shipowners, shippers, consumers and the public generally.

The British Solution

Our theme is perhaps summed up in the titles of two of the articles—"Why No Rotterdam?" and "Least Port is Best Port". Two titles which did not survive the final proofs—"Small Can Be Beautiful" and "How to get a Bigger Bang for your Buck"—provide further clues as to our thinking. The refreshing forthrightness of one of our outside contributors, Mr. George Hollwey, of Bell Lines, who describes a port as a necessary hiccough in the smooth flow of goods from producer to consumer, does put us firmly in our place, although we can take some comfort from the fact that he at least considers ports to be "necessary".

The real point is that while the development of the giant ports of Continental Europe makes sense for Continental conditions where the ports of several nations are competing for the same traffic, this is not the best answer for Britain. In our conditions competition between ports is, as Mr. Hollwey points out, a "bit of a red herring"; our solution has been a "dispersed pattern" of ports, using our geographical situation to best advantage to create what is the most cost effective system of ports for Britain.

It is worth considering what would be required to produce a port of Rotterdam proportions in Britain. If the tonnages of the Port of London and the Medway Ports Authority were combined, and to this added the annual oil traffic through Milford Haven, the total would be around 130 million tonnes. A port of this size would be approaching the Rotterdam league. But what would we have gained? As traffic for the Medway ports already passes through PLA waters, counting together the traffic of the two authorities would change no economic reality, only the way the traffic was counted. As for Milford Haven, this has been developed, quite deliberately, as our major oil port, taking advantage of the natural deep-water harbour to cater at minimum capital cost for the modern giant oil tankers. Would it really have made sense to have provided such facilities at one of the major ports, less well endowed by nature to accommodate these giant ships, just to produce a British port more like Rotterdam, and with all the environmental problems of a super-port? One could ask the same question about any of the other ports which have shown remarkable growth over the past ten years. Is it right that Felixstowe should have developed as it has? And why have the ports showing the most rapid growth tended to be

those which historically were regarded as less important—Southampton, rather than Liverpool; the Tees, Immingham and Dover, rather than the Clyde or Tyne?

The answer is that in this way Britain has obtained the best value for money. By establishing very precisely what was wanted, and then seeking out the cheapest way of supplying it, we have got a "bigger bang for our buck".

The Lesser Ports

A recurrent theme in the Bulletin is the fact that ports are a "cost component" in a total transport system. Users naturally seek a least cost solution, and will favour a port which provides that solution. Britain's geography allows it to have many ports, so enabling ships to deliver cargo near to destination and take the best advantage of sea transport, which is still the cheapest form of transport per ton mile.

This is one reason for the success of ports like Southampton, Tees and Immingham. It also helps to account for the growth of many of the smaller ports over the past decade. In 1965 the 15 major ports identified by the Rochdale Committee had about 80% of Britain's total foreign non-petroleum traffic. In 1974, although the tonnage they handled was up by 3 million, the nation's total tonnage had increased by more than 23 million, most of which was routed through the smaller ports, whose share rose from 20% to 33%.

It is important not to draw facile conclusions from such figures. Not all the major ports have lost traffic, neither have all the smaller ports gained traffic. Again, tonnage is not the only, or even necessarily the most important, measure of performance. An increase in tonnage is not very relevant unless accompanied by an appropriate increase in revenue; indeed, some ports have improved their revenue while their tonnage has declined by concentrating on more profitable types of cargo.

Adapting to Change

One problem which most ports have to face, sooner or later, is the need to adapt to changing traffic patterns. The outstanding example in this country has been the coal ports. Many British ports were literally built for the coal trade, and the decline of that trade has serious consequences for them: some have closed, others have adapted to the changed circumstances and sought to attract other trades.

On the Tyne, for instance, coal and coke shipments have fallen from a peak of nearly 22 million tons in 1923 to 2 million tons in 1975. Mr. Gillespie's article sets out how the port has reacted, not unsuccessfully, to this loss of coal traffic, and to a second, more recent blow in the loss to the Tees of the important iron ore traffic which until 1975 provided a quarter of the port's revenue. As Mr. Gillespie writes: "We must learn to live with the changes which are taking place all around us and will continue to take place".

What is Big?

In the context of ports, to ask the question "What is big?" is a question not so much of semantics as definitions. In Britain, if we use physical size or value of cargo or labour employed as the basic criterion, London is our biggest port; if simple tonnage throughput is the yardstick, London has been surpassed by Milford Haven. Hardly a fair comparison, since Milford Haven is so specialised; what really matters is how well a port caters for the kinds of cargo it seeks to attract. In a competitive situation it is relative throughput

at a given cost that is most significant. What has now become the classic example is the unitisation of general cargo. With deep-sea container berths it is usual to speak of the "factor of ten"; one such berth has the theoretical capacity of ten conventional berths. But unitisation is proving to be a field in which ports are finding that it is well worth their while to seek out ways of achieving the "biggest bang for their buck". High throughput cranes on a deep-sea container berth are each capable of doing the work of 20 cranes on a conventional berth, but they are very expensive—currently they cost £1 million each—and if they are not likely to be fully utilised the port might do well to consider one of the cheaper cranes which are well able to handle 200,000 or 300,000 tons p.a. in containerised form.

Using such equipment a physically "small" port is capable of achieving high throughputs. Even higher throughputs for a modest outlay are possible by roll on/roll off operations. Two examples at neighbouring South Coast ports may be cited. First, Folkestone, where dry cargo traffic increased from 15,000 tonnes in 1965 to 491,000 tonnes in 1974 as a result of the construction on a single roll on/roll off berth. Second, Dover: this is, on a commonsense basis a "medium" port, whether in terms of area, size of ship that can be handled, or labour employed. Yet Dover is by far the most important passenger port in the country and, thanks to the exploitation of the roll on/roll off system, is also the leading British port for unitised cargo (over 3 million tonnes of foreign dry cargo in 1974).

A further example of how "small" can be "big" in terms of throughput is the new single-point mooring for giant oil tankers at Amlwch, Anglesey, which will be very small indeed compared with the traditional array of docks needed to handle large tonnages of materials, but nevertheless will have a throughput of many millions of tonnes of oil.

Transshipment

It is customary for those who lament the absence of a super-port in Britain to suggest that this will result in our being reduced to the status of an offshore island relying on cross-Channel feeder connections with the big Continental ports for our deep-sea trade. The contrary point of view is forcefully stated by Mr. Hollwey: that if the quickest, cheapest and safest route for British cargoes entails transshipment, then this is the best answer for the British economy.

We have tried to assess the extent to which transshipment does occur. Because of the method of recording traffic currently used by H.M. Customs, this is difficult, but a study of the available statistics indicates that transshipment only accounts for a small proportion of British trade overall, but it is important in the import trades, most notably grain. Grain is transhipped on a large scale and in the Council's view this is likely to continue in the long term, not because Continental ports are bigger than ours, but because the Continental land mass, and population, are much bigger than Britain's, providing a market for grain of sufficient size to justify shipment to Continental ports in the largest vessels and transshipment thence to Britain of a portion of the cargo as the most cost-effective solution. Existence of a British super-port would not affect that solution.

Our conclusion from the statistics is that they do not show consistent process of cause and effect, but much more obviously conform to a large collection of least-cost

transport paths adapted for the particular circumstances of each system.

Optimising Performance

In the search for the most cost-effective solution we do not reach the end of the road when we determine what type of facility, and its location, is best suited to our particular requirement. We still have to ensure that the resources we provide are utilised in the most effective way. Here operational research is an invaluable tool, and an example of the research sponsored by the Council is the container berth systems study described in the fourth article which has aroused great interest among port operators not only in Britain but internationally. It is also a good example of the benefits of a co-operative approach—undertaken with the active support of the British Ports Association and the participation of four major port authorities with substantial experience of operating deep-sea container terminals.

Forecasting

The latest of the Council's forecasts to be published relate to the UK's foreign trade to 1980 and 1985. It will be seen from the Annual Report that the recession in 1975 resulted in a sharp fall in total traffic; however, with the anticipated recovery we expect, using 1975 as a base, a growth rate for all foreign trade of 4.7% per annum up to 1980, and 3.2% thereafter to reach an annual total of 335 million tonnes by 1985, half of which will be fuel traffic.

The fortunes of individual ports will be affected by the changing pattern of the nation's trade. The fall in the proportion of trade accounted for by the major bulk commodities, the loss to competitors of some of our traditional deep-sea markets, and the enlargement of the EEC have combined to produce a major shift in the geographical distribution of our trade. Between 1966 and 1973 the EEC's share of UK non-fuel trade increased from 22% to 31%. The forecasts indicate that this trend will continue, albeit less sharply: by 1980 the Community share of trade is estimated at 37% and by 1985, 39%.

Ports People

The drive for greater cost effectiveness, resulting in the development of capital intensive high-throughput systems, has had as an inevitable corollary a reduction in the number of men which ports need to employ. In the past ten years the total number of employees has dropped by 40%; there are 32,000 registered dockworkers compared with 62,000 in 1966, and the number of other employees in the industry fell in the same period from 62,000 to 42,000. (The latter figure included some 3,500 men engaged on cargo-handling at non-Scheme ports). It seems likely that the next five years will see a further significant loss of jobs in the industry.

It is worth quoting Mr. Hollwey again on this. He writes: "Ports do not exist in order to provide employment for their workers, or careers for their managements though it is absolutely vital to their smooth running that long term stable conditions of good employment are developed for their people".

Conditions of employment are a matter for collective bargaining through the National and Local Joint Councils for the Port Transport Industry and the National and Local Dock Labour Boards. I do not intend to trespass on their preserves here. But in the matter of long-term stability the

Council are involved to the extent that their work on traffic forecasts can assist those responsible for planning future manning levels. It is impracticable to make precise forecasts of manpower requirements on a port by port basis, but it is certainly possible to produce reliable indications of trend and orders of magnitude to assist employers and Dock Labour Boards in developing their own plans, which must also take account of such factors as age distribution, wastage rates, and differing skill requirements.

Paying for Ports

Because ports have to carry relatively high fixed costs, they find it difficult to adjust to reductions in traffic such as those experienced in 1975: the essential infrastructure has already been constructed; cargo handling equipment has been provided and must be maintained; docks and river channels must be dredged. Port managements cannot quickly reduce these costs to cope with revenue losses.

The immense changes in their operating environment over the past decade have had substantial financial implications for the ports. Wages and materials bills have increased not so much steadily as at an increased pace. Replacing port assets becomes a problem of nightmare proportions when every indication is that technology changes so quickly that the physical life of assets is far longer than their economic life, while new works cost very much more than they would have done even a few years earlier.

For some time, in collaboration with the ports, the Council have been considering ways and means for strengthening the financial position of ports. Attention has been concentrated upon two main areas—overall financial objectives, and charging policy. An agreed memorandum on financial objectives, based on a cash flow approach, was published last year, and more recently recommendations on charging policy have been circulated to ports.

Bluntly the fact is that it is no longer possible, as frequently happened in the past, for the ports to see themselves, or for the community at large to see the ports, in terms of an industry which basically should do no more than “break even” taking one year with another. In modern times there has to be a surplus, maintained in real terms against inflation, adequate to enable the industry to function effectively.

For many ports that will mean an increase in charges. But the port industry is tiny by public sector standards and in the national context the additional cost of maintaining the health of the industry is minute. Even an overall increase of 25% in the gross revenue of ports would amount to less than one tenth of one per cent of the gross domestic product.

24th June 1976

Bremen News

Bremen International

• Nadir of Crisis Overcome

Bremen, 24.5.76 (BremIn). Various indications point to the sole having been reached of the severest international shipping crisis since the end of the 2nd World War and that, although far from covering expenses, a slight initial improvement for 1977 in the tanker-rate market is nevertheless impending, which will continue through 1978 and so lead to normalization of circumstances years earlier than 1985, which was, at first, the fear in many quarters. This is the opinion voiced by the director of the Bremen Institute of Maritime Economics, Dr. Hans Ludwig Beth.

The flexibility of international shipping has been underestimated. The tanker owners reacted sharply to the crisis caused, as early as 1973, by an excess in the volume of newbuildings and accentuated by boycott action, by crude-oil price increases of up to 300 percent and by the general recession. “17 percent of world tanker tonnage was laid up, i.e., over 50 million tdw. The moth-balling process is continuing and will extend to affect some 18 to 19% of the total tanker tonnage. Simultaneously the high tanker-orders volume has suffered cancellations to the extent of 56 million tdw and some 13 million tdw old and medium-sized tanker tonnage have been scrapped—alone 5 million tdw in the first 1976 quarter; which is again 20 percent over that for the last quarter of 1975. Steel scrap prices are rising; 12 million tdw are expected to go for scrap in both 1976 and 1977. Lastly several tankers were temporarily re-deployed or converted (storage vessels, drillingships, grain-trade). These radical measures plus the, once again, increase in crude-oil consumption—after the 11 percent decline in the transocean carriage of crude-oil in 1975—are having an effect. In western Europe both France and West Germany are already consuming additional crude-oil, whilst the consumption-increase forecast for Japan is 6%—and that for the USA importation-increase is for 10%. Additional utilisation of lengthier transport routes, resulting in an over-proportional increase in demand, should call a halt to falling-rates and lead subsequently to a certain degree of stabilization and so, finally, to a turn for the better in the tanker market. The phenomenon that a poor market (tanker) infects others (grain trade) also applies in reverse. World economy is again tending upwards. Experience has shown that shipping feels the effects some six months afterwards”.

Bulk trading and tramp-shipping are also suffering under declining rates, being partly ‘infected’ by the tanker-shipping, and so have laid up 2 million tdw. But, says Beth, “dry-commodity bulk-shipping is 2/3rds dependent upon steel production (ore, scrap, coal, etc.) and this sphere should recover more rapidly in the train of the general economic revival. Following a forerunner phase in 1976, better rates are already to be expected in 1977, although admittedly still being retarded by the increased tonnage offerings from shipowners who have ordered bulk-carriers in place of the cancelled tankers”.

And liner shipping? Beth: “General cargoes also

declined internationally in 1975. True, the rates held, but costs increased and, with rates of below costs-level, the Comecon fleets worsened the market, already weakened by increased tonnage offerings. Additional general cargo transports (conventional, containerized and lash) will ease, but not solve the problem completely".

All in all, Dr. Beth is optimistic. "The slow economic recovery will still be borne mainly by consumption. The pace will only quicken when investments set in . . .".

● Premier German Port for USA Trade

Bremen, 24.5.76 (BremIn). Three official delegations visited the USA in May 1976: The President of the Senate of the Free Hanseatic City of Bremen, Burgomaster Hans Koschnick; President Dr. Dieter Klink and the presidency of the Bremen parliament with its political leaders, plus a group of journalists—and Bremen's senator for ports, Oswald Brinkmann, with a port delegation. Bremen is Germany's most significant port for the USA trade. Here it was that the container trade was opened, on 5.5.1966, and the lash-trade across the Atlantic on September 1st 1970. 250 American ships call annually at Bremen and Bremerhaven.

"Acknowledge Existence Interests of Developing Countries"

In any event, the 'prize pieces', says Grunenberg, will fall to the countries like the USSR, USA, Canada and Australia, which command an enormous mainland, a very extended coastline, powerful industry and large reserves of raw materials. Other countries, however, either have a long coast and no industry, or a highly developed industry and no coastline, or none worth talking about. "The Federal Republic of Germany itself, for instance, promotes only 1 percent, but processes 10% of the earth's raw materials; has only a short coast on the North and Baltic seas, plus inland lakes, but a most efficient industry. The opportunity is given here for trustful cooperation with mutually complementary partners. West Germany has to acknowledge the existence-interests of partners requiring stable and guaranteed raw-material prices and an inclination towards increased exports of semi-finished products; whilst the partners must appreciate that countries such as the Federal Republic of Germany can only offer their capital, industrial and technological assistance on the basis of mutuality and equal partnership—with possible minority holdings in opening up fallow-lying food and raw-material sources. Bremen has already been operating on this basis, on the tobacco sector, for 17 years with Indonesia, to the considerable advantage of both sides. The recent German-Icelandic fisheries treaty counts also as a model for wise counter-balancing of interests".

Seek Chances—Offer Chances

"There are only very few nations—for instance in applied ocean research or deep-sea mining—which possess the relative technology and necessary know-how. They should cooperate with others in opening-up and exploiting resources for mutual benefit".

● Increased Handling Once Again

Bremen, 24.5.76 (BremIn). The tendency continued in April and May 1976 of the slight (1.7%) initial increase in cargo-handling of the first quarter of 1976 as compared with the last quarter of 1975.

● Coffee important trading item

Bremen, 14.6.76 (BremIn). The coffee-trade importance is greatly underestimated. Among the, in value, most important world trading commodities, coffee takes no less than second place behind mineral-oil. The USA, the Federal Republic of Germany and France rank as the main coffee importing countries in the world.

Of the total 6.2 million, 60-kg, bags imported by the Federal Republic of Germany in 1975 (1974: 5.4 million, 1973: 5.7), more than 3.3 million passed through Bremen (1974: 2.7, 1973: 2.6). This represents an increase over the 1975 recession year of 600,000 bags, or 22%. The manner in which Bremen's coffee roasting firms were able to extend their leading position in 1975 is reflected 'officially' in the West-German tax takings. Of the DM 1.27 milliards (1.2 in the previous year) collected by Bonn in coffee taxes in 1975, nearly DM 580 millions (506 in previous year) were levied from Bremen. This is 45.7% of the total (42.5% in previous year); whereas Hamburg participated with 24.5% (26.4%) and North-Rhine Westphalia with 9.3% (10.4%).

Columbia in 1975, with 1.67 million sacks (1974: 1.36), again stood well to the fore of the countries exporting coffee to West Germany, ahead of Salvador, with 719,000 bags (694,664) and Brazil (up to 1973 one of West Germany's main suppliers) could only partly recover from its 1974 reverse (252,205 bags) with 479,000. Then came Guatemala with 442,000 bags (406,370), Kenya with 374,000 (as against 332,858 in 1974) and the Cameroons with 250,169 bags (262,173).

1975 was marked by an unexpectedly sharp decline in green-coffee prices, reaching its nadir at the end of April and—following severe frost damage to the Southern Brazil coffee plantations (the largest in the world)—a rapid price increase occurred within a period of a few days in mid-July, to a subsequently steady level.

● New Profession: Transport Engineer

Bremerhaven, 14.6.76 (BremIn). Up to now each organization went its own way—the most favourable transport route over land, sea and air, the securest form of packaging, the most advantageous legal protection and the best insurance arrangements etc., being determined for the particular consignment, with or without electronic aid. Now the specialists so engaged in industry and economy, transport and traffic, in the ports and shipping companies, forwarding agents, insurance firms, air-transportation undertakings etc., will have a 'proper profession': Economics Engineer for Transportation, or Transport Engineer, for short. Bremerhaven has already been training general traffic specialists for more than a century. Now The College of Science and Technology in Bremerhaven in March 1976 commenced training the first 30 Transport Engineers in 6 terms of theory and practice. Later there are to be 200 student places here for the new all-round transportation specialists. There is considerable interest. A questionnaire to some West-European universities revealed that such specialised transport engineers are also to be trained shortly in England.

● The White Fleet of a Thousand Reefer Ships

Bremen, 14.6.76 (BremIn). Of the 1044 refrigerated ships of the international merchant marine, having 5.525 million GRT and 5.926 mil. tdw., flying 62 flags: 264 with 1.462 m. GRT/1.321 m. tdw. belong to the Soviet Union; 128 with 1.155 m. GRT/1.374 m. tdw. to Great Britain; 91

with 296,000 GRT/372,000 tdw. to Japan and 41 with 252,000 GRT/310,000 tdw. to the Federal Republic of Germany, followed by the cheap flags of Liberia (42 ships), Panama (41) and Greece (40). The list continues France—38; Spain 29; Holland 28; Sweden 25 and Norway with 20 ships. The remaining 257 ships are shared by a further 50 flags (Source: 'Statistik der Schifffahrt' from the Bremen Institute of Maritime Economics).

● 53 Container Lines Run to Bremen/Bremerhaven

Bremen/Bremerhaven, 21.6.76 (BremIn). Consul Gerhard Beier, chairman of the largest German port operating company, BLG, was there from the start, i.e., as the large American shipping company, Sea-Land Service Inc., was—as the first—planning Atlantic container movements and was looking around for European port partners. The Europeans hesitated the more so as most American shipping experts ten years ago reckoned on the metal-boxes securing only a one or two, or at the most five, percent share of the total general-cargo movement. Beier saw it differently and Bremen, as the first German port at that time, took the plunge. Then, on May 6th 1966, the first container ship of Sea-Land in Bremen, the mv "FAIRLAND", discharged the initial 98 metal-boxes. In the meantime this American shipping company has alone discharged over 400,000 of these silver-boxes in Bremen and, in particular, Bremerhaven—and today 26 full-container and 27 semi-container lines call at these ports. Bremen has invested DM 400-millions in the new transportation system, with milliards having been put into the West-German inland container trade and further milliards into the shipyard industry, particularly in Bremen, for constructing container-ships of the first, second and third generations. The container share of the general-cargo increased and increased between the industrial nations, from 0.8 to 4.5 and 11.8, to 16 and then to 22.6 and now already—to 25.6 percent (3.5 million tons annually in Bremen and Bremerhaven) is continuing to increase and has meanwhile also begun to involve the developing countries. Shortly container lines will sail from Bremen to the Near-East, to Central-America at the end of 1976 and to South Africa in mid-1977.

Consul Beier: "Furthermore, as with the container trade, so was Bremen the first German port to become involved with the Lash trade across the Atlantic and if, today, all Lash-lines are also running to Bremen there is a natural reason for this. Above all, here, one does not only observe all the changes occurring in the market situation, but also immediately re-acts to same—thanks to the flexibility on the investment sector. To this is added the first-class individual service of a port organisation with long and global experience, with carefully trained personnel, as well as something for which we cannot claim credit, but which is advantageous for the ships, equally for all ships as well as for the port-group itself: namely, the most advantageous of geographical positions, both from the sea angle and from that of the hinterland. Bremen is just simply unique".

