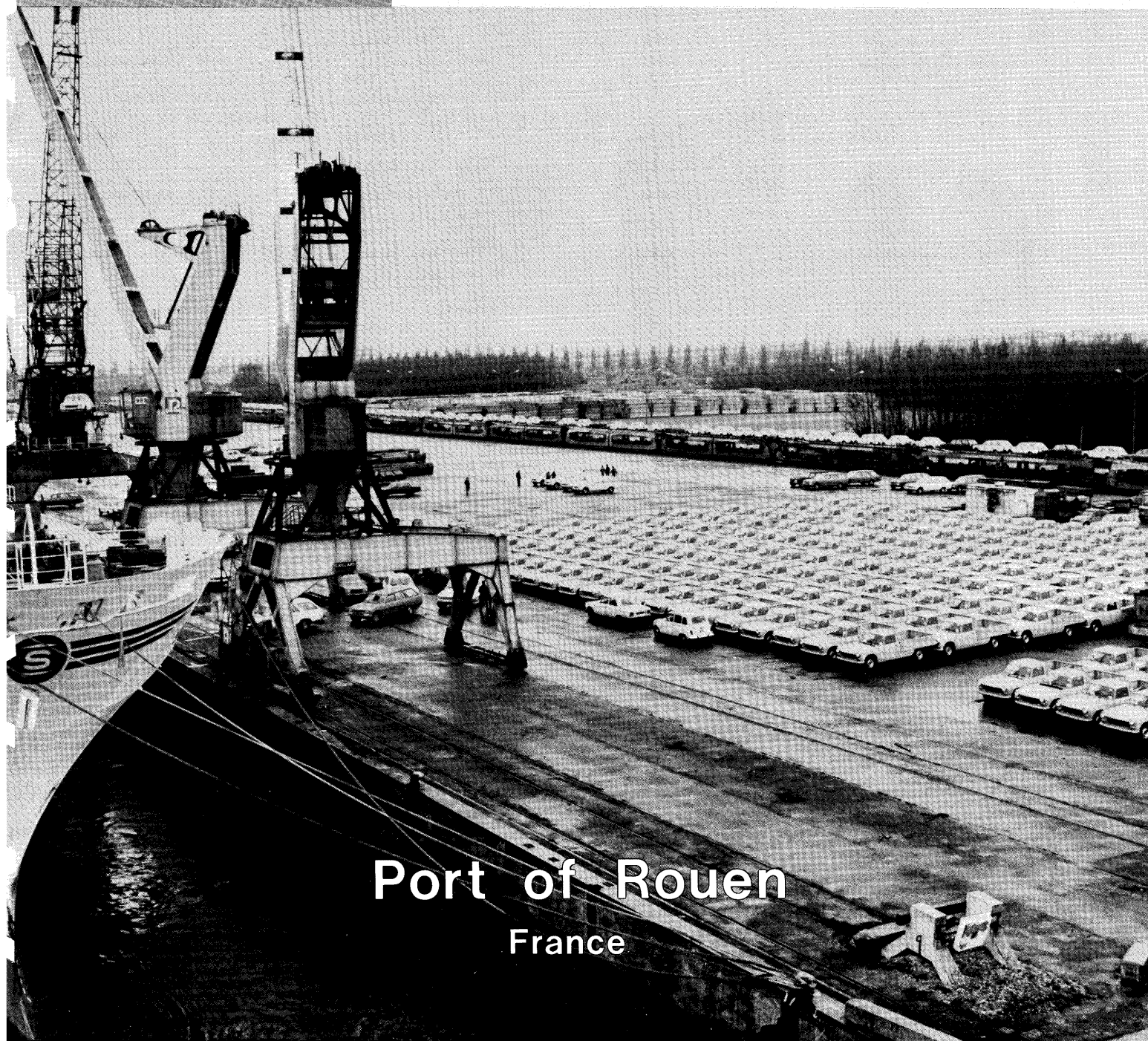


# PORTS *and* HARBORS

July, 1975 Vol. 20, No. 7



Port of Rouen  
France

**The Publisher: The International Association of Ports and Harbors**

Kotohira-Kaikan Bldg., 1, Kotohira-cho, Minato-ku,  
Tokyo 105, Japan



## FOR SAFER BERTHING!

Of all marine navigation, one of the most tricky is safely berthing the ship. With Bridgestone Marine Fenders, safer berthing is assured while the costs for construction and maintenance are reasonably low. Bridgestone Marine Fenders can meet any challenge!

Cell Fenders	G3000H —C630H	Absorbs maximum energy of 730 ton-meter — for huge tankers and ore carriers
Super Arch Fender	SA1000H —SA150H	For medium size of Vessels
Cylindrical Fender	2000×1000 —150×75	For General Cargos
Turtle Fender	100H×0.5M 1.0M	For Fishing Port

**BS BRIDGESTONE**

NO. 1-1 Chome, Kyobashi, Chuo-ku, Tokyo, Japan.  
TELEPHONE: 567-0111  
TELEX: J22217, J23207, J23227  
CABLE: BSTIRE TOKYO