● Modern Transportation Systems Remarkable Stability

Bremerhaven, 21.6.76 (BremIn). In the severe recession of 1975 the modern transocean transportation systems, in the experience of Bremen and Bremerhaven, proved to be astonishingly stable in respect equally to the container, the lash and the roll-on/roll-off trades.

Container Trade Development of Port-Group Bremen—Bremerhaven from 1966 to 1975

| Year | Total Number | In 20' Units | Weight in Tons | Container Share of General- Cargo in % |
|------|-----------------|-----------------|-------------------|---|
| 1966 | 8,335 | 16,670 | 72,462 | 0.8 |
| 1967 | 35,358 | 51,258 | 318,310 | 3.3 |
| 1968 | 46,873 | 69,848 | 464,553 | 4.5 |
| 1969 | 73,334 | 118,001 | 822,129 | 6.9 |
| 1970 | 112,191 | 194,812 | 1,384,817 | 11.8 |
| 1971 | 145,410 | 243,951 | 1,836,622 | 16.0 |
| 1972 | 189,635 | 322,331 | 2,443,273 | 19.7 |
| 1973 | 232,240 | 394,840 | 3,041,404 | 22.2 |
| 1974 | 251,202 | 420,166 | 3,393,373 | 23.3 |
| 1975 | 251,535 | 409,791 | 3,186,978 | 25.6 |

● German's Largest Container Terminal Optimistic

Bremerhaven, 21.6.76 (BremIn). Confident optimism is prevailing in Germany's largest container port, relative to the future developments for the large silver-boxes. This independent-of-tide terminal, with its 1.7 km quayage, 780,000 sq.m. of storage and operational areas, its 9 (shortly 12) container-bridges, 55 van-carriers and tractor-equipment, as well as two packing-centres of 6,500 sq. metres each, is ideal, even for the largest of container ships, as also the so-called 'third generation' units can approach these ports to within but a few miles still at top speed. Besides enduring only short approach-times the nautical risks are also lessened due to closed-water stretches not having to be navigated.

● Containers Also on West-German Inland-Waterway Vessels

Bremerhaven, 21.6.76 (BremIn). In May 1976 the 1,600 GRT "Graciela", of the 'Karl-Gross-Container-River-Line', commenced container trading on the inland-waterway route: Ludwigshafen-Mannheim-Frankfurt-Mainz-Düsseldorf-Duisburg-Bremen-Bremerhaven. Her sister-ship, the "Widar", will shortly take up the same route.

● Captain Professor Zade in Indonesia

Bremen, 21.6.76 (BremIn). In order to familiarise himself with the training of nautical and technical ships' officers in Indonesia, the professor and vice-chancellor of the world-renowned Nautical Academy of Bremen (founded 1799), Captain Günther Zade has been stopping in the large Southeastasian insular country since May 1976. Zade, within the framework of the UNO aid to developing countries program, is to produce comprehensive proposals for furthering the maritime training system of Indonesia, the training of Indonesian experts abroad and the engagement of non-Indonesian advisors, all included. In April and May 1976 representatives of American, British, Dutch, Norwegian, Japanese and Egyptian maritime training establishments visited the Nautical Academy in Bremen for exchanging experiences.

Port of Antwerp—Photographs



1) and 2) View of the new Scheldt-Rhine-canal, inaugurated in April 1976, which links the port to its German hinterland.

4) and 5) Zandvliet lock, entrance to the Northern port area. At the right the Scheldt river. Between the two waterways the port's main industrial zone.



3) The port's largest shiprepairing plant "Mercantile Marine Engineering". In the background the river Scheldt with industrial expansion on the left bank.

6) Northern port area. To the left: Scheldt river.

(Continued on page 35)

Flows of goods in Rotterdam harbours will grow further

Port of Rotterdam

Reprinted from

Rotterdam Europoort Delta 76/2

There is no reason to assume that activity in the port of Rotterdam has reached its zenith in the past few years. Continued strong growth of international sea-going transport is to be expected in the next 15 years if the City of Rotterdam and the Rijnmond district are prepared to work for this. Whereas the Rijnmond harbours handled 226 millions tons of seagoing cargo in 1970, they may expect arrivals to total 331 million tons in 1968 and no less than 507 million tons in 1990.

The steep increase in energy and raw materials prices and the cost-increasing effects of measures which proved to be necessary to protect the environment will surely slow down this growth, but they will not be able to really prevent a substantial increase in activity in the harbours of Rotterdam, Schiedam, Vlaardingen and Maassluis.

This is the expectation—carefully reasoned in an elaborate report—of a group of harbour-oriented economists who have made a study at the request of ESSOR.

Their assignment was to consider the tenability of earlier prognoses by making new calculations; to compare the earlier expectations with the latest developments; and to adjust these prognoses where necessary.

The group of economists has added an important precondition to its conclusions. Rotterdam—and this does not apply only to the city administration but also to trade and industry—has vigorously endeavoured in the past, in particular in the 1951-1970 period, to strengthen the port's competitive position as much as possible. The economists' studies are based on the assumption that it will continue to do so.

This implies that their calculations, the results of which have been laid down in schedules of flows of goods for 1980 and 1990, will only be valid if—just as in the past—all the infrastructural measures that may become necessary, are taken in time, and if trade and industry in the Rijnmond area are given an opportunity to adapt themselves to these developments.

Slight increase

The economists have made interesting observations on the seven main groups which are to be distinguished in the total flow of incoming and outgoing goods.

Demand for *grains and feeds* in Holland and the countries surrounding us is still increasing. This increase may be expected to persist—though at a somewhat slower pace. Arguments for this are a slow growth of the population and a (stronger) increase in the head of live-stock.

Overseas supplies of grains and feeds in Rotterdam are expected to total about 14 million tons in 1990, compared with nearly 10 million tons in 1970.

This prognosis is partly based on the consideration that true enough, France has developed into an European grain country as a result of EEC measures; however, the kinds of

grain grown there will not sufficiently meet West European requirements.

No real revival

The flow of solid fuels will for the larger part consist of coal.

In 1970 three important activities were to be distinguished in this sector, viz.:

- transshipments, by inland vessel from West Germany, by sea to Italy (about 2.8 million tons),
- imports into Holland from overseas (one million tons),
- transshipments, from overseas to West Germany and France, by inland vessel (about 1.5 million tons).

Although energy consumption has shown a steep increase in the past twenty years, the share of coal in energy supplies declined sharply. Even though the energy crisis slightly renewed interest in coal, no real revival of solid fuel arrivals is to be expected for the time being.

This expectation is also based on the consideration that the technical problems posed by a large-scale conversion of coal into gas have not yet all been solved.

Estimates

Since, moreover, tremendous sums of money are required for oil exploration, the oil companies are unable to release the capital necessary to open up new coal fields, even if they have an option on such fields.

The volume of the flows of solid fuels largely depends on non-predictable economic-political developments, and this makes it difficult to give reliable estimates. Total arrivals and departures by sea until 1990 are expected to remain unchanged at over six million tons—as was also predicted in 1970.

Coal transshipments to West Germany and France are expected to rise slightly, whereas transshipments from West Germany will drop somewhat. This prognosis is based on the expected development in price relations between American and West German coals, which indicate differences in quality, and the planned stabilisation of West Germany's coal production.

Growth continuous

Crude oil and oil products are extremely important for the port of Rotterdam, because they represent about 65 per cent of the flows of goods transhipped here. The sharp increase in supplies of crude oil and oil products appears from the following figures: in 1951 nine million tons entered the port of Rotterdam, in 1960 these arrivals had increased to 29 million tons and in 1972 to 139 million tons.

In 1972 these arrivals consisted for 93 per cent of crude and for the rest of oil products.

The crude mainly comes from the Middle East but there are also important arrivals from Western and Northern Africa.

Oil departures from the Rijnmond harbours totalled five million tons in 1951 (including zero per cent by pipeline),



Transshipment of ore: the rise of the pushboat shipping has made the competitive position of Rotterdam even stronger.

20 million tons (including 12 per cent by pipeline) in 1960 and 98 million tons (including 47 per cent by pipeline) in 1972.

By the end of 1973 this steep growth was suddenly checked when a number of important oil-producing countries introduced price rises and production cuts. Virtually all industrialised countries reacted by trying to reduce oil consumption. As a result of this it is realistic to expect that the growth figures of the 1960's will not recur.

Nevertheless, petroleum will continue to take a very important place in the energy package. For it is doubtful for the time being whether nuclear energy (strong social opposition) and natural gas (Government measures to restrict consumption) will be able to take over the role of oil in energy supplies within a reasonable short time.

Expectations

Therefore, it is to be assumed that the growth of oil consumption in Western Europe in the period up to 1990 will approximately keep pace with the growth of energy consumption. Following close studies of international data, the working group expects an annual increase in energy consumption in Western Europe of about five per cent up to 1980 and of about 4.5 per cent in the period from 1980 to 1990.

When the production of oil in the North Sea gets into full swing in the coming years, this is likely to result for Rotterdam in a considerable decline in transshipments and exports of crude oil and oil products to Great Britain and Scandinavia. If the production of oil in the North Sea is stabilised by the end of the 1980's, transshipments and exports to these countries will gradually return to their present level around 1990.

If Rotterdam succeeds in maintaining its leading position as an oil port in Western Europe, crude oil arrivals are expected to total 149 million tons in 1980 and 240 million tons in 1990.

About 70 million tons of the 149 millions in 1980 will be meant for transit: the pipeline will take 75 per cent of this for its account, and 25 per cent will leave Rotterdam again by sea.



The pipeline plays a very important role in the transport of the crude oil arriving in the port of Rotterdam.

Favourable position

The larger part of *ore* supplies (mainly iron ore) comes from Scandinavia, Liberia and Brazil and is destined for West Germany.

Transport to the hinterland is for about 95 per cent directed via the Rhine. The emergence of pushboat shipping has further strengthened Rotterdam's favourable competitive position. Therefore, we may expect that also in the period up to 1990 a very large part of the iron ore necessary for the West German industry will be supplied via the Rijnmond harbours.

Tendency

Account has to be taken of the tendency to shift blast furnaces and steel plants to the coast; nevertheless, it is generally expected that the blast furnaces and steel industries in West Germany will show an average annual growth of 2.5 per cent in the period up to 1990. The increase in ore arrivals in Rotterdam will not deviate essentially from this figure. The researchers do not consider it very realistic at the moment that the development of blast furnaces and steel industries in the major ore producing countries themselves will be accelerated, due to which crude steel transports would take the place of ore transports.

Their prognosis is that in 1990 fifty million tons of ore will arrive in Rotterdam. Of this enormous quantity, too, 95 per cent will be taken to the hinterland by inland shipping.

Checks

The chemical products group of goods is indeed strongly variegated in its composition. They principally consist of basic products which are used as raw materials in numerous industries.

Substantial quantities of chemical raw materials are arriving from the industrialised countries (United States, United Kingdom, West Germany). Departures are divided into many flows to all parts of the world, although here, too, the industrialised countries hold a dominating position (United Kingdom, West Germany).

Even though this group of goods is statistically rather inscrutable, it may be said that in particular general industrial activities influence the production of the chemical industry.

It has to be assumed that industrial activities will in future be subject to more rigid measures to protect the environment. Energy and raw material prices will most likely continue to rise. One will have to start from the assumption that industrial production is bound to be checked by these developments.

Also the chemical industry, which will initially be very expansive, will feel the repercussions of this, despite of the fact that eventually several well-established materials will be replaced by products made from chemical substances.

On the grounds of these considerations it is expected that in 1990 arrivals of chemical products will total 24 million tons and departures 28 million tons.

About 32 million tons of these products will be transported by sea, 13 million tons by inland ships and six million tons by road.

Steadily increasing

The group of goods comprising *other bulk* includes many raw materials and semi-manufactures which are shipped in bulk.

Important items of this group are:

- oilseeds: arrivals, three million tons, mainly from North America,
- fertilizers: arrivals 2.8 million tons, mainly from Morocco, the Soviet Union, the United States; departures 1.2 million tons, mainly to West Germany,
- crude minerals: arrivals 5.5 million tons, mainly from West Germany and Great Britain.

The market situations of these goods vary according to the products but they may all be considered to depend on industrial activity in Holland and the surrounding countries.

Arrivals in 1990 are estimated at about 65 million tons (48 millions by sea, 16.5 millions by inland shipping).

Departures are expected to total about 30 million tons. Inland shipping will carry 24 million tons of this.

Moderate increase

The last group of goods, *general cargo*, is also marked by a large variety of products. This is a collective group which includes many finished products. Due to the nature of these goods, arrivals of general cargo are not determined only by industrial activity but also by the growth of income in Halland and the surrounding countries.

The researchers have started from the view that the growth of the national product will remain at the lower level to which it has dropped. The principal causes of this are the—increasingly stringent—measures to protect the environment and the rising energy and raw material prices.

The chief countries of origin and destination in this group of goods are the industrialised countries. A striking feature is that in the general cargo sector transport by sea is almost entirely in the hands of the liner trade. Road transport takes a prominent place in transports to the hinterland.

Arrivals and departures by sea-going ships in 1990 are expected to total 21 million and 17 million tons respectively.

Comparing estimates

The expectations for the seven groups of goods have been arranged conveniently in the following tables.

A comparison of the above estimates for 1990 with the prognosis made in 1970 shows that the total volume of arrivals and departures by sea (then put at 666 million tons)

Table 1 International goods transports in the Rijnmond Harbours in million tons

| 1970 | Sea | | River | | Rail | | Road | | Pipeline | |
|--------------------------|--------------|-------------|-------------|-------------|------------|------------|------------|------------|-----------|-------------|
| | un-loaded | loaded | un-loaded | loaded | un-loaded | loaded | un-loaded | loaded | un-loaded | loaded |
| Grains and feeds | 8,3 | 1,3 | 0,2 | 3,1 | — | — | — | — | — | — |
| Solid fuels | 2,6 | 3,9 | 3,7 | 1,6 | — | — | — | — | — | — |
| Oil (crude) | 92,2 | 14,7 | — | 1,0 | — | 0,1 | — | — | — | 19,3 |
| Oil (products) | 10,9 | 19,4 | 0,6 | 10,9 | — | 0,1 | — | 0,1 | — | 5,2 |
| Ores | 29,4 | 1,1 | — | 27,5 | — | 0,6 | — | 0,1 | — | — |
| Chemical products | 4,4 | 4,7 | 1,7 | 1,9 | 0,2 | 0,5 | 0,7 | 1,1 | — | — |
| Other bulk | 15,8 | 2,8 | 4,0 | 8,3 | 0,7 | 0,2 | 0,3 | 0,3 | — | — |
| Gen cargo = sundry group | 7,8 | 6,6 | 3,0 | 2,8 | 0,8 | 0,6 | 1,3 | 1,6 | — | — |
| Total | 171,4 | 54,5 | 13,2 | 57,1 | 1,7 | 2,1 | 2,3 | 3,2 | — | 24,5 |

Table 2 International goods transports in the Rijnmond Harbours in million tons

| 1980 | Sea | | River | | Rail | | Road | | Pipeline | |
|--------------------------|--------------|-------------|-------------|-------------|------------|------------|------------|------------|-----------|-------------|
| | un-loaded | loaded | un-loaded | loaded | un-loaded | loaded | un-loaded | loaded | un-loaded | loaded |
| Grains and feeds | 10,6 | 1,5 | 0,4 | 4,0 | — | — | — | — | — | — |
| Solid fuels | 5,1 | 3,2 | 3,0 | 3,5 | — | 0,1 | — | — | — | — |
| Oil (crude) | 148,7 | 13,3 | — | 1,3 | — | — | — | — | — | 56,3 |
| Oil (products) | 16,0 | 14,8 | 0,8 | 11,0 | — | — | — | — | — | 7,8 |
| Ores | 39,6 | 1,0 | — | 37,3 | — | 1,2 | — | 0,1 | — | — |
| Chemical products | 8,5 | 8,8 | 3,3 | 3,6 | 0,3 | 0,9 | 1,3 | 2,2 | — | — |
| Other bulk | 30,3 | 5,1 | 9,5 | 16,3 | 0,3 | 0,4 | 0,8 | 0,5 | — | — |
| Gen cargo = sundry group | 13,3 | 10,7 | 4,8 | 4,7 | 1,6 | 1,2 | 2,2 | 2,9 | — | — |
| Total | 272,1 | 58,4 | 21,8 | 81,7 | 2,2 | 3,8 | 4,3 | 5,7 | — | 64,1 |

Table 3 International goods transports in the Rijnmond Harbours in million tons

| 1990 | Sea | | River | | Rail | | Road | | Pipeline | |
|--------------------------|--------------|-------------|-------------|--------------|------------|------------|------------|------------|-----------|-------------|
| | un-loaded | loaded | un-loaded | loaded | un-loaded | loaded | un-loaded | loaded | un-loaded | loaded |
| Grains and feeds | 14,1 | 2,3 | 0,6 | 5,4 | — | — | — | — | — | — |
| Solid fuels | 4,7 | 1,6 | 1,4 | 3,3 | — | — | — | — | — | — |
| Oil (crude) | 240,0 | 25,3 | — | 2,0 | — | — | — | — | — | 87,0 |
| Oil (products) | 19,5 | 23,0 | 1,0 | 14,5 | — | — | — | — | — | 11,0 |
| Ores | 50,0 | 1,6 | — | 46,8 | — | 1,5 | — | 0,1 | — | — |
| Chemical products | 15,5 | 16,1 | 6,2 | 6,6 | 0,6 | 1,5 | 2,3 | 3,9 | — | — |
| Other bulk | 47,9 | 7,3 | 16,5 | 24,3 | 0,6 | 0,5 | 1,4 | 0,9 | — | — |
| Gen cargo = sundry group | 21,1 | 16,9 | 7,7 | 7,7 | 2,6 | 2,0 | 3,6 | 4,7 | — | — |
| Total | 412,8 | 94,1 | 33,4 | 110,6 | 3,8 | 5,5 | 7,3 | 9,6 | — | 98,0 |

is now expected to be about 160 million tons less.

Since the arrangement of the groups of goods in the new tables differs from that in the previous tables, comparisons of details are hardly possible. The main differences between the old and the new estimates concern the groups covering petroleum, ores and solid fuels.

Port of Long Beach—Pictorial



1) Arrival of the Arthur Maersk on its maiden voyage to the Port of Long Beach recently found Long Beach Port Ambassador Gordon Kallenberg, right, on hand to present traditional Apollo-photo of Southern California to Captain Nils Jensens, while Maersk Operations Manager Dave Kennedy looks on at left. Maersk is now operating a nine-ship fleet of fast fully-cellular containerships with heavy equipment carrying capacity across the Pacific.



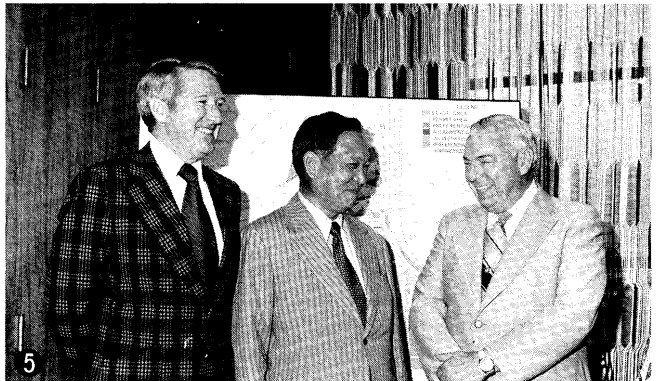
2) When the largest shipment of newsprint—7200 tons of it—arrived at the Port of Long Beach recently aboard the British-registered Harfleet, Trade Development Director Dean J. Petersen, left, went aboard to mark the occasion with a presentation to Captain Tom Gilmore. P.D. Sullivan, Star Terminal Company manager in Long Beach, is at right. Virtually all the newsprint used in Southern California moves through Long Beach Harbor, mostly from British Columbia.



3) Addition of the 25,200 ton, 683-foot Zim California to the fleet of Zim Container Service brings to seven the



4) Columbus Line has just added the Columbus Coromandel to its fleet of full-cellular containerships in service between California, Australia and New Zealand, so maiden arrival of the vessel at the Pacific Container Terminal in the Port of Long Beach found Captain D. Cornelisen, center, being presented with an Apollo-eye view of Southern California by Harbor Trade Representative Steven Resnik, left. That's Johannes T. Sante, Operations Manager for Bakke Steamship Corp., Columbus agents, on the right. (Nos. 1-4 dated 72376).

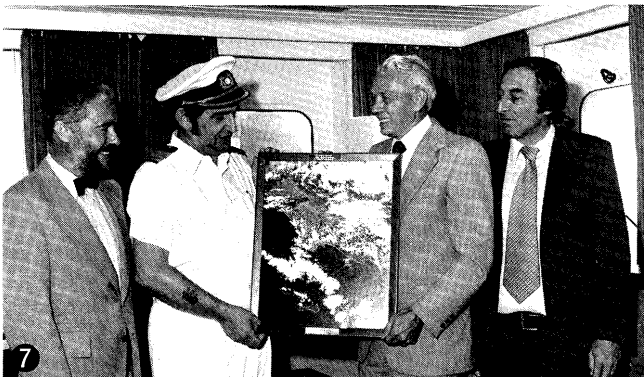


5) Among recent visitors to the Port of Long Beach to study cargo handling facilities and techniques was Chih-Li Wang, center, Deputy Director and Chief Engineer of the Taichung Harbor Bureau, Taiwan, Republic of China. He is pictured during briefing with Director of Commerce Lee Sellers, left, and Thomas J. Thorley, General Manager of the Long Beach Harbor Department.

number of large 23 knot vessels linking the Mediterranean with both coasts of the United States and the Far East. Pictured during welcoming ceremonies at Long Beach are, from left, Captain Shinta Asami, President of ITS Container Terminal on Pier J, Captain Harry Biehl of the Zim California, Captain Igal Lipkin, Zim West Coast Vice President, and Steven Resnik, Trade Representative with the Long Beach Harbor Department.