Revolutionary

# NEW

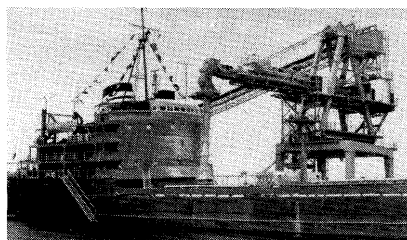
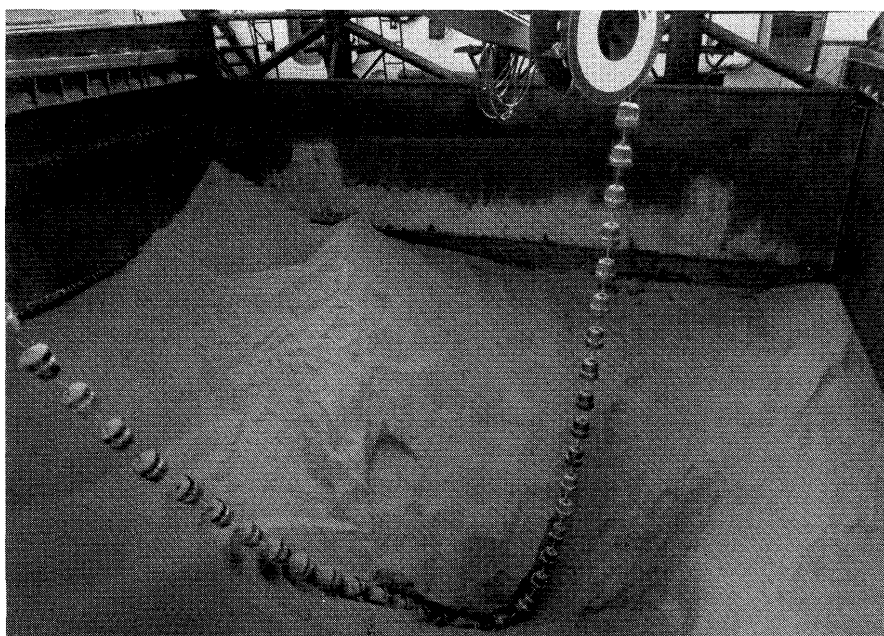
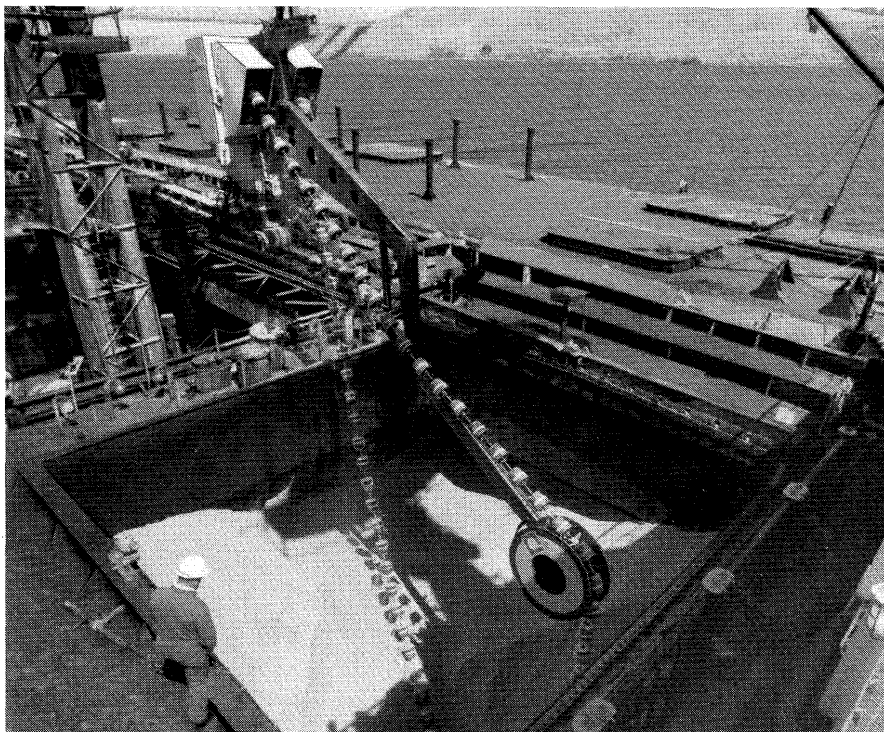
## low-cost bulk unloader

- Capacities to 1800 TPH
- Constant production
- Lightweight • Portable

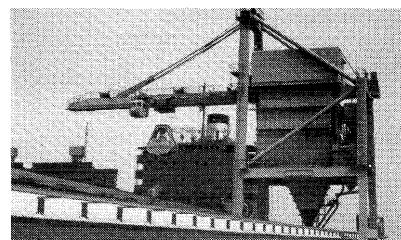
PACECO's New Catenary Unloader can handle virtually any free-flowing material—faster and at lower cost per ton—at a fraction of the investment and maintenance cost of conventional equipment.

Unique design consists of endless line of buckets connected by wire rope, suspended from special patented sprockets and easily maneuvered by hinged boom. Reaches into remote areas of ship's hold; cleans with practically no left-overs. Moving bucket line digs and fills at steady rate regardless of depth of material. PACECO's bulk unloader can be operated from stiffleg or crane, transfers easily to free crane for other jobs.

Other  
PACECO bulk  
handling  
equipment.



**Bulk Loaders**—This bulk loader, operated by one man, handles 750 Long Tons per hour of Alumina; 1000 Long Tons per hour of Bauxite. Designed with slewing upper tower and hinged apron.



**Bulk Unloaders**—One of the world's largest Alumina unloaders, designed by PACECO with dust enclosure over hopper and sealed clamshell bucket. Handles 1000 Long Tons per hour with minimum loss of material.



**PACECO**

*Telephone or write today. We're ready to  
schedule your delivery.*

Contact PACECO or the office nearest you.

Headquarters Office—PACECO, Dept. 24-G, Alameda, CA 94501 • (415) 522-6100 • Telex 335-399.