6) Surprise presentation of a Port of Long Beach plaque of appreciation from Harbor Commission president James G. Craig, Jr., right, brought a big smile from Captain Igal Lipkin, West Coast Vice President for Zim Container Service, on the occasion of his departure for a new assignment with the company in the Mediterranean area. Captain Lipkin will be in charge of the Middle East division of Zim. (Nos. 5-6 dated 72776).

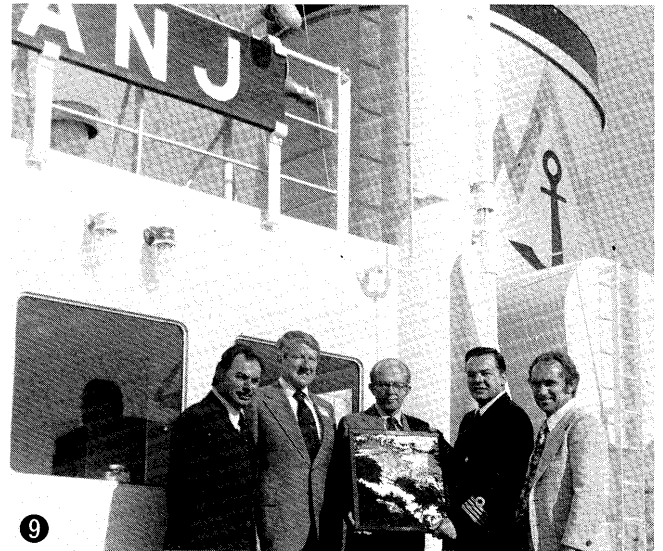


7) Maersk Line's fleet was expanded further recently by the maiden arrival at the Maersk Container Terminal in the Port of Long Beach of the MV Alva Maersk, 685 foot, 25,000 DWT containership capable of a 26-knot service speed. From left at welcoming ceremonies aboard are Maersk Operations Manager Dave Kennedy, Captain Helge Holm, Port Trade Development Director Dean J. Petersen and Maersk Terminal Manager Pete Aspaturian. (80476).



8) Twenty years of successful operation by United Yugoslav Lines, Splosna Plovba, was marked at the Port of Long

Beach recently when general agents Kerr Steamship Company representative David A. Hoekstra, left, presented commemorative scroll and silver medallion to James G. Craig, Jr., President of the Long Beach Board of Harbor Commissioners. Special ceremony was particularly appropriate as the Yugoslav flag line has been calling at Long Beach for all its 20 years' existence.



9) Traditional maiden voyage welcome ceremonies at the Port of Long Beach recently found harbor officials coming aboard the MS Kranj operated by United Yugoslav Lines for presentation of an Apollo-eye view of Southern California to Captain Danijel Groznik. Others in photo are, from left, Captain Gregorij Miglic, Owners Representative; Lee Sellers, Director of Commerce; James H. McJunkin, assistant General Manager; Captain Groznik and David A. Hoekstra, assistant Vice President, Kerr Steamship Co., general agents. (Nos. 8-9 dated 81376).



10) Once in a million odds were topped recently at the new States Steamship Company terminal on Pier B in the Port of Long Beach when no less than four of their big States-class cargoliners were berthed at the same time. States ships included the Hawaii, Idaho, Oregon and Montana. Wide apron adjacent to transit shed was specifically designed to accommodate State's new Ro/Ro fleet.

Fifth white vessel in photo (upper right) belongs to Salen. (072376).



11) What is believed to be the first shipment of architectural sheet glass from Romania to the West Coast arrived at the ITS Container Terminal in the Port of Long Beach recently aboard the Zim Montreal. The 60 ton consignment was first shipped from Constanta on the Black Sea to Greece for transfer to two 40-foot Zim containers before making the long voyage through the Mediterranean, across the Atlantic and to Long Beach via the Panama Canal. Zim Operations Manager Vic Perniciaro is seen at left as he oversaw offloading of the glass with R.D. Komaroff, president of PME International, glass importers with headquarters in Long Beach. (72776).



12) BELL OF FREEDOM ARRIVES IN CALIFORNIA VIA STATES LINE. What is believed to be the largest bell ever cast in the Orient, a 17-ton bronze "Bell of Friendship" presented to the people of the United States by the Republic of Korea as a Bicentennial gift, arrived in the Port of Long Beach recently aboard the States Line's Montana after a transpacific journey from Seoul. Conceived by Korean President Park Chung Hee, the huge bell was carefully hoisted from its cradle in a cargo hold onto the wharf of States' terminal on Pier B under the watchful eyes of Korean Consul General Sang Doo Park, far right. Bell will be formally dedicated at MacArthur Park October 3 and will hang from a bell tower provided by City of Los Angeles. (81376).



The Port of Le Havre-Antifer Is Officially Opened

Port of Le Havre Authority

The official opening of the Port of Le Havre-Antifer was held on the morning of the 25th June, Mr. Robert Galley, Minister of Housing and Equipement opened this new port and Mr. Marcel Cavaillé, State Secretary for Transport presided over the christening ceremony of the 550.000 tonner "Batillus" constructed for the French company "Shell" by the "Chantiers de l'Atlantique". Mr. Jean Lecanuet, Minister of Justice and Chairman of the Regional Council was also present.

Why Antifer ?

The rapid economic increase over the last ten years has been possible due to the ever increasing importation of crude oil. From 1963 to 1973, the amount imported multiplied itself 3 times which is an average increase of 11%, much more than the Gross National Product, 5, 7%, observed over the same period. So as to continue supplies to the industrial development, France will have to make or import more and more energy. The least expensive energy at the time being petroleum, this product replaced more and more the other sources of primary energy, especially coal.

The fact that new and more sophisticated developments consume more energy must be added to this replacement factor and also, crude oil is the basis of many articles of current consumption, petro-chemicals for example.

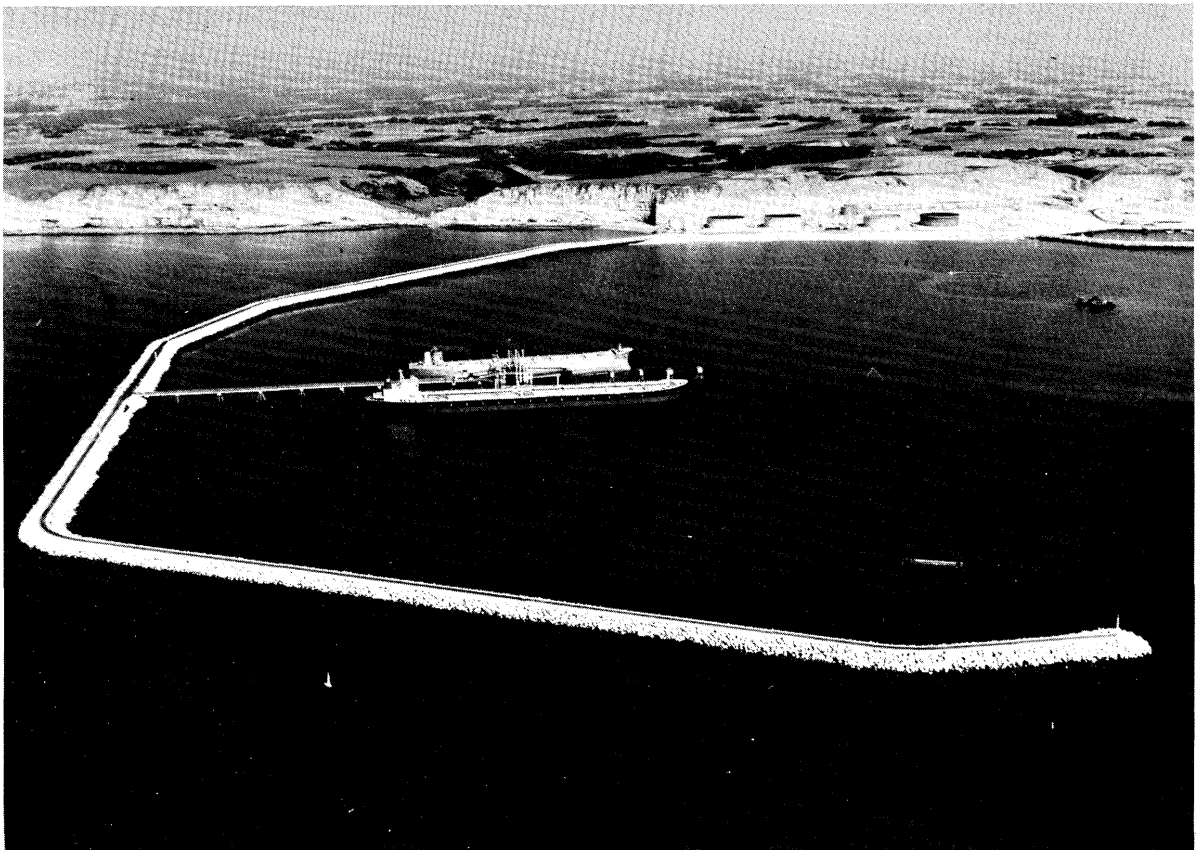
At the same time, the increase in the oil tanker's size has accelerated at a startling pace. The Suez Canal crisis in 1956 started this trend which, in 1966 led to the launching of "Idemitsu Maru" a tanker with a deadweight tonnage of 206.000 tonnes. After the closing of the Canal and a short expectation period, the race to gigantism began again.

In 1968, the "Universe Ireland" of 326.000 dwt was launched followed in 1971 by the "Nisseki Maru" of 272.000 dwt and then in 1973, "Globtik London" and "Globtik Tokyo" both of 478.000 dwt.

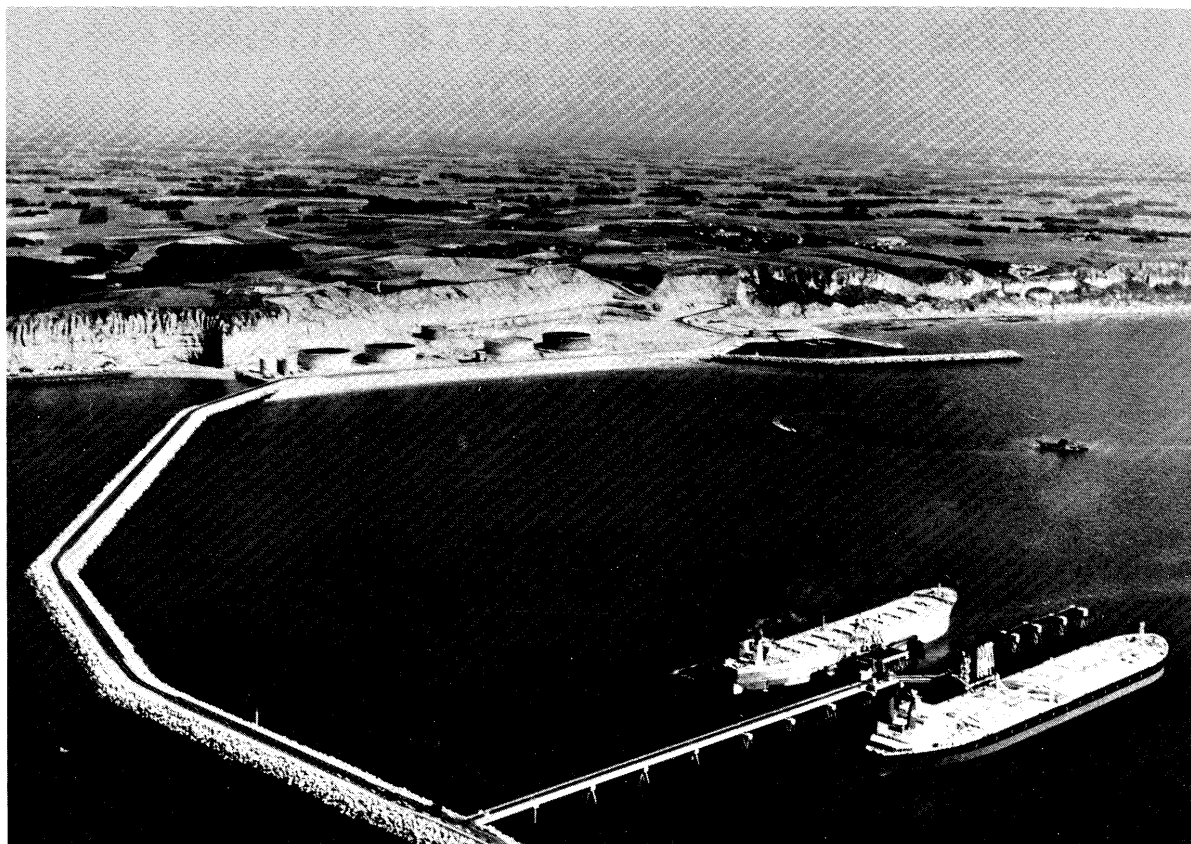
The first tanker of 540.000 dwt is now under construction in St Nazaire for the Company SHELL and already, construction docks for the mammoths of 1 million dead-weight tonnes exist.

Cuts in Transport Costs

This trend to larger and larger tankers is easily explained by the cuts in transport costs made by these ships. In fact, certain costs are practically not increased at all with the size of the ship. For example, a tanker of 250.000 dwt and a



Port of Le Havre-Antifer



Port of Le Havre-Antifer

tanker of 540.000 dwt both have basically the same amount of crew. For a normal speed of 15 knots, the consumption of fuel, brought down to the tonne of crude transported, decreases when the size of the ship increases.

Consequently, the saving procured by running a ship of 540.000 dwt compared with one of 250.000 dwt, represents about 7 to 8 francs per tonne of crude transported on the Persian Gulf-Le Havre route. This is 20% of the cost price of maritime transport by ships of 250.000 dwt.

It goes without saying that the freight level, greatly depreciated in the present crisis, does not show this difference. Nevertheless, it is apparent that on a long term basis, freight cannot ignore the real cost price; the advantage of a large ship is, thus, clear.

We can therefore consider that the theoretic cost price constitutes a reference for the average level of freight over a long period of time.

From 1976, two French shipping companies—"La Société Maritime SHELL" and "La Compagnie Nationale de Navigation" will both be putting two ships of 540.000 dwt into service. The four ships, calling at the Port of Le Havre-Antifer will transport some 12.000.000 tonnes of crude per year (6 round trips via the cape). Therefore, each year they will economise francs on maritime transport costs.

These figures alone show why the petroleum shipping agents, who are always looking for savings on the cost of maritime transportation, try to make scale savings when the possibilities of a port's structures allow for this and when the capacities of the refineries which are to be fed, also allow for this operation on a bigger scale.

History of the Project

From 1966, the Port of Le Havre was thinking about the

adaptation of the reception facilities for the VLCC (Very Large Crude Carriers) under construction, that is, ships with a deadweight tonnage of up to 350.000 tonnes. With the agreement of the "Direction des Ports Maritimes et des Voies Navigables", the Port of Le Havre Authority presented a project of a preliminary study for the reception conditions in Le Havre for large tankers on the 21st November 1966.

Three stages were foreseen:

- stage 1—the dredging of a new channel enabling the reception of ships in the 200.000 dwt class
- stage 2—thanks to further dredging ships of 350.000 dwt could have access
- stage 3—the reception inside the port for ships of 500.000 dwt.

Since the end of 1966, it appeared that the characteristics of the 500.000 dwt ships would be different to those taken into account during the preliminary study, particularly their draft which would be much more than considered.

Also the studies undertaken in various different countries showed the cuts in costs by using ships with a higher tonnage of 500.000 dwt. Together with this for future needs, it was decided that the foreseen equipment should be able to receive ships with a draft of 30 metres.

The choice of this basic information led to studying the possibility of using this equipment off-shore in natural deep waters. Therefore, at the end of 1967, the Port of Le Havre Authority presented a preliminary draft scheme for the construction of an off-shore artificial island.

Two sites were considered: one in the "Parfond deeps" which prolong the Seine Estuary to the West and the other off the "Cap d'Antifer" 20 kilometres North of the Port of Le Havre.

At the same time, the problems posed by the increasing dimensions of the oil tankers was studied by a commission created for this purpose by the "Ministère de l'Équipement." At the end of 1969, in view of the results from the numerous studies made, the Government took the decision to retain the site in the Seine Bay for the reception of very large oil tankers in order to assure the supplying of the refineries under the best conditions.

Taking into consideration the refineries' capacities which it supplies, (nearly 45% of the whole of France) the port of Le Havre could not face up, in its present capacity to the foreseen increase of its oil traffic in the hypothesis of supply by ships in the 200.000 dwt class.

The two berths perhaps able to receive large tankers, (berths 8 and 10) could not assure more than 130 to 140 calls each without necessitating long waits during the "peak" hours. If we specify that the crude oil discharged in Le Havre, transported by the largest operational ships, has always been exceptionally high—in 1971, 31, 6% and in 1974, 60% of the traffic was assured by ships of more than 200.000 dwt, the necessity of constructing new facilities becomes more comprehensive.

The scheme presented described three possibilities:

- a new port South of the present one
- the "Parfond" out at sea to the West
- near the Cap d'Antifer

After a study was carried out on the advantages and disadvantages of each possibility, the scheme of a port on the coast South of the Cap d'Antifer appeared to be the most interesting particularly for the ships' safety.

The first estimation of the scheme rose to 450 million Francs of which 40% was to be taken in charge by the State and the remaining 60% for the Port of Le Havre Authority.

A private financment, assured by the Compagnie Industrielle Maritime, concessionnaire to the Port of Le Havre, was retained for the berths, canalisation, storage, pipe line etc. . . . then estimated at 200 million Francs.

The works started in March 1973. Since then with inflation, the cost has increased by almost 30% compared with the first estimation and rose to 600 million Francs for the infrastructures and 250 million Francs for the C.I.M.'s facilities.

This investment of 850M Francs represents the same cost as the construction of two 540.000 dwt ships. If this investment is brought down to the savings procured by the only tankers of 540.000 dwt which must call at Antifer, evaluated at 90.000.000 Francs, we can easily see that the rentability of the scheme is practically assured by these ships alone. It is clear that the numerous ships with a tonnage between 250.000 or 540.000 dwt will be received at Antifer, also saving between 0–8 Francs per tonne compared with a ship of 250.000 dwt, the maximum tonnage which the Port of Le Havre can now receive.

Technical Description

The oil terminal of Antifer is situated 12 miles (20 km) North of the Port of Le Havre's access channel and 3 miles (4 km) South of the Cap d'Antifer at St-Jouin-Bruneval.

During the first stage the project comprises of:

- a breakwater protecting the port from the North
- a swinging circle
- oil equipment
- a storage area along the waterfront and a service port

Natural Conditions of the Site

The structure, outline and characteristics of these works depend on the hydrographical, geological and oceanographical conditions.

In the Seine Bay at Antifer the contour lines –25 m to –30 m corresponding to the 540.000 and 1.000.000 tonnes drafts respectively, are the closest to the beach.

Perpendicular to the beach in front of the St-Jouin-Bruneval, between a southerly bed rock and a Northern lime stone bed, neither of which can be dug by classical means of dredging, there is a band of sand 1 1/2 miles wide which can be excavated right up to the coast to –32 m which is 32 m under the lowest equinoctial spring tides.

The structure and outline of the breakwater, studied in hydraulic laboratories give the best shelter against the currents. These alternate in their directions and parallel to the coast are tidal currents which can have speeds of up to 3 knots. Shielded by the Cap d'Antifer, the port is totally protected from the actions of the ebb-tides and during 6 hours, from high tide, the speed of the current in the shelter of the breakwater is less than 0,15 m/s.

The Northern breakwater assures the protection against the dominant North-West swells.

Conditions of Entry of the Super Tankers

The outline and dimension of the port and its structures has also been by the 540.000 dwt super tankers' characteristics (length 415 m beam 63 m draft 28, 50 m) now under construction.

The natural conditions of the site will permit future development which could be adapted to the characteristics of the 1.000.000 dwt ships. (length 500 m beam 90 m draft 33–35 m).

A keel clearance of 10% of the largest ships' draft is necessary and a stopping distance of five times the length of the ship.

The ships will be received at high tide (high tide lasts 3 hours) its level being 6 to 8 metres higher than low tide.

General Characteristics of the Site

The oil terminal now comprises of:

- A storage area of 35 hectares along the foot of the cliff (length 1.300 m width 250 m) intended for oil reservoirs (600.000 m³ in the first stage) and port facilities.
- An 8 hectare service port sheltering the tugs and other serving ships.
- A Northern sloping breakwater which is 3.500 m long built to a depth of –8 to –22 m.
- An access channel dredged to –25 m, 550 m wide, a swinging circle 1,400 m in diameter, a manoeuvring area at –26 m boxes alongside the berths at –29 m.
- Two oil berths designed for ships of 1.000.000 dwt joined to the reservoirs by pipe-line.

The oil directly unloaded from the ships into the reservoirs will be pumped to the Port of Le Havre's facilities by means of a 15 mile long pipe-line.

Breakwater

The main breakwater of which the profile is exactly the same as that of the service port is of the "sloping breakwater" type constructed with materials of various origin:

- Pebbles dredged from the Seine Estuary and dredging areas of the oil terminal

- lime stone materials quarried from the cliff itself
- concrete rocks made on the site itself by means of gravel dredged from the Seine Estuary
- cubic concrete blocks also made from dredged gravel
- concrete blocks made on the site.

On a pebble sub foundation laid to -10 with a width of 200 m, two abutments have been constructed comprising of a layer of lime stone weighing 0,2 t and 1,70 m thick and a layer of concrete rocks weighing 1/3 t and 2,10 m thick.

Between these abutments the core of the breakwater is put into place that is the sub strata of shingle at -5 m and lime stone materials at -9,50 m.

The core is protected by:

- a layer of lime stone rock 0,5/2 t and 1,70 m thick
- a sub strata of concrete rock of 1/3 t sub strata on the port side and 1/5 t on the open side with respective thicknesses of 1,80 m and 2,10 m
- a shell of cubic concrete blocks of 12 t on the port side and 24 t on the open side with respective thicknesses of 3,5 m and 4,40 m resting on an abutment at the foot of the breakwater

The concrete crowning on a layer of concrete blocks weighing 2 t consists of a wall and coastal platform at 14,70 m which includes the pipe-line.