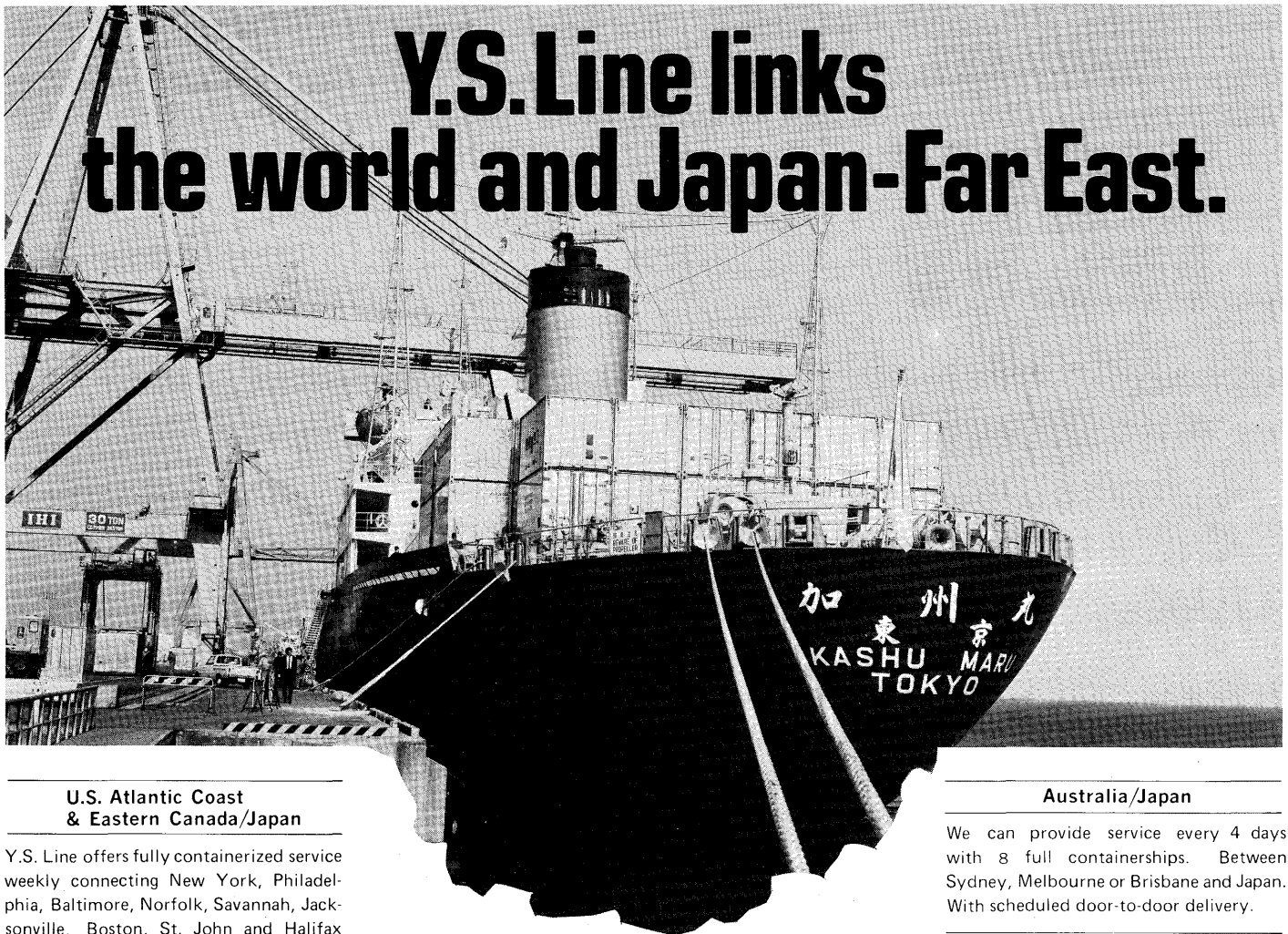
New York Representative—ROBERT MOORE CORP., 350 Main St., Port Washington, N.Y. 11050.

PACECO European Sales Office—PACECO INTERNATIONAL LIMITED, London.





# Y.S. Line links the world and Japan-Far East.



## U.S. Atlantic Coast & Eastern Canada/Japan

Y.S. Line offers fully containerized service weekly connecting New York, Philadelphia, Baltimore, Norfolk, Savannah, Jacksonville, Boston, St. John and Halifax direct with Japanese ports. This is fast, reliable and convenient service includes 7 modern container vessels and a wide variety of container equipment capable of handling all your container needs.

## California/Japan

Every 3-4 days, one of 8 modern container ships sails between the U.S. Pacific Southwest and Japan, linking the two countries in only 8 days.

## Pacific Northwest/Japan

An every-5-day service provided by six 23-knot container ships connects Seattle, Portland and Vancouver, B.C. with Japan in just 8 days.

## Gulf container express service

Y.S. Line arranges completely integrated container service between the U.S. Gulf Coast and Japan via Pacific Coast ports.

## U.S./Hong Kong & Korea

A coordinated feeder service between Hong Kong, Korea and Japan complements Y.S. Line's U.S. and Canadian services for our customers.



## Y.S. Line brings new container efficiency to Tokyo

The opening of Y.S. Line's new container center alongside Ohi container terminal No. 8 adds extra convenience to container movements from southern Tokyo.

The center covers 25,755 square meters and includes a container freight station and container yard.

From these extensive new facilities Y.S. Line can provide customers with quicker, more dependable delivery of containers than ever before.



## Australia/Japan

We can provide service every 4 days with 8 full container ships. Between Sydney, Melbourne or Brisbane and Japan. With scheduled door-to-door delivery.

## Europe/Japan Trans-Siberian route

Y.S. Line's containers carried over the trans-Siberian railway to Nakhodka and transported by ship over the Japan Sea and vice versa. It is the most short way and efficient landbridge container service to link major cities in Europe and Japan.

**For full information, please call your nearest agent:**

### Texas Transport & Terminal Co., Inc.

New York	Tel. 212-797-2200
Chicago	Tel. 312-782-0475
Boston	Tel. 617-482-2550
Philadelphia	Tel. 212-923-1808
Baltimore	Tel. 301-539-4032
Norfolk	Tel. 804-623-1954
Savannah	Tel. 912-233-7921
Jacksonville	Tel. 904-355-3889