Magnitude of the Construction

This overall necessitated:

- 5.350.000 m³ of shingle
- 11.000.000 tonnes of lime-stone extracted from the cliff
- 5.000.000 m³ of material quarried for the storage areas
- 1.500.000 m³ of concrete

The deepening of the channel and manoeuvring areas necessitated dredging 30.000.000 m³ of sand and shingle.

The road cut out of the cliff, which serves the port now and future exploitation necessitated the movement of 450.000 m³ of various materials.

Working Methods to Construct the Breakwater

The main breakwater was constructed in two phases.

- by sea: dumping of the shingle for the sub foundation, the materials forming the abutments and the sub strata of the core
- by land:
 - dumping towards the core
 - simultaneous protection of the core by means of the transition layer and sub strata placed by dumpers
 - placing of the cubic blocks by crane forming the abutment and shell
 - pouring of the concrete superstructure

Working Means

The dredging is effected by means of a suction dredger with a capacity of 9.000 m³ being able to dredge up to a depth of 38 m and extract 2.000.000 m³ of sand per month.

The shingle sub strata has been placed by the dumping of the materials dredged.

The abutments have been constructed by means of dumping barges.

The operations on land depended on:

- a caterpillar crane of 30 t with a radius of 47 m for the construction of the main breakwater's shell
- a caterpillar crane of 15 t with a radius of 45 m used on the secondary protections and able to assist the main crane

- two caterpillar cranes of 15 t with a respective radius of 28 m and 21 m reserved for handling the blocks on the casting areas.
- hydraulic shovel, loaders, bulldozers, boring machines etc.
- the concrete was made by two concrete plants of 320 m³/h and 240 m³/h respectively.

The Berths

The two berths for tankers of 540.000 dwt and 700.000 dwt are each made up of two dolphins with 3 to 4 special steel tubes with a diameter of 2,75 m and a length of 65 m.

Each berth served by a pipe-line of 421 m has an exploitation platform equipped with 5 unloading arms.

Is Antifer's Utility Affected By the Present Crisis?

We cannot say that the important investments put into Antifer have the same rentability to-day as when the scheme started. This is of course due to the fact that the new provisions for oil consumption have decreased as the French government are trying to import less.

Nevertheless, according to the specialised press, the race to gigantism of ships has not stopped. At the end of 1974, 146 oil tankers of more than 200.000 dwt were in service and 306 under order.

At the end of 1975, already 212 ships of this type unable to enter the Port of Le Havre are likely to use Antifer as port of call.

Secondly, the overcapacity of maritime transport will certainly acknowledge the relative advantage of the ULCC (Ultra Large Crude Carriers; ships of more than 350.000 dwt) faced with the more numerous class of ships, that is, the 250.000 dwt construction is accelerated and those of an older generation demolished.

For the moment the re-opening of the Suez Canal has only a minimum affect on the transport flow. The deepening works for fully laden 250.000 tonners are foreseen at the earliest for 1980 and Antifer will already have been in service for four years. Also, the cost of the works will necessitate high dues thus the running cost will become more or less the same as the Cape route.

It is evident that the barrier has considerably decreased with the utilization of ULCC 500.000 dwt ships, this situation will weigh up considerably the marginal rentability of the works.

From the information supplied by the CERLIC (Centre d'Etudes et de Recherche de Logistiques Industrielle et Commerciale) from a study made at the request of the Direction of the "Ports Maritimes et des Voies Navigables" we can see that on the Persian Gulf-Le Havre route via the Cape, the transport cost for a fully laden ship of 540.000 dwt is 29,06 F per tonne of oil and 22,29 F per tonne for a tanker of 250.000 dwt passing through the Suez Canal for a round trip taking into account the time saved by the Canal but not the dues. The 6,77 F difference does not even cover the dues now used which are about 8 F/tonne for a round trip (4,43 F per dwt laden and 3,54 F per dwt lightered) or the insurance premiums.

We may also think that this increase in ships' sizes having slowed down in the present conjuncture, will continue over 540.000 dwt as construction docks for 1.000.000 dwt ships already exist. The transport costs of these ships using the Cape route could therefore put pressure on the dues used in the Suez Canal.

Of course, the progressive exploitation of the North Sea

deposits must be taken into account, but this will always be a small source as the needs for crude oil in Western Europe will be in the region of 730 million tonnes towards 1980, 160 million tonnes of which will be interior production, which in this theory will necessitate importing 570 million tonnes (O.C.D.E. perspectives).

The geographical position of Le Havre Antifer is the nearest point to high consumption zones accessible to ships of 500.000 dwt. The Straits of Dover because of its limited depths does not allow these ships to enter the Northern ports. In particular the nautical constraints of Rotterdam do not permit ships of 250.000 dwt to enter. Schemes suggest the possibility of receiving ships of up to 400.000 dwt but this means "made to measure" ships with reduced drafts therefore leading to costs which are at a disadvantage to normal ships.

Only the Port of Le Havre-Antifer is able to offer Northern Europe and interesting revenue beneficial to the oil shipowners when wanting to "tranship" or "lighter" their cargo at Antifer. These possibilities will lead to supplementary income which, eventually, will increase the rentability of the investment and secure European cooperation faced with the serious energy problem. For information, in 1974, the Port of Le Havre received 19 million tonnes of crude oil coming from lightering and 8 million tonnes from transshipment.

Moreover, it is not impossible that our Belgian and German partners go any further and orientate themselves towards the construction of a pipe-line from Le Havre-Antifer in order to benefit directly from the economy made by the large ships. The scheme of constructing a pipe-line has not been abandoned. A working group recently created in Belgium to set up the maps of the pipe-lines in this country has acknowledge the interest of such an outline from Le Havre.

To start off with, to-day, the Port of Le Havre-Antifer, originally constructed to reply to the needs of oil traffic, now offers vast possibilities for other traffic.

Other functions are immediately foreseeable in Antifer where all future possibilities have been worked out. Already, talk is about a methane terminal for new generation ships of 125.000 m³ for liquid gas. So, why not ships of 300.000 m³ tomorrow? For example, the 125.000 m³ methane carriers have the same dimensions as an oil tanker of 200.000 dwt and a draft of 11 metres, those of 300.000 m³ being similar to oil tankers of 500.000 dwt with a draft of 15 metres.

The geographical situation of the Port of Le Havre-Antifer could also be a privileged emplacement for ro/ro traffic.

We are now thinking seriously of an ore berth for very large carriers of more than 350.000 dwt OBO type (Ore, Bulk Ore) using the new slurry discharging system.

The pipe-line which has already proved its competitive position for the transportation of oil and gas, can be adapted to solids and therefore reduce the transportation costs of bulk in the years to come.

Thus, the development projects of oil pipe-lines can be made mixed, oil/ore to Belgium and the Ruhr and exploitation costs considerably decreased.

Finally, when the nuclear propelled ships for general cargo are in service, the shipping agents will try and get the maximum from Antifer which, thanks to its size and qualities of the site will be able to receive the largest ships under the best conditions. Therefore, why should it not

(Continued from page 24)

Port of Antwerp-Photographs



7) Left bank port development. Construction of new lock (upper left) and tunnel built under future dock system. The tunnel is being built in the (still) dry soil.



8) Left bank port development. View of the new lock at its junction with the Scheldt river.

become a real transshipment port for general cargo assuring by rapid lines and large ships a service to the East coast of the States and Europe.

In other words, a network of direct or indirect advantages already exists in contributing to the rentability of the initial project founded on the saving procured by the transportation of crude oil by large ships.

The reception facilities are ready and to-day, the Port of Le Havre-Antifer is an incomparable reality for the French and European economy.

Spanish-speaking port expert sought by UNCTAD secretariat

The Shipping Division of The United Nations Conference on Trade and Development (UNCTAD) is engaged on a programme of work aimed at:

- improving the efficiency of maritime transport;
- helping developing countries establish and strengthen their merchant marines;
- securing a proper balance of interests between shippers and shipowners;
- improving the management and operation of ports.

A vacancy exists for a Spanish-speaking staff member in the Shipping Division's Ports Section.

The successful candidate should:

- carry out studies aimed at increasing port efficiency;
- provide substantive support for technical assistance projects;
- participate in port management training courses and seminars.

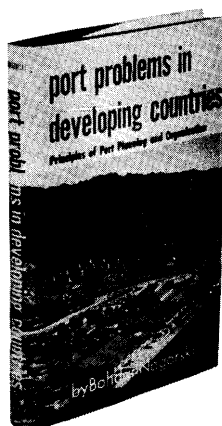
The successful candidate should:

- have a degree in economics, engineering or a related subject;
- have at least 3 years' experience in port operations;
- be fluent in Spanish and have a good working knowledge of English.

Applications should be addressed to:

Chief, Personnel Section
UNCTAD
Palais des Nations
1211 Geneva 10
Switzerland.

Last date for submission of applications: October 15th 1976



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—Editor, the Dock and Harbour Authority

"I would like to take this opportunity to say that I found the study by the author of this book to be of tremendous interest and I would like to congratulate Mr. Nagorski on a first class work".

—Assistant Secretary General, ICHCA

Orbiter Probe

"Portos e Navios" April '76

Rio de Janeiro, Brazil (Selected titles from the April issue of "Portos e Navios"):

Ports and Waterways

- Port of Vitória hits operational mark in 1975
- Minister visits ports in Santa Catarina
- Port at Amapá to be built
- Ministerial Committee studies the Suape Port System
- Minister of Transports inaugurates Fertilizer Terminal at left bank of Port of Santos: Conceiçãozinha
- Portobrás invests 46 million in Rio Grande do Sul Ports
- Port of Amsterdam: Occidental area already occupied
- British team to study the enlargement of the Suez Canal
- Marine Terminal of Praia Mole (ES): 15 million for the design
- Federal Government shall invest 200 million at the Tietê River

Other Articles

- Pollution of the sea.
- National line of roll-on/roll-off trailer transport has been inaugurated.

A record breaker?

Hamilton, Ontario, Canada (Port of Hamilton Information Release):—1976 could well be another record breaking year at the Port of Hamilton.

The source of optimism is the July tonnage figures indicating an impressive 90% increase in overseas tonnage over the same time period last year. To the end of June 1976, the total overseas figures revealed an 82% hike which means in the space of one month, the tonnage has jumped a further 8%.

Domestic and U.S. tonnage was 11% below the 1975 figures in June, but July indicates tonnage is only 4% lower than July 1975.

The Port's total tonnage (domestic and overseas) is less than 2% below last years. And, Port Director, Earl Perkins, is hopeful the 1975 record tonnage of 14,347,244 will be exceeded.

Although the Port's figures indicate a slight deficit in tonnage, it must be remembered the Welland Canal remained open in January 1975 in an effort to meet the Steel Companies' demands. This would account for the increased tonnage in 1975. The 1976 shipping season at the Port of Hamilton opened in April. Says Perkins, "we are guardedly optimistic at this point. If the trend continues it is quite possible we will have a record year. But a lot depends on the next 6 months."

Trade upswing

Nanaimo, British Columbia, Canada, August 1976 (Nanaimo Harbour News):—Nanaimo shipped 15 percent more cargo tonnage through the port in the first six months of 1976 compared to the same period in 1975.

"Last year we faced a decline in the market for forest products," comments Port Manager John Dunham. "And later there were labour problems with the result that we had not a single ship in port for 141 days of the year."

"This year we are catching up. There is a slowly increasing demand for the use of the Port of Nanaimo in its shipment of all types of forest products. We have seen pulp shipped to the People's Republic of China, the visit this month to the port of the largest vessel which has moved all the pulp out of our warehouses, and we expect this trend to continue."

"In fact we expect the same volume increase to continue for the second six months of this year and this will bring us near to, or above, the 1974 figures for exports, which were 956,568 tons."

In the first six months of this year, 99 vessels handled cargo in the port against only 85 in the same period last year.

Tonnage for the six months of 1976, with 1975 in brackets, was: lumber 221,000 (178,000); pulp 201,000 (188,000); newsprint 27,436 (18,225); total (including miscellaneous, not shown) 449,709 tons in 1976 against 389,701 tons in 1975.

Total tonnage in 1975 was 608,041.

Foreign Trade Zone No. 23 opened

Buffalo, N.Y., June, 1976 (Niagara Frontier Transportation Authority Newsletter):—Buffalo's Foreign Trade Zone (FTZ) No. 23 was formally dedicated in a brief ceremony on May 28, 1976. The ceremony was attended by about 150 elected officials and business leaders from both the U.S. and Canada. Erie County Executive Edward V. Regan, who had proclaimed the week of May 24-30 "Erie County Foreign Trade Zone Week," cut the traditional ribbon to symbolize the opening of the Zone, which is located in Terminal A of the NFTA's Port of Buffalo. He was assisted by Chairman Chester R. Hardt of the NFTA, Buffalo Mayor Stanley M. Makowski, President Charles F. Light of the Buffalo Area Chamber of Commerce, U.S. Representative Henry J. Nowak, John J. Palisano, president of Buffalo Foreign-Trade Zone Operators, Inc., and George K. Keitner, vice president of Buffalo Foreign-Trade Zone Operators, Inc. Others in attendance were U.S. Representative Jack Kemp, N.Y. State Senators James D. Griffin and Lloyd H. Paterson and Ronald A. McMullen, director of classification and valuation for the U.S. Customs Service in Buffalo.

Chairman Hardt, in a brief statement at the ceremony, noted that the opening of the Zone "clearly shows what

can be accomplished in Buffalo when governmental agencies and the private sector get together to create opportunities and jobs." Mr. Regan presented certificates of appreciation to the Zone's first ten tenants, acknowledging their "significant contributions" to the community in their willingness to participate in the Zone. He said that the dedication marked "a day of great expectations for the Niagara Frontier as we in Buffalo show the nation that we are going to be a focal point for international trade." Mayor Makowski congratulated John J. Palisano, president of Buffalo Foreign-Trade Zone Operators, Inc., and his firm; he also pointed out that the economic benefits conferred by the Zone would be welcomed by the City of Buffalo.

The FTZ began operations on June 1 with 10 tenants and 14 employees. The tenants include importers of martial arts equipment, meat tenderizing and packaging machinery, leather goods, liquors and photographic and optical equipment. To facilitate operations in the Zone, the U.S. Customs Service in Buffalo will maintain offices there. Tenants of the FTZ will be able to import goods and materials for further processing, storage or display without payment of duty until the items actually enter U.S. commerce, and then the duty on finished goods is usually less than the duty on parts or materials. Buffalo's FTZ, one of 18 nationally, is intended to serve the growing import business between U.S. and Canadian markets; it is also designed to attract overseas imports from foreign companies in Europe and the Far East.

Record revenues

Charleston, S.C. (Trade News from South Carolina State Ports Authority):—Fiscal 1976 was the best year in South Carolina State Ports Authority history, with the most dramatic business increases coming from the headquarters port of Charleston.

Records were toppled in total tonnage, revenues, containerized cargo and exports for the 12 months ended June 30, 1976.

South Carolina State Ports Authority (SPA) tonnage hit a new high of 3,478,460, compared with 2,995,802 in fiscal 1975, at state terminals in Charleston, Georgetown and Port Royal. The Port of Charleston's three SPA terminals handled 2,512,846 tons of cargo, of which 1,032,062 were containerized, 1,073,872 break-bulk, and 406,912 dry bulk.

SPA gross revenues exceeding \$13.5 million were the highest ever recorded, up 22.7 percent from the fiscal 1975 figure of \$11 million.

Containerized cargo, all of which moved through Charleston, increased 27 percent, or 220,410 tons over the 1975 figure of 811,652. The container tonnage totals cover only shipments via pure container lines, not reflecting substantial tonnage in containers transported by break-bulk ships.

The ports Authority's record export activity totalled 1,907,770 tons, continuing a favorable balance-of-trade and accounting for about 55 percent of the total tonnage handled in fiscal 1976.

The second half of the fiscal year keyed the significant cargo gains. During that time, the volume was 486,913 tons, 36 percent more than that of January-June, 1975. Business for June, 1976, alone was 311,993 tons, almost 50



BOSTON, July 19:—The Italian Line became the fourth steamship line to initiate service this year at Massport's Boston-Mystic Container Terminal with the July 6 arrival of the S.S. Italica.

The S.S. Italica and its sister ship, the S.S. Americana, will each call at the Mystic Container Terminal once a month, providing direct cargo service to and from Mediterranean ports with extensive transshipment possibilities to North Africa and the Middle East. The two-year old vessels, with all cargo carrying capability, are 688 feet long and so tall that a 10-foot section of their uppermost masts had to be removed to permit passage beneath the Tobin Bridge. They are unique in their designation as "vehicle carriers" as well as container, bulk and break-bulk carriers. They are also equipped with the MARISAT communications system, the most advanced shipboard communications equipment available.

Massport Executive Director David W. Davis said he welcomed the return of the Italian Line to regular service at the Port of Boston, where it operated passenger vessels for many years. The Italian Line, which recently acquired the container ship MV Atlantica Genoa, is rapidly expanding its cargo services. Mr. Davis credited Port Director Thomas F. Moakley and Capt. Nicola Arena of the Italian Line for conducting the negotiations to bring the S.S. Italica and the S.S. Americana to Boston.

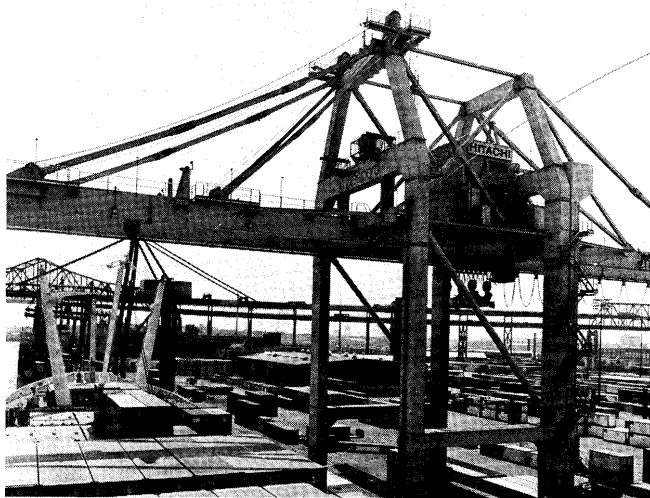
The Italian Line is represented in North America by its general agent, Seatrain Agencies, Inc.

With the addition of the Italian Line service, the Boston-Mystic Container Terminal is now served by 19 steamship lines on a regular basis.

percent greater than the 210,057 tons recorded during the previous June.

Cruise Guide

Hollywood-Fort Lauderdale, Florida, July 26 (Port Everglades News):—Among the publications recently produced for the Port Everglades Authority are an 18-page fact brochure and a directory of Port Industries. The fall-winter Cruise Guide is now in preparation and will be available in September.



BOSTON, July 19:—For the third month this year a record volume of containers was handled at Massport's Boston-Mystic Container Terminal in June.

Some 5,927 TEU's (Twenty-foot equivalent container units) were handled at the terminal in June as 30 vessels called there. This volume surpassed the previous monthly record at the five-year-old terminal, the April 1976 total of 5,193 TEU's, by more than 11 percent.

In the first six months of 1976, 26,987 TEU's were handled at the Mystic Container Terminal, 10 percent more than the terminal's previous high of 24,421 TEU's handled in the first half of 1974 and more than 50 percent above the 17,089 TEU's handled in the first six months of 1975. At its present pace, container volume will easily surpass the annual record for the facility of 46,181 TEU's handled in 1974.

Massport's Executive Director David W. Davis, who has slated Port of Boston development as one of the top priorities of his administration, attributed the container volume increase to the efforts of Port Director Thomas F. Moakley and a spirit of cooperation between Massport, the International Longshoremen's Association (ILA) and the port community. The Boston-Mystic Container Terminal is the Port of Boston's only public container terminal (Sea-Land operates a second container terminal) and, with the break-bulk Castle Island terminal, one of two prime general cargo facilities at this port.

While container volume at the Boston-Mystic Container Terminal is nearing capacity levels, there are strong indications that it will continue to increase in the upcoming months. On July 6, the Italian Line became the fourth steamship line to initiate service at the terminal this year when the S.S. Italica arrived there. The S.S. Italica and its sister ship, the S.S. Americana, will call at the terminal twice a month. This brings the total number of steamship lines calling regularly at the Mystic facility to 19.

Foreign Trade Zone at Galveston

Galveston, Texas, July 27 (Port of Galveston News Release):—The Board of Trustees of the Galveston Wharves voted at its regular monthly meeting Tuesday to apply to the Department of Commerce for the establishment of a duty-free foreign trade zone on Pelican Island.

The zone, totalling approximately 1,100 acres, will be comprised of land now owned by Mitchell Energy and Development Co. and the Galveston Wharves. The Wharves will, however, be the sole applicant, grantee and administrator of the zone if it is approved.

George P. Mitchell, president of Mitchell Energy, said his company would "fully support" the Wharves application by designating up to 800 acres of its holdings for use in the zone. He added that development of such a zone will make the Port of Galveston even more attractive to international trade and will provide benefits to shippers, foreign and American industry and the Galveston area economy.

Establishment of a foreign trade zone (FTZ) allows the handling, storing manufacture and exhibition of imported goods without the payment of customs duties. Duties become payable only when the goods are withdrawn for domestic production. Merchandise withdrawn for export is not subject to duty.

Only 19 such zones now exist. Their creation was made possible by legislation passed in 1934 and amended in 1950 to allow manufacturing with the zones.

Several advantages are inherent within an FTZ and will stimulate productive and profitable development of Pelican Island:

A duty-free area will be created for the storage, manufacturing, processing, assembling or other manipulation of foreign and domestic merchandise of every description, without bonding fees or time limits.

It is specifically designed for the acceleration of international business from a strategically located deepwater site 40-minutes from open water in the Gulf Mexico—facilities to include warehouses, plant sites, and available land.

It is exempt from inventory taxes on imported merchandise.

Total security is required by the federal government.

Any finished product leaving the FTZ for domestic consumption is dutied only at raw-material level.

C.S. "Chuck" Devoy, executive director and general manager of the Wharves said the FTZ has been discussed for many years and that "its time has come." He noted that the Wharves has embarked on a program to more broadly diversify its cargo mix and the FTZ would help its balance of imports vs. exports.

Tonnage on the increase

Houston, Texas, 8-3-76 (Port of Houston News Release):—Total tonnage shipped through the Port of Houston for the first six months of 1976 equaled 44,982,075 tons, an 18.3 per cent increase over the total of 38,033,788 tons for the first six months of 1975.

Foreign bulk cargo imports increased 89.8 per cent for the first half of 1976, numbering 9,665,490 tons as compared to 5,091,176 tons for the same period of 1975. Total bulk movements, including foreign export and import and domestic shipments and receipts, showed a 21.1 percent jump at 41,608,965 tons compared to 34,356,891 tons for January through June of 1975.

Total general cargo tonnage was down slightly at 3,373,110 tons for the first six months of 1976, while the 1975 figure was 3,676,897 tons.

Automobile imports continued to increase with 93,492

(Continued on next page bottom)

Vancouver Economic Impact Study

Vancouver Port News May 1976

The Port of Vancouver emerges as a 20th Century cornucopia, pouring wealth and opportunity into the entire Greater Vancouver area, in the findings of a new economic impact study. It is clear, also, that it beneficially affects a much wider region beyond the area.

This long-awaited report of an intensive survey of the port's economic importance completely verifies long-standing opinions of the vital role it plays.

Among its findings are that:

- One out of every 10 jobs in Greater Vancouver—54,000 jobs in all—is related to the port.
- Each job supports an average 1.8 dependents, so that 150,000 people are legatees, or about eight per cent of the total population of Greater Vancouver.
- In 1974, the year surveyed most closely, \$620 million in payroll was created by the port, about 12 per cent of the area's entire payroll. Obviously through substantial wage increases granted since 1974 the wage total today is much higher.
- Sales and revenue from maritime-related activities reached \$1,990 million, 17 per cent of the area total.
- The workers in the 54,000 jobs created by port activity paid \$135 million in personal income taxes. Port activities produced another \$155 million in federal, provincial and municipal taxes and customs levies.

At wider range it has been discovered that 70 per cent of Western Canada's external trade is handled through Vancouver. It represents \$8 billion in monetary terms.

Foreigners contribute substantially to direct revenues from the port. Seamen from visiting ships left \$2.25 million among Vancouver merchants in 1974. Some 70,000 cruise passengers from ships in the harbour spent \$27 million among the storekeepers, hoteliers, restaurants, and entertainment and recreation establishments.

Those miles of docks and wharves, the huge waterfront cranes, the fussy tugs in the harbour, the acres of containers, the cataract of loading grain, the piles of sulphur, the less spectacularly-colored coal and potash combine to provide benefits for every sector of the community. They help fill family piggy banks, keep taxis running, unload the shelves of bookstores and help empty the racks of clothing stores. Banks, buses, bars—all are touched by the dollar flow from the harbour.

That very harbour has its own impressive statistics.

It is to be found on more than 200 square miles of land and water stretching from Vancouver to the U.S. border.

There are 107 berths, four major bulk loading terminals, five grain elevators with a capacity of 26 million bushels in

units discharged at the Port through June of 1976 as compared to 64,446 cars coming in during the first six months of 1975. This represents a 45 per cent increase.

all, 1.69 million square feet of transit sheds, and 3.3 million cubic feet of refrigerated warehousing.

In most harbours the NHB owns and operates 100 per cent of the facilities. In Vancouver the figure is less than 50 per cent and there are those who maintain this judicious blending of private and public enterprise in a joint venture is one reason for the success of Vancouver, the nation's busiest port.

Cargo handled through the port doubled from 1965 to 1974, reaching 42 million tons in the latter year. Of that 85 per cent was bulk cargo, which had increased 60 per cent in five years.

Coal, the touted energy fuel of the next halfcentury, totalled 12,167,000 tons and rises annually in amount. Coal shipments were only 4,334,000 tons in 1970. The port shipped 5.3 million tons of grain, worth more than a billion dollars, in the survey year, but will without a doubt ship much more in the future.

Deep sea trade accounted for 33 million tons of cargo, of which 50 per cent went to the Orient and nine per cent to Europe and the United Kingdom. The remainder was local coastal traffic.

Vessels of all shapes and sizes—16,749 to be exact—entered the port in 1974. Of that total 2,022 were deep sea ships.

Port records show that vessels continue to increase in size, imposing new challenges on the port which must adapt and increase its facilities for docking and handling. Container traffic rose to 83,000 units in 1974, with total cargo content of 870,000 tons, up from 690,000 tons in 1970 and the new container dock at Vanterm will skyrocket those figures in the future.

Jobs

A total of 30,400 jobs directly related to port activities and 23,700 more provided indirectly was the employment impact of the Port of Vancouver, the study has concluded.

Of this sum 15,300 of the jobs were directly related to the waterfront, and another 15,100 in firms using the port services. Breakdown of waterfront and related industry showed 3,300 jobs for railroad workers; 2,400 in the fishing industry; 2,200 in trucking and warehousing; 2,100 in water transportation; 1,900 longshoremen; 1,800 ship and boat industry; 1,100 in other marine services; 500 in marine construction.

Among forest and mining industries 5,400 jobs were created; with 3,800 in other manufacturing, and 5,900 employed in trade activities.

Payrolls for the 15,300 on the waterfront amounted to \$202.4 million; in the industries directly related to \$404.4 million; and for the 23,700 working as a result of indirect impact the payrolls amounted to \$219.6 million.

The investigators concluded that the direct waterfront activities created \$697.6 million in sales. Sales in the other directly related industries were \$1,362 million; and sales

(Continued on next page bottom)

Safe Boarding Week conducted by Panama Canal Company

Balboa Heights, Canal Zone, Panama, June 24 (Panama Canal Press Release):—Refer to August 1975 issue, page 33 news item "Safe Boarding Week".—The Marine Bureau of the Panama Canal Company recently conducted a Safe Boarding Week.

Safe Boarding Week is an international cooperative effort sponsored by the International Maritime Pilots Association (IMPA) and its member associations throughout the world. It is held annually in May to call attention to the condition of boarding equipment on ships and boats.

As part of its overall safety program, the Panama Canal is vitally interested in the matter of boarding facilities on arriving ships. These facilities are used by many Canal personnel including boarding officers, pilots, seamen (linehandlers) and steamship agents. The safety and well-being of all these personnel is a fundamental objective of the Canal's Safe Boarding campaign. Vessels not providing Safe Boarding facilities may suffer delays at the Canal.

During the designated week in May, boarding teams consisting of Port Officials, pilots and safety specialists boarded arriving ships to inspect their boarding facilities for compliance with Safety of Life at Sea (SOLAS) and Canal requirements. Deficiencies and corrective suggestions were discussed with ship officers. These visits were followed by a letter to the operator of the ship congratulating them on the facilities provided or explaining any deficiencies found.

An analysis of approximately 300 Safe Boarding Week inspections by Panama Canal Company teams and pilots reveals the following significant data:

achieved in the indirect relation were \$631.5 million.

Thousands Took Part in Survey of Port

The economic impact survey of the role of the Port of Vancouver on the Greater Vancouver region involved 2,750 businesses and organizations and took many months to complete, and many more in which to assess the vast amount of material obtained.

This data was used as a basis for a complex computer program study to determine the direct and indirect effect of port operations.

Because of the time required to conduct the survey and complete its examination the economic impact figures relate to the year 1974, the most recent for which complete, accurate statistical information was available when the study began.

There have been earlier, less comprehensive and more informal examinations of the subject but nothing to match the diligent depth at which this examination, commissioned by the port authority in 1974, has been pursued.

Earlier studies demonstrated, in general terms, the immense contribution of the port to the regional economy. This survey has demonstrated, in much fuller detail, that the hints of its importance given by the previous surveys only began to touch on the size of the participation.

Pilot Ladders

- Not constructed in accordance with Regulation 17, Chapter V (as amended), Safety of Life at Sea (SOLAS) Convention 1960 30%
 - Spreaders improperly affixed and/or spaced 46%
 - Failure to have bulwark stanchions in place or secure 15%
 - Failure to have life ring with water light attached and heaving line nearby 38%
- Other deficiencies noted include improperly securing of ladders, bulwark ladder not in place and secure; ladder and immediate deck area improperly lighted.

The Panama Canal requires the rigging of the accommodation ladder on most ships. The more common deficiencies of these installations include:

- Boat spar not in place or missing 63%
- Ladder not resting firmly against ship's side (usually because of location at stern section of ship) 34%
- Bottom platform missing or improperly canted ... 21%

Except for other miscellaneous deficiencies, the basic fault of accommodation ladder installations is associated with landing a launch alongside.

Most of the boarding team members were of the opinion that many deficiencies would be non-existing or greatly reduced with the exercise of proper supervision by ships' officers.

The Panama Canal Company plans to continue a boarding facility education program by periodic inspection and follow-up advice to operators.

Specialized carriers with unique characteristics will be inspected on an individual basis to arrive at a mutually satisfactory solution to a safety problem. This will include the boarding facilities for the many fishing vessels using Canal facilities.

It was the consensus of all Canal personnel concerned with the 1976 Safe Boarding Week Program that some improvement over 1975 was evident, but that a continuing educational program was essential.

Intermodal Seminar

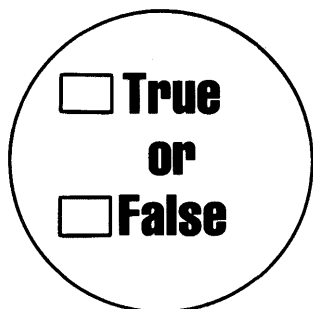
Houston, Texas (Port of Houston News Release):—The Port of Houston Authority, in conjunction with the Containerization Institute Inc., will sponsor a "Shipper's Dialogue West Gulf" intermodal seminar October 26–27 at Stouffer's Hotel in Houston.

The theme of the conference will be "Progress Through Intermodalism".

One of the highlights of the conference will be the luncheon speech on the first day given by the Hon. Bob Casey, newly-appointed Federal Maritime Commissioner and former Congressman from Houston.

Walter Pancoe, Southwest Regional Manager for E.I. DuPont de Nemours Co., will serve as general chairman of the conference with George W. Altwater, Executive Director

All Ports Are Alike



Test your transportation IQ. Put a check in one of the squares and look at the bottom of this column to see if you agree. By way of information, some ports provide only the bare essentials. Then there are others, like the Port of Houston, where facilities have always been kept ahead of customers' needs. For instance we have now expanded into three distinct port areas, each complete and designed for your particular cargo, providing the best facilities in the Gulf of Mexico.

TRI-PORTS OF HOUSTON

Serving You better three ways

Port of Houston Authority/P.O. Box 2562/Houston, Texas 77001/Field Service Office/
Lincoln Bldg./60 East 42nd St./New York, N.Y. 10017

Answer: False; but if you marked True, please write to the Director of Trade Development for information.

of the Port of Houston as co-chairman. Program chairman will be C.A. Rousser, Port Director of Trade Development, aided by Norman Stone, Executive Director of the Containerization Institute.

The morning and afternoon programs of the first day will concern The Commodity Approach to Intermodalism, moderated by Wiley George, President of the West Gulf Maritime Association. The panel will be made up of experts in the transportation of various commodities and there will be ample time allotted to question and answer periods.

Following the business session, conferees will be taken to the Port's new Barbours Terminal LASH/container facility for a Texas-style reception and barbecue dinner.

The Wednesday session will concentrate on The Future of Intermodalism in the West Gulf, moderated by George Strange, General Manager of the Houston Port Bureau. Areas to be discussed include New Trends in Intermodalism, an Update on Mini-bridge, and Deregulation-Pros and Cons.

The conference will adjourn following a luncheon on Wednesday.

Advance registration will be possible between 5 p.m. and 9 p.m. at the hotel on the Monday before the conference, and will continue the following day. An early arrival hospitality reception will be sponsored by the Port of Houston Authority at the hotel from 7 p.m. to 9 p.m.

Monday, October 25.

Registration for the conference will be \$100 for members of the Containerization Institute and \$125 for non-members. A \$15 charge will be made for those wishing to attend only one of the luncheons.

Rooms have been set aside at the hotel for out-of-town participants.

Anyone wishing registration materials or information about the conference should contact C.A. Rousser, Port of Houston, P.O. Box 2562, Houston, Texas 77001.

FIATA Congress 1977 in L.A.

Los Angeles, Calif., July 23 (Port of Los Angeles News):—When 1,200 delegates and wives come to Los Angeles from 100 countries in September 1977, to attend the 15th FIATA World Congress, it will be the first time an association of such size and significance has ever met in this city.

The congress, held every two years by the global organization and scheduled for September 25 through 29 next year, was held only once before in the United States.

FIATA, the 50-year-old International Federation of Forwarding Agents Associations, made up of representatives of freight forwarding associations in the major trade nations of the world, is concerned with increasing the

(Continued on next page bottom)

The Sixth Meeting of the National Association of Foreign-Trade Zones

Charleston, South Carolina, August 19 (by Robert G. Jacobi, Vice President of U.S. International Trading Co.):—A South Carolinian will be conference chairman for a national meeting of all the United States' 19 foreign-trade zones next month in Washington, D.C.

Robert G. Jacobi of Charleston, Vice President of U.S. International Trading Co., will chair the Sixth Meeting of the National Association of Foreign-Trade Zones, September 13–15 at the Statler Hilton in Washington.

Will Leonard, Chairman of the U.S. International Trade Commission will be one of the featured speakers at the three day meeting.

Other speakers will include:

- Emanuel Celler, former U.S. Congressman and a member of the law firm of Weisman, Celler, Spett, Modlin & Wertheimer of Washington;
- John DaPonte, Executive Secretary, Foreign-Trade Zones Board, U.S. Department of Commerce;
- Craig Rovzar, Foreign-Trade Zone No. 18, San Jose, California;
- Raymond V. Lehr, Information Services Interna-

tional;

- George K. Keitner, A.C., Vice President and Executive Director, Foreign-Trade Zone No. 23, Buffalo, New York;
- John Holl and John D. Robinson, U.S. Customs Service, Washington;
- Homer Maxey, Foreign-Trade Zone No. 9, Honolulu;
- Ken Nickerson, Foreign-Trade Zone No. 12, McAllen, Texas;
- Robert Dee, Foreign-Trade Zone No. 2, New Orleans; and
- Marshall Miller of Miller, Swanson, Midgley, Gangwere, Thurlo & Clarke of Kansas City.

The National Association of Foreign-Trade Zones was created in 1973: (1) to improve channels of communication and understanding between the U.S. Government and all of its executive departments and agencies and Foreign-Trade Zone Grantees and Operators; (2) to promote, further, and support Foreign-Trade Zones and their utilization as integral and valuable tools in the international commerce of the United States; and (3) to encourage the establishment of Foreign-Trade Zones at U.S. ports of entry as elements of economic development programs contributing to international business development.

Current officers and directors are: President—Robert Dee, Foreign Trade-Zone No. 2, New Orleans, La. Vice President (acting)—Solly Braun, Foreign-Trade Zone No. 1, New York, New York. Secretary/Treasure—Craig J. Rovzar, Foreign-Trade Zone No. 18, San Jose, California. Directors—Homer A. Maxey, Jr., Foreign-Trade Zone No. 9, Honolulu, Hawaii; Marshall V. Miller, Foreign-Trade Zone No. 15 & 17, Kansas City, Mo.; Ward Martindale, Foreign-Trade Zone No. 16, Sault Ste. Marie, Mich.; Kenneth Nickerson, Foreign-Trade Zone No. 12, McAllen Texas.

From 1972 to April 1976, Jacobi was with the South Carolina State Ports Authority as manager of financial planning services and assistant to the executive director for special projects. He was project director for the Ports Authority in the establishment of the foreign-trade zone at the port of Charleston.

Jacobi resigned from the Ports Authority in April, 1976, to become vice president of U.S. International Trading Company of Charleston, and vice president of its parent company, Property/Business Research and Development Finance Company.

U.S. International Trading functions in international research, sales, and agency representation. John P. Qualey is Chairman of the Board, James M. Tobias, President and William B. McGill, Vice President-Research.

efficiency of freight or cargo processing within and between countries. Their expertise contributes greatly to the improvement of world-wide living standards through the development of fast and low-cost delivery systems to manufacturer and consumer alike.

Heading the planning committee, which met July 20 to outline the Los Angeles FIATA congress, is Honorary Chairman and Los Angeles City Councilman John Ferraro, chairman of the City Council's Industry and Transportation Committee and twice a Los Angeles delegate at previous FIATA congresses.

Chairman for the committee is Erwin Rautenberg, president of Air-Sea Forwarders, Inc., who is a leading freight forwarder in the Los Angeles area and a veteran FIATA member.

Vice-chairing the group are Fred B. Crawford, general manager of the Port of Los Angeles, and Clifton A. Moore, general manager of the Los Angeles Department of Airports.

Headquarters for the meeting will be the new Bonaventure Hotel now under construction in downtown Los Angeles, where 700 rooms have already been reserved for the visiting delegations.

Speaking both for the committee and the Los Angeles shipping community, Rautenberg expressed the hope that the 1977 FIATA World Congress will have a record attendance, "for the good of the entire Southern California area.

"Many of these association representatives have never before called on the Los Angeles area," he added, "and their exposure to our markets and industries could result in a tremendous increase in commerce between world trade centers and Los Angeles."

Port of New Orleans Has A Major New Rebuilding Program

Press Release from Port of New Orleans

New Orleans—The Port of New Orleans is about to embark upon a major rebuilding program that will include the construction of new terminal facilities, industrial site development and the renovation of existing waterfront facilities.

The five-year capital improvements program—which will be partially funded by the State of Louisiana and partially out of port-earned revenues—calls for a total expenditure of \$91 million.

The Louisiana Legislature passed into law a \$75 million general obligation bond issue to finance the bulk of the improvements.

Planners for the Board of Commissioners of the Port of New Orleans (Dock Board) have conducted sophisticated economic studies and are projecting that by the year 2000 cargo moving through the port will be equally divided between conventional break-bulk, roll-on/roll-off and container. Long-range planning is aimed at providing the modern cargo handling facilities to handle all three types of cargo with speed and ease.

The five-year program is part of the 30-year master plan for redevelopment of the port to be completed in the year 2000.

Priorities for the program are divided into four categories.

- France Road Terminal and adjacent industrial site development.

The Dock Board already has two full container berths in operation at France Road, with a third under construction and a fourth berth on the drawing board.

The fourth berth is included in the \$34,450,000 earmarked for development in this category. This part of the program also includes purchase of additional container cranes, installation of trackage, drainage, sewers, lighting, clearing and preliminary grading of approximately 87 acres set aside for port-related industrial development adjacent to container facilities.

Port planners project that 70 per cent of all container cargoes moving through the port will be handled at France Road by 1981. The additional facilities and industrial development will generate 1,500 new jobs with a payroll of \$20 mill, over and above the jobs created by the actual construction.

- Mississippi River Waterfront development and renovation.

Breakbulk wharves, ship repair facilities and LASH/Seabee facilities are to be upgraded and expanded under this category, which calls for an expenditure of \$32,965,000. Additionally, new lighting and other safety and security modifications are to be made to older riverfront wharves.

- Modifications for Tenants and Assignees and other miscellaneous riverfront projects.

In order to accommodate specialized cargoes from the more than 130 steamship lines operating out of the port, modifications to existing wharves—such as enlarging doors, providing truck-unloading facilities, mooring bits, paving, fencing, reefer outlets—are required. The total expenditure projected for this category of projects over the five-year period is \$7,731,000.

- Tidewater Facilities.

The tidewater area along the Mississippi River-Gulf Outlet requires approximately five years of land consolidation before permanent structures can be initiated. This already is underway. Initial construction of two general cargo berths—designed to accommodate large roll-on/roll-off vessels as well as conventional breakbulk ships—is slated for completion by 1981. These berths will complement the port's existing berths for small ro-ro vessels. Development of this important area is expected to gradually generate a total of 25,000 jobs. For the development in this category a total expenditure of \$16,400,000 is projected.

While the capital improvements program for the next five years has been divided into four major categories, the most important thing about the legislation authorizing the program is the flexibility it gives Dock Board planners to meet with immediacy the constant fluctuations in the various trades vital to the Port of New Orleans.

The program guarantees that major new facilities will be constructed and major modifications to existing wharves will be made in a manner that is most satisfactory to the customers who utilize the port facilities.

The thrust of the Dock Board in this major undertaking will be to satisfy with the utmost efficiency the needs of existing port customers and to provide the facilities that will attract new customers to New Orleans.

Board President elected

Los Angeles, Calif., July 28 (Port of Los Angeles News):—Nate DiBiasi, legislative representative for the International Longshoremen's and Warehousemen's Union, Local 13, Wilmington, California, was elected today (Wednesday, July 28) as president of the Los Angeles Board of Harbor Commissioners for the year 1976–77.

Re-elected vice president was Roy S. Ferkich, a San Pedro attorney who has been a Board member since 1973.

DiBiasi has been a member of the Board since 1973, and served as vice president for 1½ years. He was recently reappointed to a five-year term on the Board by Mayor Tom Bradley.

DiBiasi has been vice president and welfare officer of the ILWU's Local 13, and is second vice president of the Pacific Coast Association of Port Authorities. He is also a member of the Wilmington Democratic Club, the Sons of Italy and the Catholic Maritime Club.

He and his wife, Donna, reside in Harbor City and have two sons. They have lived in the Harbor area for more than 20 years.

New Far East representative

Los Angeles, Calif., August 5 (Port of Los Angeles News):—The Far East office of the Port of Los Angeles will be fully staffed soon as a result of action this week (Wednesday, 8/4) by the Los Angeles Board of Harbor Commissioners.