### Lilly Shipping Agencies

San Francisco	Tel. 415-781-3600
Los Angeles	Tel. 213-381-2121

### International Shipping Co.

Seattle	Tel. 206-623-5511
Portland	Tel. 503-226-7681

### B & K Shipping Agency Ltd.

Montreal	Tel. 842-7983
Toronto	Tel. 864-1211

### North Pacific Shipping Co., Ltd.

Vancouver, B.C.	Tel. 682-2811
-----------------	---------------

Other Agents: At all major ports in the world

**Y.S. LINE**  
YAMASHITA-SHINNIHON STEAMSHIP CO., LTD.

Head Office: Palaceside Building, Tokyo, Japan Tel. (03) 282-7500



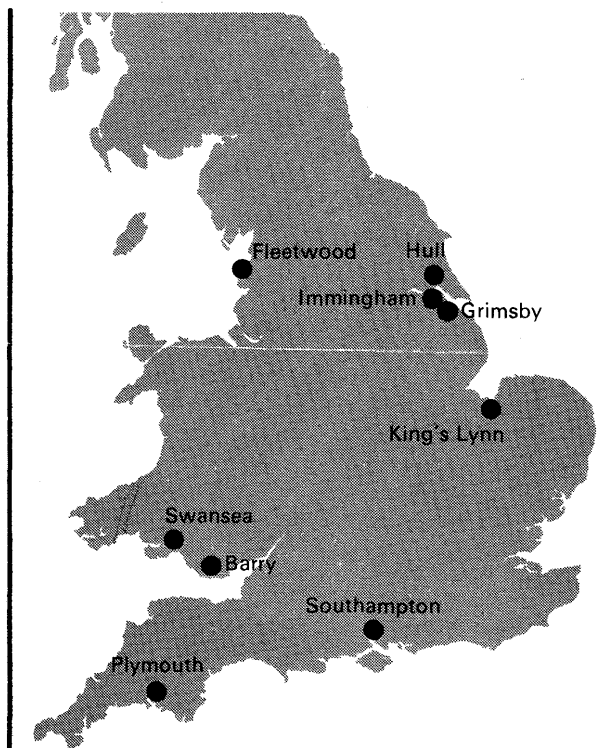
# OUR £11 MILLION INVESTMENT IN ROLL-ON/ROLL-OFF BERTHS SHOWS WE MEAN BUSINESS

During the past ten years the Docks Board has spent £11 million providing roll-on/roll-off berths. Twenty-three are now in action at nine of our ports—Hull, Grimsby, Immingham, King's Lynn, Southampton, Plymouth, Swansea, Barry and Fleetwood. Together they deal with about one third of all UK roll-on/roll-off traffic. We have worked closely with ferry operators in research, design and engineering to achieve maximum efficiency in handling cargo and passengers.

Traffic using our ferry terminals is increasing steadily. In 1972 the throughput was 2,463,694 tonnes of cargo in 304,449 units; two years later the figures were up to 4,445,104 tonnes of cargo in 457,053 units.

Future prospects are just as good. We have new terminals under construction—at Southampton, for example, where the port's seventh roll-on/roll-off terminal will be in operation next year—and still more are planned. Such is the major role the British Transport Docks Board is playing in the development of the roll-on/roll-off handling technique in Britain.

British Transport Docks Board,  
Melbury House, Melbury Terrace, London NW1 6JY.  
Tel: 01-486 6621 Telex: 23913