The Board authorized the signing by Fred B. Crawford, Harbor Department general manager, of a one-year personal services contract with Katsuya Yokoyama of Kawasaki, Japan. As the new Far East representative, Yokoyama will fill the vacancy created by the death of Zenzaburo Seto last year.

A three-week orientation tour of the United States has been scheduled for Yokoyama beginning Sept. 6. Included in his itinerary will be stopovers in several major eastern and southern cities following an extended visit with Los Angeles Harbor officials.

Duties of a Far East representative for the Port of Los Angeles include the solicitation of trade for the Port and various public relations services in both Japan and South Korea.

A staff officer of the Mitsui O.S.K. Lines, Ltd., Yokoyama has over a quarter century of maritime experience. His duties and positions have included publicity manager for the General Affairs Department and internal auditor for Mitsui O.S.K. Lines; deputy secretary general of the International Association of Ports and Harbors; and secretary general of the Japan Container Association.

Record fiscal net income

Los Angeles, Calif., August 11 (Port of Los Angeles News):—The Port of Los Angeles has reported a record total net income of \$10.6 million for fiscal year 1975-76, based on a preliminary financial statement presented to the Board of Harbor Commissioners today (Wed. 8/11) by the Harbor Department General Manager, Fred B. Crawford.

The report showed a net increase of over one-half million dollars over the same 12-month period ending June 30, 1975. Gross revenues increased \$2.8 million, eleven percent over last year, and \$7.5 million over 1974.

The largest increase in gross income was in wharfage and dockage fees as well as an increase in oil royalties. Wharfage receipts rose \$1.7 million (18%), dockage \$800,000 (33%), and oil royalties \$460,000 (24%).

Net income for the year increased \$550,000 (5.4%), the fiscal report stated.

LNG Terminal

Los Angeles, Calif., August 18 (Port of Los Angeles News):—A proposed permit and an agreement between the City of Los Angeles and a potential terminal operator for liquefied natural gas (LNG) were received by the Los Angeles Harbor Commission today (Wed., 8/18) for consideration and forwarding to the office of Mayor Tom Bradley.

Presented to the Board by Harbor Department General Manager Fred B. Crawford were provisions of a lease with



San Francisco, Calif., 8/2/76 (Marine Exchange of the San Francisco Bay Region):—Norwegian pride beams across the face of Capt. O. Tanke-Jenssen, master of the new MS HOEGH TRIGGER on this auto carrier's maiden voyage to the Golden Gate and around the World. On hand to welcome the new motorship were Dirk Van Meurs, Marine Exchange director and president, West Coast Ship Changers, Don Taggart, Port of San Francisco public relations director, and maritime Princess Chris Herring. Transpacific Transportation Company is the agent for Hoegh-Ugland Auto Lines' vessel.

Western LNG Terminal Company. A subsidiary of Pacific Lighting Corp., the firm is proposing to build and operate a \$155 million LNG receiving and regasification facility on Terminal Island at Los Angeles Harbor.

The Board is also examining a channel agreement concerning the Harbor Department's obligations to dredge a —45-foot channel to the LNG facility, a turning basin and a slip, and to construct a dike for dredge material containment. This dredge material will be utilized, according to current Harbor Department plans, in the landfill for further harbor development.

Cost of the dredging will be \$12.6 million, half of which will be paid by Western LNG. Additionally, the Harbor Department will be required to construct 3,850 feet of dike for dredge material containment at a cost of \$2.8 million.

Pacific Lighting Corporation's proposals call for transporting natural gas in liquefied form South Alaska to the terminal in Los Angeles Harbor. The gas which is converted into a liquid by cooling to —265 degrees F. would be shipped in vessels specially constructed, at a cost of \$179 million each, to accommodate 130,000 cu. meters of LNG (equivalent to 2.8 billion cu. feet of natural gas.)

Nearly 1,000 feet long, with a draft of 38 feet, the tankers would be berthed at a special wharf designed and constructed by Western LNG Terminal Co. The LNG would then be piped to two 130-foot-high storage tanks. An adjacent revaporization facility would process the stored LNG at an expected initial rate of 200 million cu. feet of natural gas per day. This rate is expected to double within a year as the terminal reaches its second stage of development.

Estimates by Pacific Lighting Corp. place the cost of the entire gas liquefaction, transportation and regasification project at \$1.1 billion.

“International Rivercenter”



New Orleans, Louisiana, July 22 (Information from International Rivercenter, New Orleans):—Rivercenter Mall, the newest attraction on the banks of the Mississippi at New Orleans, will have a \$1 million, 17,531-square-foot seafood restaurant according to an announcement today by Vincent and Joseph Vuskovich of Visko's, and co-managing partners of International Rivercenter, James J. Coleman, Jr. and Lester E. Kabacoff.

Rivercenter Mall encompasses the upper level of the former Poydras Street Wharf, now leased for 60 years to International Rivercenter by the Dock Board, and connected to The New Orleans Hilton Hotel complex by two bridges across the remaining railroad tracks. The upper level of the wharf is undergoing a \$5 million conversion into the elaborate shopping center. Adjacent to the Hilton complex is a landside section of Rivercenter Mall, above the 4-acre convention center. The two malls are connected by the upriver bridge, providing a complete circulatory passageway among malls, convention facilities, hotel, and the Spanish Plaza. George Talbott is general manager of Rivercenter Mall in charge of leasing its space.

The lease proposed to the Board provides for a 25-year term with five, five-year options to renew. The leased premises would include 4.2 million sq. feet of land, 647,946 sq. feet of water and 96,917 sq. feet of pipeline right-of-way.

Compensation to the Harbor Department for this area is anticipated to be \$100,018 per month, or \$1.2 million annually.

Port Finances Explained

New Orleans, Louisiana, June, 1976 (New Orleans Port Record):—A group of state legislators from Oklahoma recently requested the Port of New Orleans to give them a full briefing on port finances and port operations.

The legislative group was particularly interested in capital financing since the Oklahoma Port of Catoosa at Tulsa is requesting legislative assistance with its capital development program. The group also questioned port officials about the interrelationship of New Orleans with the Arkansas Waterway and Catoosa.

Port director Edward S. Reed explained to the group that the Port of New Orleans is totally self-sufficient in

terms of operating and maintenance expenses and also services nearly \$90 Million dollars in capital improvements bonds out of port revenues. He pointed out, however, that recent high inflation in the construction market and demands for new cargo-handling facilities to meet the needs of advanced shipping technology make it impossible to meet these demands out of port revenues alone.

Reed said port-earned revenues—after all operating, maintenance and bonded debt service obligations have been met—amount to between \$1.5 Million and \$3 Million annually.

The port director said that over the next five years port revenues available for capital construction will amount to about \$16 Million and that the port needs to spend a total of \$91 Million to keep the master plan for redevelopment of the port on target.

Reed told the Oklahoma legislators that the Louisiana Legislature is being asked to approve a general obligation bond issue in the amount of \$75 Million to make up the difference, with the bonds to be sold gradually over the next five years as market conditions are favorable and as port projects progress.

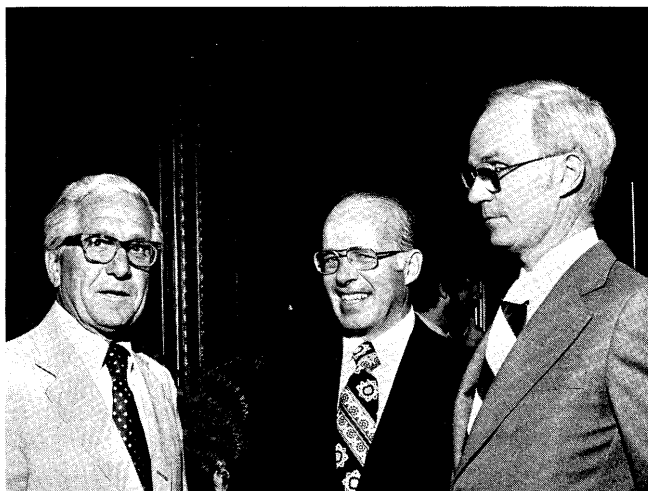
The group included Oklahoma House Speaker William P. Willis; Rep. John Miskelly Jr., chairman of the House Appropriations and Budget Committee; Rep. A.C. Holden, chairman of the House Business and Industry Committee and Representatives Joseph E. Fitzgibbon, Bill Lancaster, Roy B. Hooper Jr. and Robert V. Cullison. They were accompanied by their wives and by Quentin Fitzgerald, staff vice-president of the Oklahoma Bankers Association.

N. Y. Port Maritime Queen

New York, N.Y., July 9 (The Maritime Association of the Port of New York):—Three finalists will be chosen from among some 40 girls who are entered in the Maritime Queen of the Port of New York Contest, at a reception and luncheon aboard the ROBERT FULTON, moored at The South Street Seaport, Fulton Street and the East River, Manhattan, on Wednesday, August 18th.

The event is divided into three segments. (1) An appearance by the girls (all between the ages of 18 and 28 years) in swim suits for photography. (2) A cocktail reception for the entrants, and (3) An individual introduction and an interview by the MC before the luncheon audience. A distinguished panel of judges will select the three finalists.

The Maritime Queen and her Court of two Princesses subsequently will be selected from the three finalists at the Tamarack Country Club, Greenwich, Conn., on Tuesday, September 14th, at the dinner following the annual golf tournament of the Maritime Association, sponsor of the annual contest. The Queen and her Princesses will then reign for a year over maritime functions in the New York-New Jersey port region, appearing at ship maiden arrival ceremonies (there were 150 ship maiden arrivals here during 1975), luncheons, receptions and other official affairs. The winners of last year's contest received cruises for two, modeling courses and other prizes.



San Francisco, Calif., 8/10/76 (Marine Exchange of the San Francisco Bay Region):—"It's the 2% that counts" was one of the messages of John L. Stewart (left), vice president of Fireman's Fund American Insurance Companies, to the San Francisco Customs Brokers and Freight Forwarders Association. The veteran marine insurance executive addressed an audience which included association vice president William F. Bosque, J.E. Lowden & Co., and president Marshall Brownfield, BBC International. He noted that while marine insurance volume is only 2% of total U.S. underwriting, it is an important factor in America's world trade and balance-of-payments. Unlike domestic insurance, marine coverage is not regulated by state-filed rates; about 35% of such business is for covering export and import cargoes. But U.S. companies provide only about 25% of the protection for outbound shipments, and less than that portion for import cargoes. Competition is keen—"across the street" with other U.S. firms, and with overseas underwriters. Problems of restricting such open availability of choice for insurance are handled in the U.S. by the American Institute of Marine Underwriters, headquartered in New York with about 180 members, and overseas, by the International Union of Marine Underwriters. The latter—over 100 years old—seeks "freedom of insurance". However, among its 37 member nations, some 21 have to some extent limited those engaged in their trades in the selection of insurance. Last year was one of the worst for marine underwriters, Stewart reported, with major losses involving large tankers and bulkers, heavy port congestion (as in the Middle East) and continuing high rates of pilferage and thefts.

Port bibliography available

San Francisco, Calif., August 11 (Elliot Schrier, President, Manalytics, Inc.):—In October 1975, Manalytics, Inc. published an authoritative bibliography on port planning and development. It was designed to provide a comprehensive guide to the literature covering the broad spectrum of issues confronting port planners. The favorable response, which quickly exhausted the press run, indicated a need to update and expand the scope of the bibliography annually. Accordingly, Manalytics has compiled a second edition of **Port Planning and Development: A Bibliography** to be published October 1.

New executive director



Mr. George J. Nichols

Savannah, Georgia, August 12 (Georgia Ports Authority News Release):—George J. Nichols has been named Executive Director of the Georgia Ports Authority succeeding J.D. Holt, who is retiring after serving as the Authority's Executive Director for the past eighteen years. The appointment was announced July 26th by Don A. Grantham, Chairman of the Authority.

Nichols joined the Georgia Ports Authority in 1963 and was named Assistant Comptroller in 1964. He was appointed Comptroller in 1971 and named Assistant Executive Director, March 24, 1976.

Prior to joining the G.P.A., Nichols was affiliated with Hunt Foods and Industries.

Nichols serves as 2nd Vice President and Secretary-Treasurer of the South Atlantic and Caribbean Ports Association and as a member of the Financial Committee of

The bibliography includes more than 500 citations, culled from more than 2,000 journal articles, professional papers, technical reports and books issued throughout the world in English since 1965. It covers port organization, administration and operation, economic and environmental impact, port access, intermodal interchange and deepwater port planning. A special section on dredging, new to the second edition, lists citations to the literature of the dredging industry over the past five years and comments on those aspects of dredging which are most relevant to port planning. Also new to the second edition are citations on marina planning and development. Significant research projects in progress are also cited. For added convenience, the spiral-bound bibliography is indexed by subject area and author.

Copies of the bibliography are available for \$30 each. To order, please.

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Refer also to "Ports and Harbors" November, 1975 page 59 "Port bibliography available".



San Francisco, Calif., 8/12/76 (Marine Exchange of the San Francisco Bay Region):—Discussing his new duties as Commander of the Pacific Area and Twelfth Coast Guard District at a World Trade Club reception and luncheon in his honor, Vice Admiral Austin C. Wagner was greeted by Bay Area maritime leaders and by two of his predecessors. Left to right: Paul O'Leary, Marine Exchange president and executive vice president of Connell Bros. Co., Ltd.; Adm. Mark Whalen, former 12th District Commander; VADM. Wagner; Admiral Chester Bender, former Commandant of the Coast Guard, and Arthur Haskell, Exchange vice president and senior vice president, Matson Navigation Co.

the American Association of Port Authorities.

He is a member of the Governor's Advisory Council for the Coastal Zone Management Program.

He is a member of the Propeller Club, the Lions Club and serves as Treasurer on the Advisory Board of the Salvation Army.

A native Savannahian, Nichols is married to the former Anna Marangos of Valdosta, Georgia. The Nicholases have two children, John and Heidi, and reside at 1605 Queensbury Street.

Import Port of Ford vehicles

Tampa, Florida, 8-10-76 (News from the Tampa Port Authority):—Importation of Ford Motor Company vehicles through the Port of Tampa will increase over the next several years, a Ford executive has predicted.

The predictions followed approval by the Tampa Port Authority of a lease to Predelivery Service Corporation, a Ford subsidiary, for several acres of land where the vehicles will be processed and stored.

Principal vehicle to be imported will be the Ford Courier, a small pickup truck manufactured in Japan. Other models are expected to come later next year.

The Courier is at present being imported through the Port of Tampa and has been for the past four years. Volumes, however, will increase in the U.S., the Ford official said.

Predelivery Service will take over the activity of receiving and processing the vehicles from Computer Automated Transportation, Inc., a private firm which has had a contract with Ford for more than four years in the past.

Computer Automated Transportation, which still has a lease on Port Authority property, has not indicated its future plans, according to Guy N. Verger, Tampa Port Director.

The lease to Predelivery Service is for two years with two two-year options. It provides for five acres at a rental



San Francisco, Calif., 8/16/76 (Marine Exchange of the San Francisco Bay Region):—COAST PORT OFFICIALS celebrated their 63rd annual gathering when the Pacific Coast Association of Port Authorities met recently in the San Francisco World Trade Club. Hosting for the convention was the Port of Oakland; Port Commission president William Walters (left) also serves as PCAPA president. Program participants included Brig. Gen. Richard Connell, South Pacific Division Army Engineer; Frank C. Boerger, engineering consultant and Dredging Committee chairman, California Marine Affairs and Navigation Conference, and Ben E. Nutter, port executive director. The event was one of a week-long series of gatherings, which included extensive discussions on funding for ports, insurance matters, environmental impacts, coastal zoning and other subjects affecting commercial harbors.

of \$15,000 annually and use of an additional 20 acres on a month-to-month basis at a rental rate of \$3,000 per acre. The lease also provides for the payment of wharfage, dockage and sheddage.

Container service to Europe and Middle East

Toledo, Ohio, July 22 (Toledo-Lucas County Port Authority):—Regular import and export container service has been established between the Port of Toledo and United Kingdom, Mediterranean and Middle East ports. Manchester Liners Ltd. of Great Britain will maintain the feeder service for 20 and 40-foot containers between Toledo and its Montreal terminal.

A fully cellular containership will call at the port's overseas general cargo center every 14 days outbound and weekly inbound. At the Montreal terminal, connections are made with Manchester and Liverpool, England and Greenock, Scotland. Containers will also be accepted for Dublin, Ashdod, Limassol, Malta, Piraeus, Tartous, Iskenderun, Portugal, Spain, Saudi Arabia and Iran.

Toledo has long been regarded as an excellent site for container consolidation and handling. For the past several years, service has been on an inducement basis and containers were moved primarily on combination container-break bulk ships.

"Our prime concern has been providing shippers with the most efficient handling possible for break bulk and large project cargoes," said Frank E. Miller, seaport director for the Toledo-Lucas County Port Authority. "A substantial amount of container traffic is generated in the Toledo trade area, however. We are glad that we can now offer regular service to these shippers."

The key to the success of feeder service to Toledo depends on its utilization by importers and exporters in the Toledo trade area, according to Richard M. Toohey,

manager of trade development for the Port Authority. "The amount of business generated for the Manchester service is the single fact governing how long it will be maintained," he said.

"The Manchester service offers intermodal transportation from the point of origin to point of destination on a through bill, one charge for all necessary costs and services. Because of lower inland transportation costs to Toledo, shippers in our trade territory will realize considerable savings by routing their containers through the port," Mr. Toohey said.

The Manchester service was initiated on June 26 when the MANCHESTER MERCURIO loaded boxes for the U.K. and Middle East. The vessel is one of two fully cellular containerships providing feeder service by Manchester Liners on the Great Lakes. Kerr Steamship acts as agent for the new service.

ICHCA Conference Amsterdam 1976

Place and date

An international ICHCA Conference will be held in Amsterdam on Thursday, October 28 and Friday, October 29, 1976 at the Royal Tropical Institute (Koninklijk Instituut voor de Tropen), 63 Mauritskade.

The conference is being organized jointly by the National Sections of Belgium, the German Federal Republic, the Netherlands and the United Kingdom.

Language

The conference language will be English.

Outline of the conference

The theme of the conference is 'Loss and Damage in Transport'. The problems to be considered at the conference may be summarized as follows: All goods run the risk of being lost whilst passing along the transport chain, and this risk is by no means hypothetical. Equally serious for certain classes of freight is the risk of a decrease in quality during transport; when the decrease exceeds acceptable levels, it comes under the heading of 'damage'.

Loss and damage entail many costs and problems for the shipper, the carrier and the consignee, and the resulting waste is frustrating and harmful. In addition to the direct costs—which remain costs, even though covered by insurance—there are the indirect costs which should not be underestimated and which are usually not covered by insurance.

Among the indirect costs may be mentioned: time of standstill, time and effort needed for supplying the insurance company with the necessary data on which they will make payment, loss of interest, and so on. There is also the very real risk of damage to supplier/customer-confidence and relationship.

Loss and damage may be classified as follows:

- a. Excessive decrease in quality during the transport process, making the final condition of the product unacceptable.
- b. Loss of the product through fire, leakage, etc.
- c. Loss of goods through organizational causes.
- d. Loss of goods through pilferage or major theft.
- e. Goods not arriving at the right time or the right place.

Antwerp: leading general cargo loading port in Western Europe

Antwerp, 24/5/1976 (Press Release from Port of Antwerp Promotion Association):—The massification in shipping, by which certain commodities as for instance paper, cellulose, timber, fruit, coils etc. are shipped unpacked as bulk goods and in ports as Antwerp handled by specialized terminals, as well as the introduction of modern transportation techniques such as container, roll-on/roll-off and Lash resulted into a diminution of the so-called traditional general cargo.

However, by lack of a better method, when comparing the general cargo traffic in the Le Havre-Hamburg range use is still made of a repartition by which the general cargo traffic is obtained by subtracting from the total maritime cargo traffic in the various ports the following commodities: oil, solid combustibles, ores, cereals, cattle fodder, oilbearing seeds and fruit, fertilizers, crude mineral products, unroasted iron-pyrite and sulphur, pulp wood, scrap-iron, bunker products and ship's stores.

The range total of the thus obtained maritime general cargo traffic evolved from 51 million t in 1962 over 82 million t in 1970 to reach about 111 million t in 1974. The Antwerp share during the years in view amounted to 14.4, 21.5 and 31.3 million t respectively. Consequently of the total general cargo volume of the seven range ports considered Antwerp secured a share of 26 to 28%. When considering both directions separately then the Antwerp share amounts to about 20% for what the unloadings and to no less than on an average 35% for what the loadings are concerned. So, Antwerp may rightly be called the leading general cargo loading port of the West European continent.

The share of the general cargo in the overall Antwerp port traffic amounts to 42.4% (1974).

When talking about general cargo one inevitably also deals with containerization. In Antwerp about 12 to 14% of the general cargo traffic is containerized. When considering this percentage one has to bear in mind that the Antwerp general cargo volume contains a lot of iron and steel which by its very nature is hardly containerizable.

The above items came to the fore during a largely attended General Cargo Day which was arranged by the City of Antwerp and the Port of Antwerp Promotion Association (ASSIPORT) on 21st May last. During the information session arranged on that occasion the many-sided port services Antwerp offers to its customers were dealt with. One of the numerous service-components are the good communication routes with the hinterland. They can contribute to a safer and especially faster inland transportation. A gain in time enables the head of the forwarding department in a factory in certain cases to respect periods of notice that are fitting best in his forwarding scheme.

Spokesmen during this information session were on behalf of the City, General Manager R. Vleugels and on behalf of the private sector Messrs. W.H. Osterrieth (President—Port of Antwerp Promotion Association), H. Verhulst (President—U.S.V.A.), J. Hufkens and H. Schuddinck (both members of the working committee "Scheldt-Rhine" of ASSIPORT).



Antwerp, 20/8/76 (City of Antwerp, General Management of the Port):—**ORE AND BULK TERMINALS.** In Antwerp ores are handled mainly at two specialized terminals where some 15 million tons per year are transshipped. One terminal (Stocatra) with 15 travelling bridges (15 and 25 tons) handles mainly iron ore. A new terminal (SGM) handles mainly non ferrous ores. The SGM-terminal (see photo) has now three travelling bridges and decided to install a new crane with 25 tons lifting capacity, able to handle 1000 tons per hour. The company also decided to install a bucket wheel loader with a capacity of 2300 t/h (the second biggest in Europe). The capacity of the terminal (18 hectares and 800 m quay-length) thus is to be increased from 8 to 15 million tons per year. As the navigability of the Scheldt river for bigger vessels is progressing a further expansion of the ore traffic with bigger vessels is expected.

Industrialization and port traffic in Antwerp

Antwerp, Belgium, 1976 April/May (Antwerps Havennieuws, Bimonthly review of the Port of Antwerp):—One of the aims of the ten year plan 1956-1966 for the development of the port of Antwerp was, amongst others, to provide an important area destined for industrial sites.

This industrialization has been an important growth factor for the port traffic in Antwerp, especially for those traffics the industry imports as raw materials or exports as products. Whereas the total maritime cargo traffic of the port over the period 1966-1974 showed an increase of 28%, the growth of the traffics concerned ranged from 40% to 600%.

Based on berth statistics, an investigation of the evolution of the maritime loadings and unloadings per branch of industry shows that in 1974 nearly 24% of the maritime port traffic or some 18 million tons found their origin at the berths of the industrial concerns in the port area.

The most intensive traffic sector in 1974 is naturally the «refining» sector with 10.8 million tons or 14.3% of the total port traffic.

The most expansive is the «chemical» and «petrochemical» sector, the share of which represents approximately 5% of the total maritime cargo traffic, whereas in addition more than 350,000 tons are loaded and unloaded at other places than those of the industries. It must be mentioned that important tonnages, destined to or originating from certain mother-industries in Germany, are transiting through their establishments in Antwerp.

The «tank storage companies» sector represents also, in 1974, approximately 5% of the total maritime cargo traffic in the port. The strong development in this sector is facilitated by the presence of important chemical groups for which, to a large extent, the storage of chemicals takes place. Moreover, approximately 18 million tons have been loaded or unloaded in/ex barges at the berths of these three branches of industry i.e. approximately 42.5% of the overall inland navigation traffic in the port.

Apart from the industrial companies with own berths, there are also several companies established in the port which, due to lack of own berths for their imports and exports, are committed to use the port's general cargo berths. This is namely the case for the Antwerp car assembly companies (approx. 223,000 tons loadings and unloadings in 1974).

This statistical evaluation of the maritime cargo traffic directly originating from the industries in the port zone confirms that this traffic represents a solid base to the port activities. The «chemical» and «petrochemical» sector offers great possibilities for growth which will result in an increasing industrial port traffic.

Arabian Nights—And Days

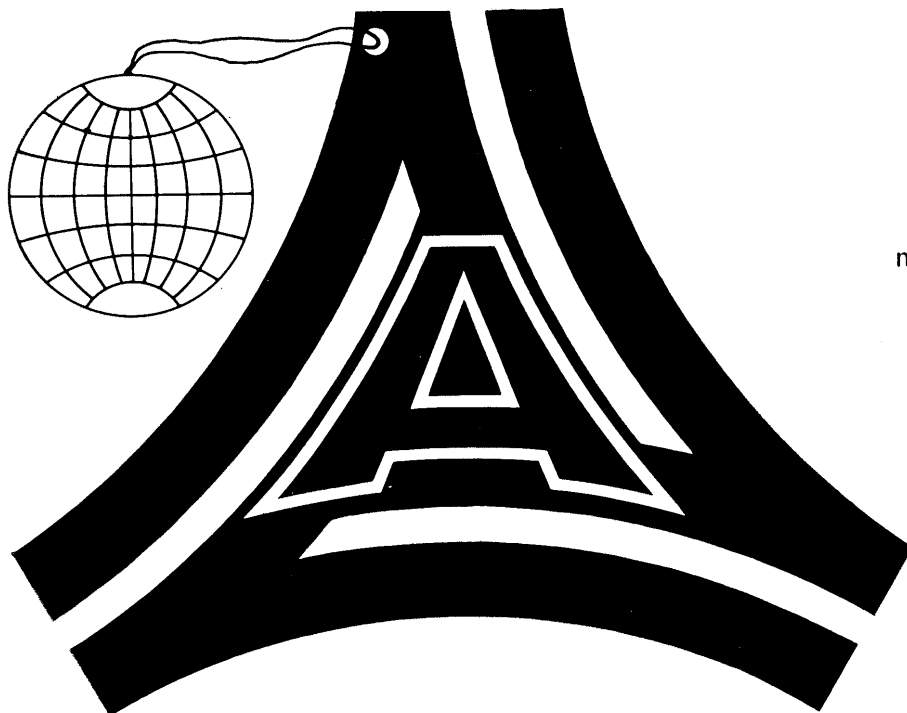
Bristol, England, August 4th («Portfolio», A Newspaper for the Port of Bristol):—Lucrative offers have been made to dock workers in several ports in England in an attempt to entice them away to the port of Dammam, Saudi Arabia.

The offer, initially an 18,000 U.S. dollars tax-free one-year contract, comes from Maritime Transport Overseas

multi-purpose and permanent

The multi-purpose and "round the clock and year" activities are some of the assets symbolized by the new P.R.-emblem, stressing the fact that the Antwerp service to port users **at all times** meets all requirements of international trade and transport.

PORT OF ANTWERP



Information: General Management of the Port, Town Hall, Antwerp, Belgium.

(U.K.) Ltd., who hold a five-year contract to handle lighterage in the port.

So far, approaches have been made to dockworkers in Liverpool, London, Avonmouth and Glasgow.

Portfolio asked Mr. Patrick Trueman, Spokesman for M.T.O., what interest had been shown.

"Following recruitment in Glasgow last week we have now more or less fully met our requirements in terms of crane drivers and fork lift truck drivers. Those who have already been offered contracts are likely to be leaving on the 15th August", he said.

The £10,000 contract is not without drawbacks, however. For three months of the year, temperatures reach 120°F. in the shade, although the rest of the year is comparable to an English summer. Hours of working are from 7.00 a.m. to 6.00 p.m. and 7.00 p.m. to 6.00 a.m. (how's that for shift working?), with no overtime or bonuses. Bachelor status accommodation only is available at the moment, although the Company will fly workers home for one month's leave after six months.

Some sporting facilities are available with obviously excellent bathing and diving facilities. No alcohol is permitted in Saudi Arabia, but such facilities are available on a nearby island.

Why British dockers? Well, the Port Consultants, Gulf Port Management Services, are composed of fifty Britons with Port managerial experience in London and Liverpool. Britons, we understand, are also by far the most acceptable foreigners in Saudi Arabia.

To date, it is understood that approximately a dozen

dockworkers at Avonmouth have been accepted.

Surplus tops £1 million despite traffic drop

Glasgow, June, 1976 (Clydeport News):—Clydeport's recently-published accounts for last year show a net surplus of £1.203 million, in spite of the fact that traffic through the port dropped as a result of the world-wide trade recession.

At a press conference to announce the year's results, Chairman Mr. A.G. McCrae said that he was concerned by the amount of unwarranted criticism of the British ports industry and public references to British ports as being "ailing" and "troubled".

"As our results show, Clydeport is neither ailing nor troubled and we take no little satisfaction in being able to record figures of such stability in times like these," he said.

Mr. McCrae added that indiscriminate criticism of the ports had arisen in debate on the controversial Dock Work Regulation Bill, presently before Parliament: "The main purpose of this Bill in extending the Dock Labour Scheme outwith the ports is aimed at mitigating in certain ports problems which do not exist here on the Clyde."

Reviewing Clydeport's performance during the year, Mr. McCrae recalled that the success of the Authority's venture into road haulage, coupled with an increase in warehousing business, had prompted further expansion in this field. The Authority acquired two more road haulage firms and an export packing company at the turn of the year.

"It is, to an extent, through this type of expansion and



The greater Rotterdam Europoort area has many shipbuilding and ship repair yards. Here the launching of a super-tanker.

the broadening of our base generally into related activities that we are able to cushion the severe impact which the change in the pattern of shipping has had on our traditional role of simply providing a haven and berthage for ships," he said.

Looking to the future, Mr. McCrae commented that there was as yet, no real sign of an early upswing in trade though, hopefully, there would be an improvement in the second half of this year.

Record week for Tilbury Timber Terminal

London, 8th July (PLA News):—This week saw the setting up of a new record, and the equalling of an old one at Seaboard Pioneer Terminal's forest product berth—Tilbury Docks.

A new record timber shipment was set when the discharge of 28,530 tonnes of timber and plywood from the "SCAPWILL" was completed today—and on Monday the "10,000 tonnes through the terminal in a day" mark was passed again when 8,160 tonnes of timber, plywood, pulp and sack-kraft paper were unloaded from two ships, and 1,929 tonnes of cargo were delivered to road vehicles in two 7 hour shifts. And all this was in temperatures in the upper 80's!.

Seaboard Pioneer's Managing Director at the terminal, Colin Bush, was delighted with the way the record

shipment had been handled and was full of praise for the Port of London Authority's stevedores and dockers who man the terminal under the supervision of his own terminal staff. "Ten thousand tonnes in a day, particularly in that heat, is a superb performance in anybody's language", he said. "That record shipment just brings us up to the quarter million tonnes mark this year so we are about 4% ahead of our tonnage forecast, with plenty of commitments ahead". "With performances like this we should easily pass last years total", he predicted. Denis Ray, Director of the Shipping & Forwarding Agency—Seaboard International—confirmed that productivity on the vessel was probably the highest achieved over such a prolonged period, and this was particularly pleasing.

New shore station for Humber pilots opened at Spurn Head

London, 29 July (British Transport Docks Board):—A new pilot station serving shipping using the Humber was formally opened at Spurn Head today (Thursday, 29 July) by Mr. John Good, the chairman of the Humber Pilotage Committee.

The new installation has been developed with the help of a £3½m loan made by the British Transport Docks Board to the Humber Pilots Steam Cutter Company Limited, and has replaced the cruising cutters from which the Humber pilotage service operated in the past.

The Docks Board is the pilotage authority as well as the conservancy authority for the Humber and the Cutter Company is its wholly owned subsidiary.

The Spurn pilot station has cost about £½m and incorporates an operations room housing sophisticated radar and VHF radio equipment for ship-to-shore communication. The operations room is normally manned around the clock by a pilot master, a duty pilot, and a writer who logs all movements of shipping and messages. When necessary, other pilots on the duty roster provide additional assistance.

The new station includes accommodation for pilots on stand-by, comprising six cabins, a lounge, a dining room and kitchen.

A jetty has been constructed 850 ft out into the Humber, enabling the pilot boats to operate at all states of the tide. Four new launches have been purchased at a total cost of £320,000 for the transfer of pilots boarding or leaving vessels in the estuary. These new craft, two 50 ft and two 40 ft vessels, with a service speed of 18 knots, have been designed to operate to the pilotage limits about 15 miles out into the North Sea.

The new system of operating from a shore, rather than a floating base, is enabling the pilotage service to function more efficiently and flexibly to meet the requirements of shipping particularly in bad weather.

Tankers of up to 250,000 tons deadweight are now calling in the Humber and the total number of shipping movements requiring pilotage in the last six years has averaged about 24,000 a year. In addition there are substantial movements annually by trawlers and small vessels exempt from pilotage.



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Partner for Future-builders

a high-strength steel bridge in Alaska.

NKK has more than 60 years of industrial experience. Our Steelmaking Division operates two modern integrated steelworks, one of which boasts the largest production capacity of any single plant in the world. Our Shipbuilding Division constructs every type of ship from lay barges to VLCCs.

So our total engineering capabilities are not land-locked—and they are underpinned by vast steel resources.

Whatever kind of project, whatever kind of site, NKK is fully geared to join in building a better future.

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Malaysian hardwood trade for Newport Docks

London, 5 August (British Transport Docks Board):—A regular monthly bulk hardwood service being introduced shortly by the Malaysian International Shipping Corporation with four large new bulk carriers has been won by the British Transport Docks Board's Newport Docks.

For the South Wales port it is expected to result in at least 50,000 tonnes of hardwood and plywood arriving at the modern MacMillan Bloedel Meyer timber terminal in South Dock each year.

The first cargo of Malaysian hardwood is due to arrive at the port on 10th September aboard the 27,000-tonne Rimba Meranti. The vessel is loading at Singapore, Port Kelang, and Penang during August, and Newport will be her first port of discharge in Europe. Other new vessels operating the service at 30-day intervals will be the Rimba Ramin, Rimba Keruing, and Rimba Balau—all named after species of Malaysian hardwood.

A spokesman for MISC said that Newport had been selected for the new service after "careful consideration". "We are extremely satisfied with the attitude of the South Wales dockers, both at Newport and at Cardiff where we have our inwards general cargo service, and we have established a good relationship with the British Transport Docks Board. Moreover, MBM are well known as efficient and expert terminal operators," he added. Agents for the service are Lambert Bros. Ship Agencies Ltd.

The decision by MISC to use Newport Docks was welcomed by Docks Manager Mr. Vernon Snow who said, "We are delighted with the news which is a very encouraging sign for the future. With the recent opening of the motorway link to the port we are now in a better position than ever to attract trade to Newport".

Container Port, Le Verdon, opens

Bordeaux, France, 23rd June (Press Release from The Port of Bordeaux Authority):—June 23rd, 1976, has become a date to mark in the annals of Maritime Transport, for it is the date on which a vessel first called at the long awaited and carefully planned and built Container and Ro-Ro Port of LE VERDON.

It seemed right and just that this vessel should be the TOMBARRA, one of the vast ro-ro vessels of the SCANAUSTRAAL LINE, for indeed, the Line has awaited as eagerly as the Port Authority itself, the completion of these new facilities on the Mouth of the Gironde Estuary.

Represented in Bordeaux by A. BALGUERIE, the TOMBARRA, with Captain A.B. DAVIKNESS in command and piloted by Mr. Maurice Bouscalt, docked smoothly at 6.40 a.m. alongside the new berth and slip, built specially for her and her four sister ships, who have maintained our regular line to Australia for a number of years now.

On this voyage, the 21,700 tdw. vessel brought with her a cargo of 1,200 tons of sheepskins, destined for the fellmongers of the Mazamet region, in the heart of Bordeaux's hinterland. She also embarked, during her call, about 40 containers and nearly 100 tons of building materials.

These vessels, a magnificent and familiar sight in the estuary, will be seen no more plying to and from the

Bassens facilities where they previously docked. But for those who visit Le Verdon, they may now be seen in all their glory, set off by the giant container gantry cranes, the modern berths and back-up facilities of this new port, which was conceived to handle them and their cargo as they were designed to be handled.

Open 24 hours a day, 7 days a week, 365 days a year, Le Verdon can rightly be called a Throughport, for it is designed and equipped to offer the fastest possible turn-around times.

Here on the fringes of the ocean, protected by the Pointe de Grave, there are no tidal problems, no locks to negotiate, Le Verdon is alongside very deep water so the largest containerhips and ro-ro's, loaded to the maximum, have access at any stage of the tide.

The ultra-modern equipment has been carefully chosen and the lay-out of the shed and storage facilities planned to provide the maximum efficiency on the pitch for the fastest throughput, so that vessels are handled under ideal conditions.

For the TOMBARRA and the vessels which follow her, Le Verdon saves time and for the ship owners and the importers and exporters who use Le verdon that time means money.

The Port of Rouen has gone up to Paris

Rouen, France, June 11th 1976 (Rouen Port, International Issue, Information bulletin of the Port Authority of Rouen):—The Port of Rouen Authority has "gone up" to Paris for the first time on the 13th January, and established headquarters at the Maison de la Chimie, where the annual Press conference was first held at 11 o'clock for the numerous journalists who are familiar with the Port. M. CINTRAT, chairman and M. MANDRAY, General Manager, took the opportunity of drawing the picture of 1975 operations, and outlined the immediate prospects to be opened up, and for the period of the VIIth Plan. The information was given very good cover by the Press.

Then, at 17.30 began a very big meeting dealing with the general information spectrum for 1,100 people who came along (shippers, transport specialists, transport auxiliaries, charterers, etc.). This was a big success for the Port of Rouen Authority.

M. CINTRAT, in his address of welcome, set out the aim of the meeting:

"You may be wondering why we haven't put Paris sooner on the long list of towns, countries and regions visited in the course of the last few years. The reason is very simple. At first, our main object was to find means to extend the horizons of Rouen Port, which for a long time was limited to coaster trade, **by paying visits to foreign ports and shippers. Today we are in a position to come to you with the results of these contacts,** and to give you the scale of all the changes of our port's progress, both on technical and on commercial grounds.

"Our efforts, I think, have been quite pronounced and positive, since your region's external trade is playing a more and more important role in our port trade. As far as exports are concerned, the figures have increased from 24% in 1972 to 35% in 1974, these being the latest figures at our

disposal."

M. MANDRAY then spoke with an enthusiasm that the entire audience fully appreciated about the advantages of Rouen Port and about the efforts actually coming into effect to perfect the service it is capable of offering to shippers and shipowners. The General Manager enlarged particularly on the container terminal at the Rouen-Quevilly Basin, which is the spearhead of Rouen Port's expansion programme. The film "A Day at Rouen" followed and the evening finished with a cocktail party.

Trade traffic 1975

Amsterdam, June 1976 (Amsterdam News Letter):—Final figures for international seagoing goods traffic during 1975 were recently announced by the Amsterdam Municipal Port Management. The statistics show that the Port of Amsterdam handled 18,794,000 tons, against 19,242,000 tons the preceding year—a slight decline of 2.3 percent.

The decrease was insignificant, however, in view of general economic conditions and a subsequent down trend in world trade, which affected all Western European ports—with most reporting declines of 10 percent or more.

Currently, improvements in international trade, along with the addition of several new services to Amsterdam, are promising indicators that the Port of Amsterdam should continue to maintain and improve her strong position in the future.

Gray, Mackenzie news, June

• Abu Dhabi

During the month of June, 88 vessels called at this port and discharged a total of 189,121 deadweight tons of cargo. Imports consisted of 48,747 tons general, 2,853 tons steel, 106,160 tons cement, 960 tons pipes, 27,501 tons timber and 2,900 tons bitumen.

In addition to the foregoing, 3 tankers called at Mina Zayed for discharging gas and fuel oil.

The position at the port deteriorated during June, with delays ranging between 12 to 15 days due to combination of heavy tonnages and a shortage of equipment to cope with the tonnages. Delays are unlikely to come down and congestion is expected to remain at about the same level during the coming months and at least until after Ramadhan. Due to heavy congestion in the Port, some principals have opted for barge discharge but again the lighterage jetty is becoming increasingly congested due to shortage of equipment to discharge barges.

A seminar of Gulf Port Directors was held in Abu Dhabi in June at which discussions were held regarding registration procedures, the need for even distribution of cargo in hatches, how best to tackle congestion problems and ways and means of reducing the surcharges imposed by Shipowners. Some sessions of the seminar were attended by representatives of various Shipping Conferences.

It has been reported that a U.S. \$4.6 million floating dock has been ordered by Abu Dhabi from Blohm & Voss of Hamburg. The dock will have a capacity of 1,700 tons and will be able to take ships of up to 5,000 deadweight tons.

• Khorramshahr

During June, 41 vessels discharged a total of 249,829 tons of import cargo.

During the month there was a berthing delay of up to 215 days.

General

With effect from 21st June 1976 the Ports and Shipping Organisation have announced that the registration scheme whereby vessels after registration were permitted to discharge at other ports during waiting time, has been withdrawn until further notice. Vessels are obliged to register at South Iranian ports and await their berthing turn for the applicable port concerned.

Gladstone Harbour Board Chairman's Review 1974/75

Gladstone, Queensland, Australia (Gladstone Harbour Board Annual Report 1974/75):—Consolidation, progress and forward planning are words which best describe the activities of the Gladstone Harbour Board for the year ended 30th June, 1975.

The sudden surge of development over recent years fully extended the Board's physical resources. A lull in that surge during the past year had allowed the Board to closely examine the Port as well as to put in hand many works which had previously been by-passed.

At the same time future expectations have not been disregarded. Works associated with new Port development have been commenced and planning which will facilitate the establishment of new industry has been initiated.

Cargo handled at the Port during 1974/75 showed a 3 per cent increase over the previous year to 15,731,317 tonnes. This cargo was handled in 430 vessels of 11.4 million gross registered tonnage. Whilst the cargo handled was a record it was far below the Board's expectations. Economic and industrial problems, especially in the Mining Industry, had a significant impact on the year's result. Port delays were infinitesimal and the established Port facilities particularly the Bulk Loading Facilities at Auckland Point and Barney Point were no where near taxed to capacity.

There is no doubt that the Port has the capacity to handle shipping far in excess of that which passed through the Port during the year under review.

Whilst there was some disappointment in the throughput for the year it has not dampened the Board's optimism for the future.

Serious discussions have taken place with a view to providing additional Berths and Bulk Loading Facilities in the Clinton area just West of the existing Port facilities. The Board as a first step towards this development has commenced the reclamation of an earth embankment which eventually will carry services to these future Berths.

This reclamation is being undertaken as part of the annual reclamation programme. Already many hectares of land are available for Port-orientated industry close to established Berths. Extensive industrial development has taken place on land reclaimed by the Board, no doubt encouraged by the Board's policy of providing these lands at reasonable rentals. Ample land throughout the Port is still available for new industry.

In addition to this reclaimed land the Board has

PSA Symposium 1976

Singapore, August 5-7, 1976

Speech by Mr. Ong Teng Cheong, Senior Minister of State for Communications, officiating at the opening ceremony of PSA Symposium 1976—Developing Singapore as a Regional Warehouse and Distribution Centre—on Thursday, 5 August, 1976 at 6.00 P.M. at the Shangri-La Hotel, Singapore.