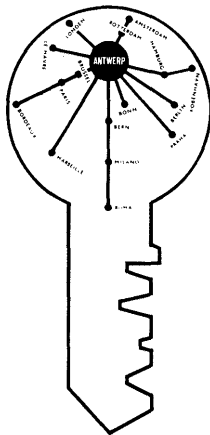


**British Transport  
Docks Board**

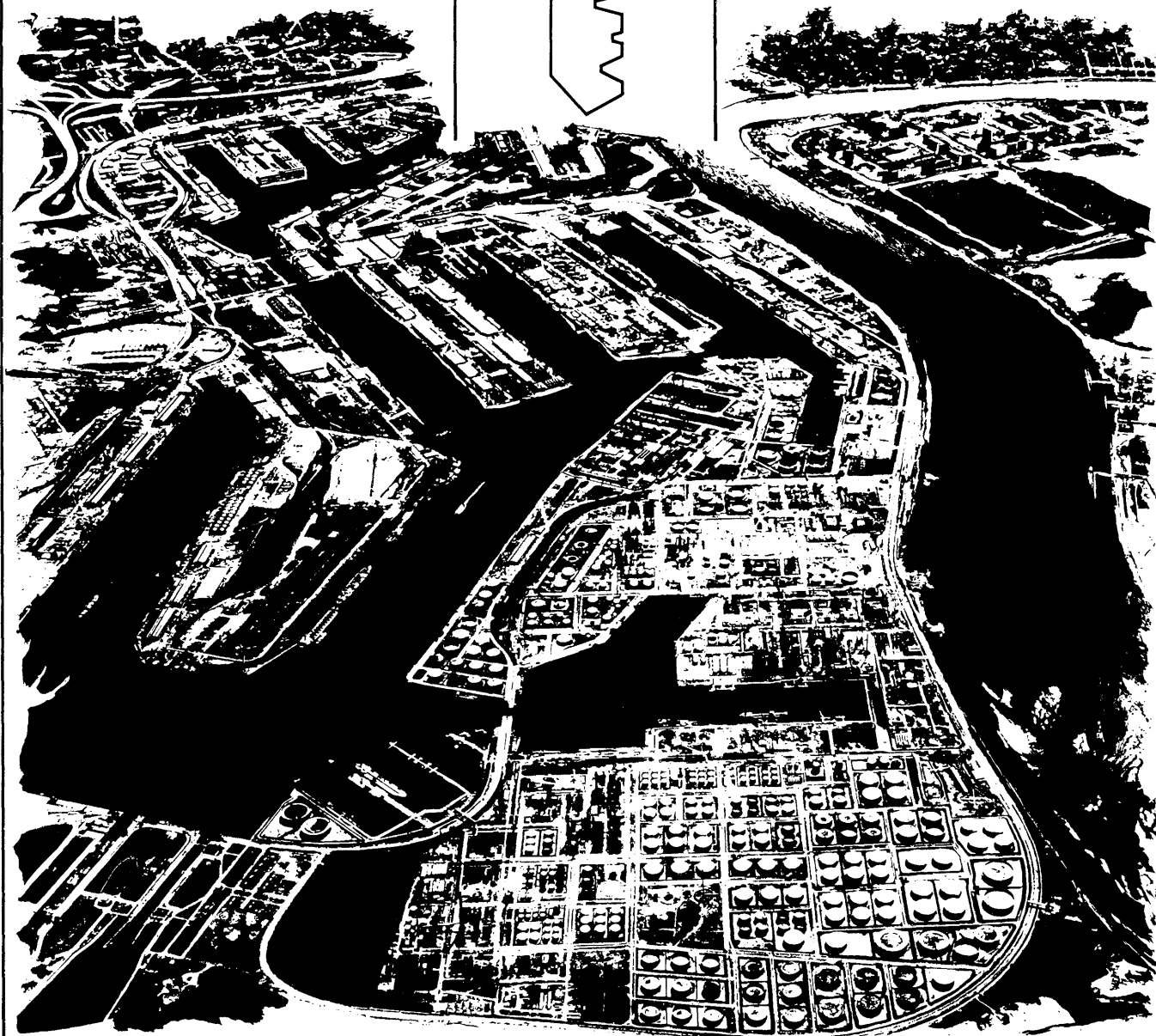


Don't knock on 'any door'  
**our business is port management  
at Antwerp**

Yours is distribution.  
So, if you are checking Antwerp's  
possibilities as a link in  
your cargo system, ask us for  
those data which may help you  
to find the most efficient  
combination for your requirements.



Call us at the following address :  
**General Management of the  
PORT OF ANTWERP,**  
Town Hall  
**B-2000 ANTWERP**  
Phone 031/31.16.90  
Telex 31.807



# PORTS *and* HARBORS

Editor: Yoshio Hayashi

Published monthly by

**The International Association of Ports and Harbors**

N.G.O. Consultative Status, United Nations (ECOSOC, UNCTAD, IMCO)

*President:*

Howe Yoon Chong  
Chairman/General Manager  
The Port of Singapore Authority

*Executive Committee:*

*Chairman:*

Howe Yoon Chong  
President, IAPH  
Chairman/General Manager  
The Port of Singapore Authority

*Members:*

George W. Altwater  
1st Vice President, IAPH  
Executive Director  
Port of Houston

Stanley Johnson  
2nd Vice President, IAPH  
Managing Director  
British Transport Docks Board

W.H. Brotherson  
3rd Vice-President, IAPH  
President  
The Maritime Services Board of N.S.W.

Robert L.M. Vleugels  
Immediate Past President  
Director General  
Port of Antwerp

R.O. Ajayi  
Deputy General Manager  
Nigerian Ports Authority

Y.M. Raja Azam  
Chairman  
Kelang Port Authority

Robert Boeuf  
General Manager  
Port of Dunkirk Authority

R.W. Carr  
Chairman  
Auckland Harbour Board

Ir. J. den Toom  
Managing Director  
Port Management of Amsterdam

P.K. Kinyanjui  
Chairman  
East African Harbours Corporation

Fumio Kohmura  
Vice President  
Nagoya Port Authority

A.S. Mayne  
Chairman  
Melbourne Harbor Trust Commissioners

Ben E. Nutter  
Executive Director  
Port of Oakland

Bruce Procope  
Chairman  
Port Authority of Trinidad and Tobago

Thomas T. Soules  
Port Director  
San Francisco Port Commission

D.E. Taylor  
Chairman  
National Harbours Board, Canada

Anthony J. Tozzoli  
Director, Marine Terminals  
The Port Authority of New York  
and New Jersey

Gengo Tsuboi  
Vice Chairman  
The Japan Shipowners' Association

*Secretary General:*

Dr. Hajime Sato

*Head Office:*

Kotohira-Kaikan Bldg.  
1, Kotohira-cho, Minato-ku,  
Tokyo 105, Japan  
Tel.: TOKYO (591) 4261  
Cable: "IAPHCENTRAL TOKYO"  
Telex: 02222516 IAPH J

July, 1975 Vol. 20, No. 7

## CONTENTS

### IAPH Head Office Announcements : ..... Page 7~24

Texan Invites Us En Bloc—Minutes of the Meetings of Six  
Special Committees—IAPH 1st President Passes Away—IMCO  
Report—Singapore Resolutions circulated in Japan—PIANC  
responds to IAPH Resolutions—ICHCA met in Florence—IALA  
recommendation—PIANC's 24th Congress—Membership Notes  
—IMCO Book—Japanese Port Circle Welcomes Seminar Parti-  
cipants—Visitors.

### Topics :

Anti-Marine-Pollution Sheet Pile System Is Tested Success-  
fully .....26  
California Navigation Group Hits Federal Funding (C-MANC).....34  
AQUAPOLIS—Floating City of the Future .....50

### Ports :

Townsville—Gateway to Australia's North..... 49

### Orbiter Probe (International News) : ..... 31~52

### The Cover :

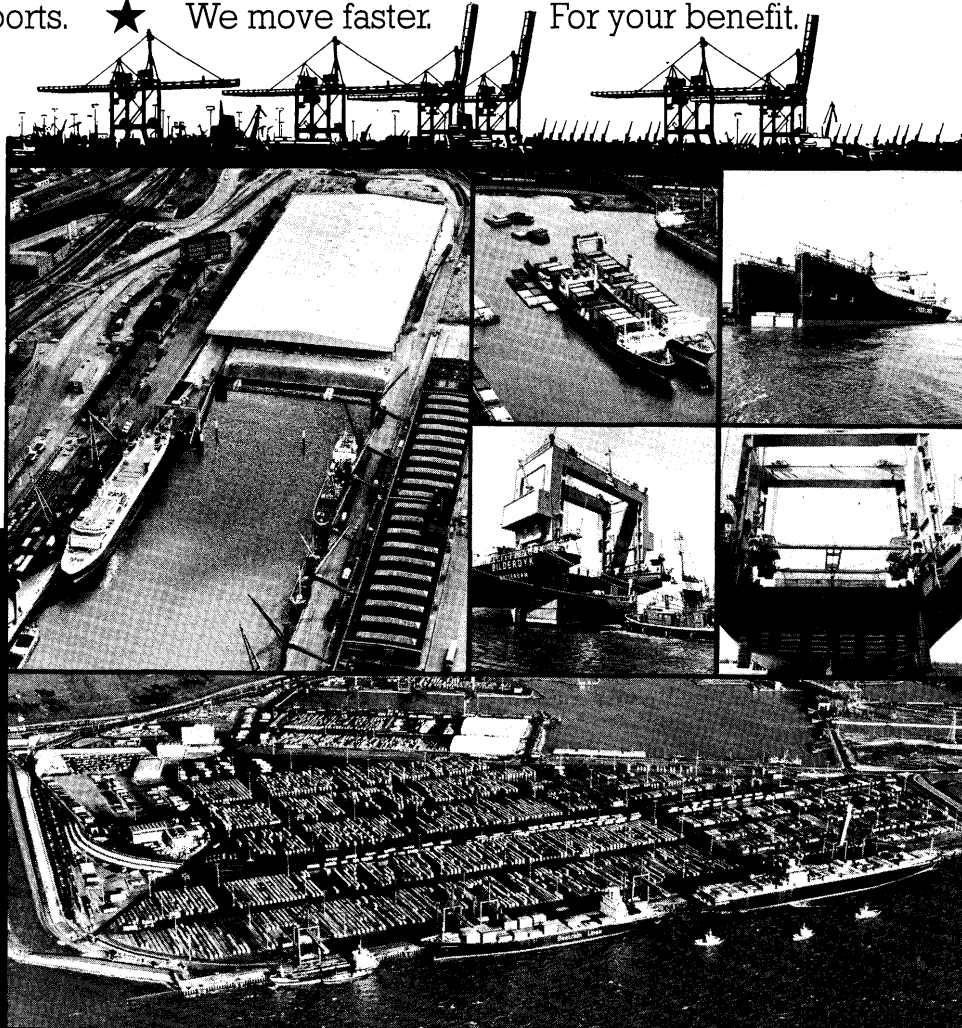
**Port of Rouen, France: Cars waiting for loading at the roll  
on /roll off berth at Petit Couronne.  
The Swedish ship Snow Hill loading 700 cars to Nigeria  
(Apapa).**

Price US\$ 2.00 per copy  
US\$ 20.00 per year



# ***Container Ro/ro-Lash***

Intermodal traffic needs speed, efficiency, and flexibility. ★ We've got the facilities and the know-how. ★ That's why more and more lines are calling at our ports. ★ We move faster. ★ For your benefit.



***The Ports of  
Bremen-Bremerhaven***

For details write to: Bremer Lagerhaus-Gesellschaft, 28 Bremen, Überseehafen. Phone 3 89 61, Telex 2 44 840  
Bremer Lagerhaus-Gesellschaft, 285 Bremerhaven, Steubenstr., Phone 48 41, Telex 02-38722

# PORTS *and* HARBORS

## **IAPH Head Office Announcements:** Pages 7 ~ 24

### **Texan Invites Us En Bloc**

As announced in the May-June 1975 edition of this journal, the 10th Conference was decided to be held in Houston, Texas, in April, 1977, at the Closing Session of the 9th Conference on March 14, 1975.

Mr. George W. Altvater, the 1st Vice-President, Executive Director, Port of Houston, handed an official invitation to Mr. Howe Yoon Chong, the President.

The official invitation is composed of the letters from Governor of State of Texas, Mayor of the City of Houston, Chairman of Houston Chamber of Commerce and Chairman of Port of Houston, and greeting words from relevant organizations. We are pleased to publish here the reproduction of the afore-mentioned four (4) invitations, as follows. (K. Yokoyama)

STATE OF TEXAS  
OFFICE OF THE GOVERNOR  
AUSTIN

February 19, 1975

Officers and Delegates  
International Association of Ports and Harbors  
In Convention Assembled, March, 1975  
Singapore

Dear Officers and Delegates:

It has been called to my attention that an invitation has been extended to the International Association of Ports and Harbors to hold its 1977 convention in the State of Texas. As Governor of Texas, I would like to extend to you a most sincere invitation to bring this group to our State.

Texas is well known for its many attractions—scenic, recreational, industrial, scientific and artistic. Perhaps, however, the greatest attraction is the genuine friendliness and warm hospitality that exemplifies Texans everywhere. I know that those in attendance will receive a hearty welcome to our State and that their stay will be a memorable one.

I hope favorable consideration is given to this invitation.

Sincerely,

Dolph Briscoe

OFFICE OF THE MAYOR  
CITY OF HOUSTON  
TEXAS

February 12, 1975

Officers and Delegates  
International Association of Ports & Harbors  
In Convention Assembled  
March, 1975  
Singapore

Gentlemen:

On behalf of the citizens of Houston, Texas, I am pleased to invite the International Association of Ports & Harbors to hold your annual convention in our dynamic city in 1977.

Houston is an exciting city that is rich in American and Texas heritage. It has a friendly and youthful personality that says "yesterday's dreams are today's realities and tomorrow's dreams are already under construction."

Major League sports, top entertainment, cultural and educational attractions and our modern shopping areas will combine with our fine restaurants, hotels and convention facilities to provide a meeting site that will be enjoyed by all of your members.

Please be assured of the wholehearted cooperation of the Houston City Government in making your convention here the most successful in the history of your organization.

We look forward to the honor and privilege of serving you in 1977.

Cordially,

FRED HOFHEINZ  
MAYOR

HOUSTON CHAMBER OF COMMERCE

February 12, 1975

Officers and Delegates  
International Association of Ports & Harbors  
In Convention Assembled  
March, 1975, Singapore

Gentlemen:

The Houston Chamber of Commerce is delighted, indeed, to join the Greater Houston Convention and Visitors



Council and other fine civic associations in extending a very warm and sincere invitation to the International Association of Ports & Harbors to stage your convention in the dynamic city of Houston, Texas.

Ever-expanding hotel and convention facilities are available. Houston is the only city we know of which has constructed two exciting and different convention and exhibit facilities in a five-year period . . . affording this city the ability of accommodating any known convention and trade show now produced in America.