Mr. Chairman,
Distinguished Guests,
Ladies & Gentlemen,

It gives me great pleasure to be here this evening to meet such a distinguished gathering of shipping, transport, warehouse and port operators as well as other members of our commercial and industrial community. You belong to that very important sector in our economy called the private sector which has contributed so much to the material well-being of our country. It is also encouraging to me that some of the Government Departments involved in economic development and communications and trade are represented at this gathering.

purchased 70 hectares of land just West of the Calliope River mouth. Levelling of this area would provide some 250 hectares of prime land for major industry.

Perhaps the most satisfying achievement during the year was the completion of the Board's 3 storey Administration Building in Yarroon Street, Gladstone. This magnificent Building, details of which will be found later in this Report, is an expression of the Board's faith in the future of the Port of Gladstone. It is with pleasure that I record the appreciation of the Board to all those who were connected with this Project. Special note must be made of the Board's construction workforce who took over the Project during the final 7 months work on the Building, following the withdrawal of the original Contractor.

Inspired by the natural beauty of Gladstone Harbour the Board is constantly taking steps to ensure that the Port's surrounds should be pleasing to the eye and provide a clean and tidy atmosphere. In this regard a scheme of beautification has been commenced which has transformed many Port areas into picturesque settings. It is the intention of the Board to continue with this work.

Financially the Board is in a sound position. Every attempt is made to keep Port Charges as low as possible and even though inflation has played havoc with the country's economy the Board has operated throughout the year without any general increase in Port Dues. Again it is satisfying that although the Board undertook capital works to the value of \$1.2 million it was not necessary to call on additional Loan Funds to finance these undertakings.

My Board is aware of the immense responsibilities placed upon it in administering the Port of Gladstone. It is mindful of the Port's role in the national and international transport scene. In order that it may be kept up to date on

Over the last few years, the PSA has organised these Symposia on a regular basis so that those having common problems may exchange ideas, discuss and assess our joint role with a view to improving the level of services. The present Symposium aims at promoting Singapore as the warehouse and distributing centre of the region. It is an interesting and challenging subject and offers great scope for future development.

With its strategic location, Singapore is naturally an attractive base for the distribution of goods in South-East Asia, one of the fastest growing regions in the world. This expanding market of over 250 million people offers tremendous business opportunities as it forges ahead with development of its natural resources and manufacturing activities.

For more than 150 years, Singapore has served the region as its entrepot, handling its produce to the industrialised countries and conversely, their industrial and consumer products in the various fields of construction, agriculture, petrochemicals, transportation and communication to the region. Today, with containerisation moving goods at a rapid pace, more and more cargo from the

national and world trends it arranged to be represented at the Conference of the Association of Australian Port and Marine Authorities in Perth during October, 1974, and also at the Conference of International Association of Ports and Harbors held in Singapore in March, 1975. On the State front, the Board was pleased to host the 28th Conference of the Queensland Harbour Boards' Association during September, 1974.

On behalf of the Board may I extend our sincere thanks to all those who have assisted us during the year. We extend special thanks to the Queensland Government especially to the Hon. N.T.E. Hewitt, M.L.A., who during the greater part of the year was the Minister responsible for Harbour Boards. We welcome and look forward to a happy association with the Hon. T.G. Newbery, M.L.A., Minister for Tourism and Marine Affairs, who has now accepted the portfolio of Minister administering the Harbours Act. Thanks are also extended to the Director, Mr. A.J. Peel, and the Officers of the Department of Harbours and Marine, for their courteous co-operation and assistance.

To the Harbour Master and Pilots at Gladstone we also extend our thanks for the efficient manner in which they have handled the Port's shipping. The Board offers its gratitude to the Administration and Operational Staff for the loyal and dedicated service which has been rendered throughout the year.

I reiterate the Board's conviction that the future will see developments occur in the Port of Gladstone which will play a vital role in the economy not only of the Port and Central Queensland but of the Nation as a whole. To those who will develop industry in Gladstone in the future I offer the assurance of the full and ready co-operation of the Gladstone Harbour board.

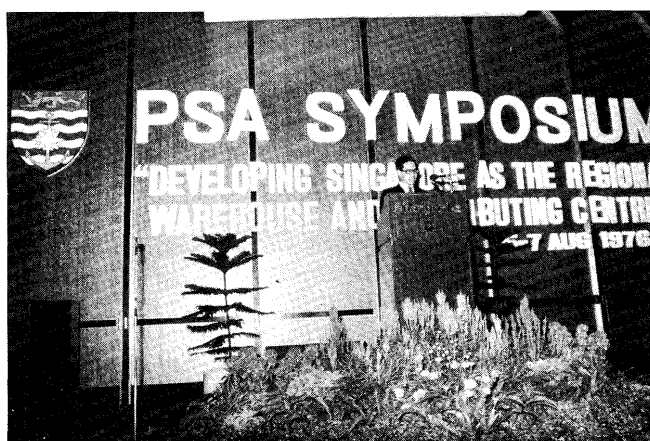
industrialised countries are being shipped through Singapore for subsequent distribution to countries in South and South-east Asia.

As the regional warehouse and distributing centre, Singapore offers many advantages. Located at the hub of a huge consumer market, she is the convenient springboard for the storage, marketing and distribution of goods. A central depot established in Singapore as a distribution base within the region has much to be said for. This is made possible by our regular, fast and efficient transportation and communications.

Singapore already has over 800,000 sq metres of covered warehouse space. Nearly all these warehouses are efficiently linked and are close to the gateways of the port. Designed

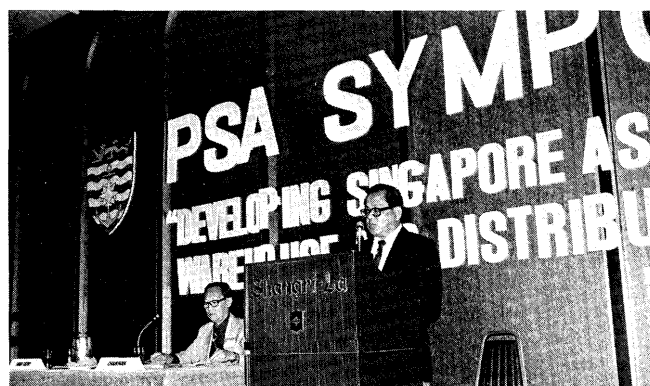
for advanced cargo handling concepts, these warehouses are the most modern in the region. The task before the Symposium is how best to utilize these facilities and to develop them further to make Singapore the foremost warehouse and distributing centre in this part of the world.

During the course of this Symposium, I have no doubt you will exchange views and have fruitful discussions in the true business spirit of give and take and to look for ways and means of making Singapore the regional centre for trade and industry.



Picture shown Mr. Ong Teng Cheong, Senior Minister of State for Communications addressing guests and participants at the opening ceremony of the PSA Symposium 1976.

The Symposium with the theme "Developing Singapore as a Regional Warehouse and Distribution Centre" attracted some 150 participants from various government bodies, shipping communities and the industrial and commercial sectors.



The 3-day PSA Symposium 1976 on the theme "Developing Singapore as the Regional Warehouse and Distribution Centre" concluded on 7 Aug. 76. Picture shows Mr. Bille Cheng, PSA Director (Operations) delivering a closing speech. Seated at the left is Mr. Kenneth Seah, PSA Assistant Director (Port Promotion).



Picture shows Mr. Kenneth Seah, PSA Assistant Director (Port Promotion) delivering a welcome speech at the opening ceremony of the 1976 PSA Symposium.

The 3-day gathering (5 Aug. 76–7 Aug. 76) with the theme "Developing Singapore as the Regional Warehouse and Distribution Centre," held at Shangri-la Hotel provided fruitful opportunities for meaningful discussions and exchange of views amongst government officials, port users and the business communities.



Picture shows Mr. Kenneth Seah; (second from right), PSA Assistant Director (Port Promotion) briefing Mr. Ong Teng Cheong, Senior Minister of State for Communications, (second from left) on operations at PSA Pasir Panjang Wharves cum Warehousing Complex before a model. On-looker is Mr. Howe Yoon Chong, Chairman of PSA (extreme left) and Mr. M.M.J. Subramaniam, Traffic Manager of Warehousing Services Department (next to Mr. Seah).

Singapore, maritime artists

Singapore, 7 August:—Speech by Mr. Kenneth Seah, Assistant Director (Port Promotion) at the Presentation Ceremony for winners and participants of the 2nd PSA Artists' Encouragement Scheme on 7 August 1976 at the Maritime Museum, Sentosa.

Ladies and Gentlemen,

It is my pleasure to welcome you here this afternoon to witness the presentation of awards and certificates for the Port of Singapore Authority's 2nd Artists' Encouragement Scheme.

The Scheme was first launched in 1974 with the aim of encouraging artistic talents of younger and lesser known artists in Singapore.

We have, to a certain degree, achieved this end as out of 79 works received from 36 participants, 18 works were contributed by 15 students from six secondary schools.

These young artists not only showed their keen interest in the activities of the port and in the seas, but also showed a higher standard in their work. This can be seen from the fact that one of them from St. Andrew's Secondary School, Mr. Lim Ee Meng, 15, was awarded the 3rd prize for his oil painting "Twakows".

And, in the course of this exercise, the PSA has been able to acquire a selection of paintings which it could use not only to beautify the offices in the port but also for reproduction in its publications.

At this juncture, it would be interesting to point out that plans for expansion are now underway at the Maritime Museum. Under the stage 2 development which will cost some \$700,300, the following facilities will be added:

A Port Today Gallery which highlights the facilities and related services of the PSA which is reputed as "A Port that never sleeps".

A Primitive Craft Gallery where visitors will be able to see full size primitive watercraft on display. An area is also allotted for the display of photographs and crude models.

A Fisheries Galley which comprises six sections covering fishing boats, fishing traps, spears and harpoons, hooks and lines, fishing nets and food fishes.

A Boat-building Shed where visitors will be able to see the construction and repairs of boats and the making of crude boat models.

Other attractions will include a Fishing Village and an Old Signal Mast which was formerly located at the Albert Dock. It is interesting to note that all Galleries will be of attap-shed, open-sided with steel portal main frames and steel sheeted roofs except the Boat-building Shed which is of timber construction.

With the completion of the new development, I hope the Maritime Museum will not only become another tourist attraction on Sentosa but also an educational medium for schoolchildren and will further interpret the maritime history of Singapore with its themes and materials pertaining to shipping, navigation, hydrography and the history of the port.

Lastly, I would like to take this opportunity to thank all participants and the judges Mr. Koh Boon Piang and Mr. R. Karmakar for making this event a success. I must congratulate those who have won the awards, but, for those who did not make it, try again next time.

PSA Fire Training School

Singapore, 18 August (PSA Press Release):—The PSA Fire and Safety Department's training facilities will be enhanced with the completion of a \$500,000 Fire Training School at Pulau Brani.

The School scheduled to be opened next month will have an area of some 8,000 sq meters. When fully operational it will be able to accommodate up to 100 trainees—from Singapore and surrounding region—at any one time.

Various Fire Fighting, Fire Prevention and Anti-oil Pollution courses will be provided. It will cater not only for the needs of the PSA but also that of industries, hotels, refineries and shipyards. It is envisaged that the School will be one of the focal points for fire training in this part of the world.

The Fire Training School's facilities include an Office/Engine Bay building with briefing/lecture rooms, offices, engine bays for fire vehicles, a smoke house, a four-storey high training rig and a fire house.

The fire house is for indoor fire demonstration and has been constructed to withstand intense heat for training purposes. Trainees will be expected to simulate smoke conditions in the smoke house and the training rig will be used for rescue and ladder training. The Training School also has oil pits for demonstration fires, a salt water tank for testing of appliances and a fire drill yard.

The development of the Fire Training School started in August 1975 in order to meet the additional training facilities required to upgrade the operational capabilities of the PSA Fire personnel.

PSA Employees from various Divisions/Departments and the Auxillary Fire Service and the Vigilante Corp's Auxillary Fire Service also receive their training from this Department.

Since the Fire Training Scheme started in 1974 the Fire and Safety Department has trained a total of 7,589 persons, both local and overseas, up to 31 Jun. 76. The courses conducted ranged from three days to six weeks.

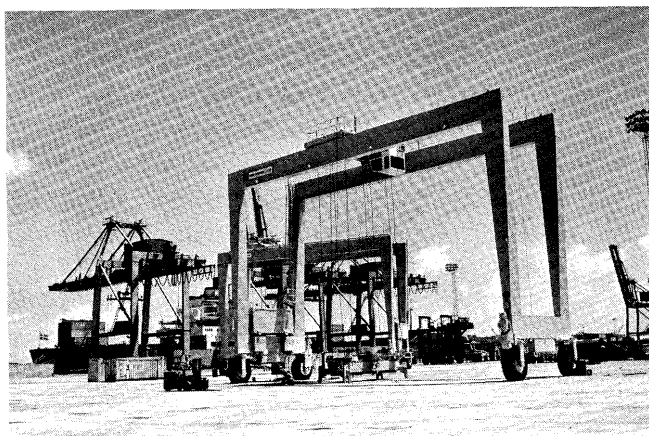
1976-77 Budget

Karachi, Pakistan, May 15th, 1976 (K.P.T. News Bulletin):—The Budget for 1976-77 of Karachi Port Trust was considered and approved by the Trustees of the Port of Karachi at a Special Meeting held on 12-5-1976, subject to the approval of the Federal Government. The total Budget is for Rs. 502 47 million.

The Financial Year 1976-77 envisages a very heavy capital development programme amounting to about Rs. 252.50 million; the heaviest in the history of the Port.

The Trading Account shows a substantial surplus and the development programme is financed by K.P.T.'s own resource whereas the Foreign Exchange component is being provided by the World Bank.

New equipment for Container Terminal



Picture shows the two 30-tonne capacity, mobile transtainers (foreground) undergoing training at the PSA Container Terminal. The transtainers can stack both 20-ft and 40-ft containers six abreast and four high.

Singapore, 20 August (PSA Press Release):—Two mobile transtainers costing some \$2.4 million will be commissioned for operation at the Port of Singapore Authority Container Terminal by the end of this month.

These are the first two of five transtainers acquired by the PSA to increase the container handling capability at the Container Terminal.

The Transtainers with 22.70 m (74½ ft) span and 19.04 m (62½ ft) overall height can straddle six rows of containers plus a chassis lane and stack both of 20 ft (6.09 m) and 40 ft (12.19 m) containers four high. They are of 30-Tonne lifting capacity and their controls include differential steering and ninety degree turning of all four wheels for versatile manoeuvring in the terminal. They are also equipped with quick-change fitting spreaders for handling both sizes of containers.

The rubber-tired transtainers have self-contained diesel electric power to enable them flexibility of movement at the Container Terminal. The system will be utilised to handle containers at the 13.94-hectare marshalling yard at the East Lagoon which can accommodate some 8,000 containers (TEUs).

Besides these two transtainers, the PSA has approved \$14.7 m for the purchase of additional equipment including three more transtainers, two quay cranes and two heavy Ro-Ro forktrucks to enhance the capacity of the present facility at its Terminal.

Meanwhile, container traffic at the Terminal has increased significantly in the first half of this year. Some 140,967 TEUs (Twenty-foot equivalent units) were handled during the first six months of this year and increase of 69.4% over the corresponding period in 1975. For the same period last year, the Terminal handled 83,218 TEUs.

Containerised cargo totalled 1.8 million tonnes, 712,000 tonnes or 65.2% more than the total for the period January to June 1975.

The PSA's Container Terminal is expected to handle

some 280,000 TEUs of containers with about 3.6 million tonnes of containerised cargo this year. In 1975 the Terminal handled 2.6 million tonnes of cargo in nearly 192,000 containers (TEUs).



Singapore (The Port of Singapore Authority):—The first of the Franco-Belgium Service's container vessel 'Chevalier Paul' arrived at the PSA's Container Terminal on Thursday, 29 July 1976. To commemorate the occasion, Mr. Kenneth Seah, Asst Director (Port Promotion) of PSA presented a salver to Capt Andre Lacoste, Master of the Ship. This vessel has a container capacity for 1458 twenty-foot equivalent units and would be used for the ACE Group container service between Europe and Far East.



Singapore (The Port of Singapore Authority):—Picture shows Mr. Tan Kay Juay (right) Zone C Manager of Keppel Wharves, PSA, presenting a commemorative salver to the shipmaster of M.V. "Tae Dong Gang" Captain Rim Beng Wan (left) during a maiden voyage presentation ceremony on board the vessel on 6 Aug. 76. The North Korean cargo vessel of dwt 13,550 is on her first lap to the Persian Gulf.

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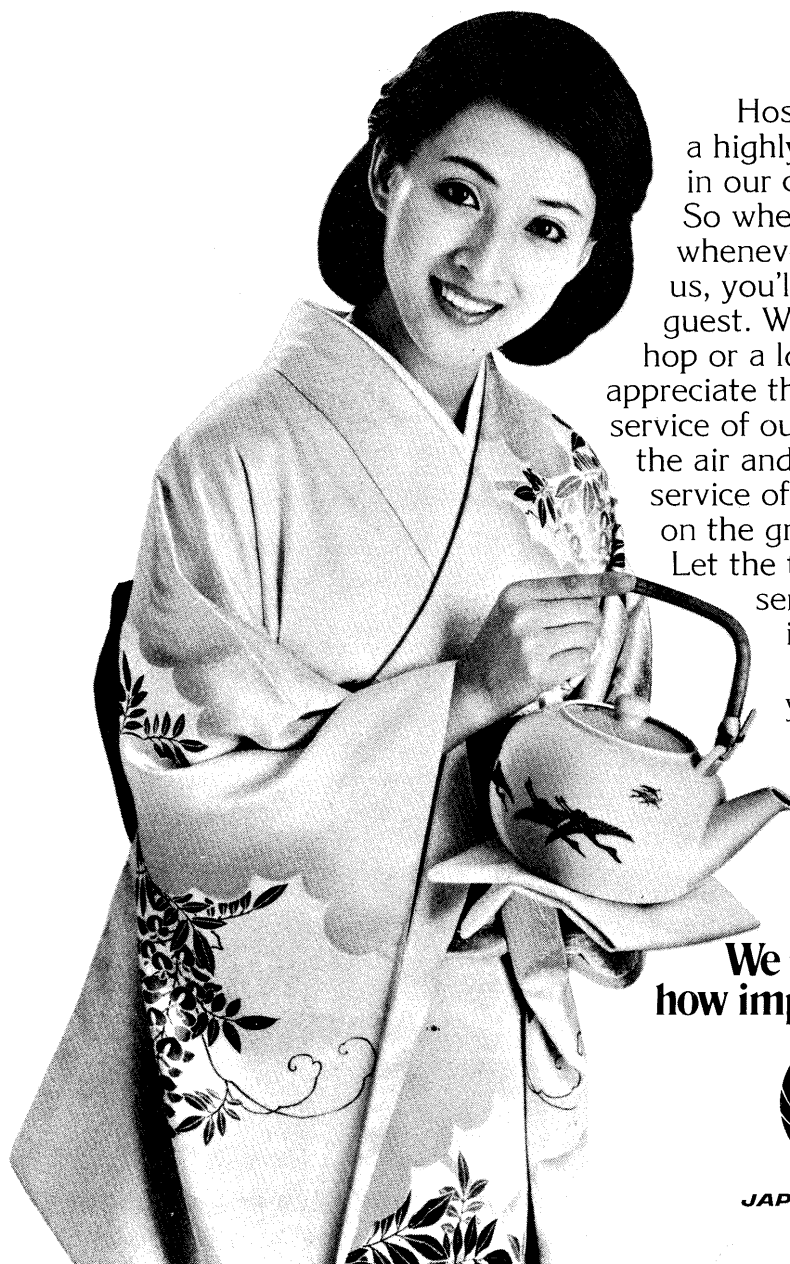


Singapore (Port of Singapore Authority):—Mr. Cheng Meng Sheng (left), PSA Traffic Manager (Sembawang Port) presented a salver on board the M.V. "Rimba Meranti" to the Master Capt A.E. Urbino, to commemorate its maiden voyage call to Singapore on 10 Aug. 76. The 27,000 dwt (Deadweight Tonnes) bulk carrier services the ports between East Asia and Europe.



M.S. "TADEUSZ OCIOSZYNSKI", a 10,129 GRT semi-container vessel of the Polish Ocean Lines recently called at the Port of Singapore on her maiden voyage. She loaded some 3000 tonnes of general cargo especially rubber and some containers for the European ports of Rotterdam, Hamburg and Gdynia. At a ceremony on board, Mr. Or Kum Thong, Container Operations Manager (Yard), PSA, presented a commemorative salver to the Master of the vessel, Capt Stankiewicz. Mrs. Stankiewicz who accompanied the master on a holiday trip and Mr. W. Horodeczny, the owner's representative are also in the picture.

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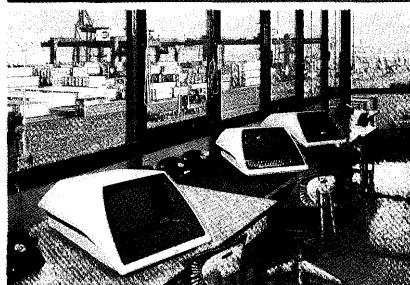
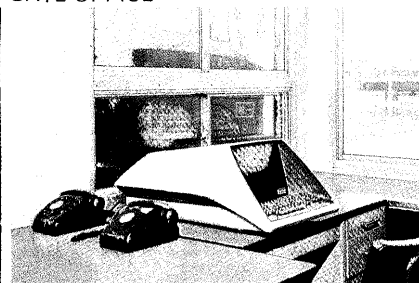
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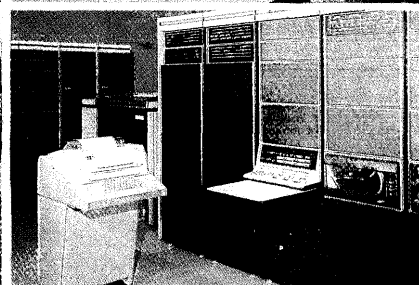
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