As the Nation's fastest growing major city, now ranking sixth in population, we believe our growth in industry, education, professional institutions, shipping and transportation will prove of great interest to all convention goers.

Our cultural and entertainment fields have kept pace with Houston's other growth patterns: we are proud of our Symphony, Ballet, Opera and Legitimate Theatre; our Art Museums and Galleries, plus historical and special interest museums are exciting indeed, and tours of NASA and our famed Medical Center can be arranged. We are confident your fine association would not only enjoy our many natural advantages but also that your convention here would be a most successful event.

All of Houston awaits the privilege of serving you.

Sincerely yours,

WILLARD E. WALBRIDGE  
Chairman of the Board

## PORT OF HOUSTON AUTHORITY

February 12, 1975

Officers and Delegates  
International Association of Ports & Harbors  
In Convention Assembled  
March, 1975, Singapore

Gentlemen:

On behalf of the Port of Houston Authority, it is indeed a pleasure and an honor to extend a most cordial invitation to the International Association of Ports and Harbors to meet in Houston, Texas in 1977, on the occasion of its 10th Biennial Conference.

Houston is looking forward with great enthusiasm to hosting your distinguished group, as evidenced by invitations from the Governor of Texas, the Mayor of the City of Houston, and others, all of whom are ready to display Houston's brand of Texas hospitality.

The Port of Houston Authority has long been a member of I.A.P.H., which has given us sufficient opportunity to appreciate the importance of your deliberations during the biennial sessions. Naturally, we feel that Houston provides an ideal atmosphere for this type of deliberation, and that the 10th Biennial Conference in Houston will perpetuate the high standards and traditions of this esteemed organization.

We at the Port of Houston eagerly await the opportunity to personally greet each of the delegates, in extending a warm welcome to Houston.

Sincerely yours,

Fentress Bracewell



# Minutes of the Meetings of Six Special Committees

Before and after, also in parallel with, the 9th Conference in Singapore, various meetings of six (6) Special Committees were convened. They are as follows;

- |  |              |
|--|--------------|
| No. 1. Committee on International Port Development           | March 8      |
| No. 2. Committee on Large Ships                              | March 8 & 13 |
| No. 3. Committee on Containerization and Barge Carriers      | March 9 & 15 |
| No. 4. Committee on Legal Protection and Navigable Waterways | March 9      |
| No. 5. Finance Committee                                     | March 8 & 15 |
| No. 6. Constitution and By-Laws Special Review Committee     | March 8 & 11 |

It is hardly necessary to refer to the aims and duties of each of these Committees, but, the former four (4) Committees (No. 1—No. 4) are in charge of the affairs as indicated in the name of respective Committee. At the meetings of these Committees, discussions were focussed upon the activities to be tackled by the Association members during the two years period to come up to the 10th Conference, inter alia, upon measures to promote and protect the interests of the world ports community effectively in relation to the world shipping community etc..

The other two (2) Committees (No. 5—No. 6), on the other hand, taking charge of strengthening the management of IAPH itself, re-amendments to the By-Laws, were discussed and agreed upon with considerable details. Discussions were centered around also how to achieve the goal of IAPH economic independence from IAPH Foundation, the date of which was fixed as January 1st, 1978.

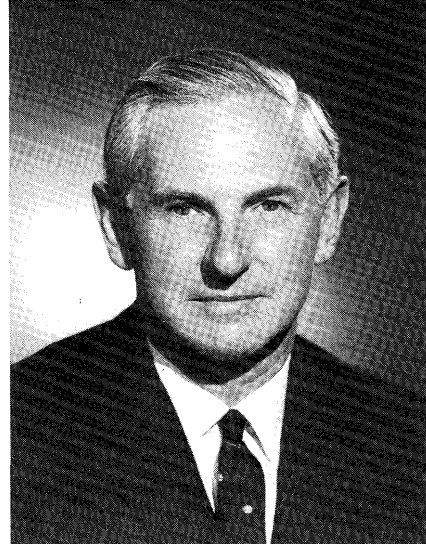
Thanks to the good offices of the Chairmen of these Committees we are blessed with an opportunity to publish the full minutes of these meetings, having been approved by each Chairman respectively.

We sincerely hope that IAPH members, especially those who could not attend the Singapore Conference, would carefully read the following and become well acquainted with what had been discussed and agreed upon at Singapore and what are expected to be done in the two years between now and 10th Conference which is called at Houston in April, 1977. (K. Yokoyama)

<b>No. 1. Session Title:</b>	Meeting of Committee on International Port Development
<b>Date of Meeting:</b>	8 Mar 75 Time: 1100—1230 hrs
<b>Chairman:</b>	Mr. John Lunch Director General Port of London Authority UK

The Chairman extended a warm welcome to the Members of the Committee.

The minutes of the last meeting held at Amsterdam were



Mr. John Lunch

approved.

The Committee discussed at length the 1974 Report of the International Survey of Port Training & Advisory Facilities issued by the Committee as follows:—

**Mr. Ben Nutter:** The updating of the Survey should be brief and not more than once a year. An annual supplement should be produced to keep the survey up to date. At the same time it would be helpful to circulate information on how far the survey information was used.

**Chairman:** A circular would be sent to obtain information to update the survey and obtain information on how far the survey was used. This would be done by his office and circulated annually. The whole situation would then be reviewed at the next Committee meeting which was intended to be held at the next IAPH meeting at Houston in 1977.

**Mr. Howe Yoon Chong:** It was an excellent report under the dynamic leadership of the Chairman and it would be up to recipient ports to use the report and set out exactly what they want. An alternative proposal to sending the experts travelling on short training attachments was to establish training facilities at strategic points for a group of ports around an area. He suggested that the existing training structures such as Colombo Plan training and the bilateral training arrangements at Japan should be used for this proposal. It would require extensive co-ordination by the London office to build up the Regional Port Training Centres on a formal basis. Regarding finance, he suggested that the trainees should be sent at their own ports' expense, and the host port or city should accept the costs of providing the host facilities.

**Chairman:** Members were evidently in favour of this scheme and volunteers were available to undertake co-ordination of training on a regional level. Thus the IAPH Secretariat in Japan could co-ordinate for the Far East area, Port of Singapore Authority for South East Asia and Middle East

area, Port of London Authority for Europe, East African Harbours Corporation for Africa area, and Port of Oakland for North and South America. Also he would contact suitable people in Australia to co-ordinate for Australasia. He would write to the various volunteer members on this matter and after members had commented he would ensure the IAPH Secretariat published the information in Ports and Harbours. With regard to finance, many ports made some kind of charge for training or advice, as the Survey showed.

The Chairman pointed out the availability of US\$16,000 in the Special Port Development Technical Assistance Fund, and requested the Committee to deliberate on the guidelines for its proper use. He suggested that this should be a form of sponsored bursary assistance for approved courses to a limited number of able ports people in really poor countries. The members went on to discuss the conditions for the use of the fund and wished to agree these conditions, which must be strict, against which each application would be evaluated. In addition to bursaries, assistance could be given in providing training material for developing countries which really lacked financial resources. The Chairman agreed to settle these conditions by correspondence with committee members. After that the Committee authorised the Committee Chairman to select the cases for use of the Fund for recommendation to the President of IAPH for approval.

Despite no new contribution from members the fund had grown from the profits arising from the sale of IAPH books, interest accumulation and exchange rate appreciations. There would be a possibility of raising further funds in the future when required but the Chairman's view was agreed that such funds should not be sought until the new arrangements had been demonstrated to be successful.

Mr. Kinyanjui requested assistance in obtaining contract harbour pilots and advice was given at the meeting by members with particular experience of this matter.

In conclusion, the Chairman expressed the view that the International Port Development Committee now well established had done useful work already and had agreed on a programme of further work which should assist IAPH members. It was agreed to recommend that the Committee should continue in its present form as long as it had such useful tasks to perform for IAPH.

All ensuing business would be conducted by correspondence until the next Committee meeting at Houston in 1977. Should a matter of great importance arise meanwhile, the Chairman was authorised to call a special meeting to deal with it.

No. 2-1. Session Title: Meeting of Committee on Large Ships

Date of Meeting: 8 Mar 75 Time: 1500—1700 hrs

Chairman: Mr. S. Ullman  
General Manager  
Port of Gothenburg  
Sweden

1. The meeting was informed by Mr. Ullman that Mr. P. Bastard, the Chairman of the Special Committee on Large Ships (COLS) was not available in Singapore to chair the meeting. Capt. Goh Choo Keng's proposal that Mr. S. Ullman be the Chairman of the meeting was then unanimously supported by the members.

2. Mr. Ullman now Chairman of the meeting, began by reading out the three items in the Agenda as follows:—



Mr. Sven Ullman

- “(1) Study of the Committee on Large Ships' Chairman's proposals for the continuation of works during the next two years.
- (2) Project of the Presentation of the Final Committee on Large Ships' Report to the plenary assembly on March 11.
- (3) Committee on Large Ships Composition for the next two years.”

He firstly requested the members to comment on the final report from the Chairman of COLS. Mr. Tsuboi pointed out that in the attachment to his letter dated 5 Mar 75 to Mr. Bastard he had included results of additional studies and a number of amendments. The Chairman remarked that as the report had been delivered it should be presented to the Conference on 11 Mar 75. This was supported by Capt Mason who said that the report was produced after a lot of work and that it would not be practical for the meeting to reproduce the report with modifications. He proposed that any suggestion or comment should be included in the future work programme of COLS. Mr. Dubois however voiced out a suggestion that comments could be presented in the Plenary Session. The Chairman then concluded the general view of the meeting that comments presented by Messrs Tsuboi and Dixon should be distributed to the Committee and be taken into consideration in the further work of the Committee.

3. Moving onto the first proposition of Mr. P. Bastard on Page 6 of his report, for the Committee as appears on Mr. Coune suggested that the proposition should be extended to cover manoeuvres of ships at very low speed when approaching berth as this subject being very technical had rarely been studied. Mr. Tsuboi remarked that it might not always be advisable to maintain the ship at very low speed in the harbour as the manoeuvrability of ships sometimes requires a certain speed depending on many factors, e.g. tide, etc. Mr. Brandenburg brought up the problem of sedimentation which causes the sudden shallowing of entrance to the harbour in certain parts in Rotterdam. As such he also happens added that the results of the sounding studies in this field would be of interest to the Committee. Mr. Horscroft commented that Mr. Coune's idea could be covered by adding 'including berthing' after the word 'water'. The Chairman explained that manoeuvres

of ships when berthing are rather complicated and it is worthwhile to stress the necessity of studying this subject. Mr. Brandenburg, however, was of the opinion that the use of tugs in berthing was a factor to be included. Mr. Coune then elaborated that mentioning of tug assistance in berthing would make the proposition a little more restrictive. He added that with the development of new systems of steering, it could be imagined that large container ships could berth without tugs in the absence of wind and current. The Chairman supported Mr. Coune's view which allows a wider scope for study. Mr. Brandenburg accepted that view but expressed regret over the omission of tugs in the proposition. The Chairman assumed that the use of tugs should be studied as well and that this could be taken as granted as the matter should be mentioned in the minutes of the meeting.

The meeting agreed to have this sentence added to the first proposition:—

“Ships’ manoeuvres inside port when approaching berth should also be studied”.

4. Touching on the second proposition of Mr. P. Bastard, Mr. Brandenburg commented that the term “Port Authorities” might not be sufficiently applicable in certain ports where several port organisations and government bodies each shoulders only part of the responsibilities. Mr. Horscroft added that this would not cause much difficulty as the various port organisations, public or private and government bodies of a country could present their views through a representative port authority. Mr. Dubois enquired whether “responsibilities” are for matters of security or just general responsibilities. The Chairman replied that this problem should be studied in all respects. Without much discussion on Proposition No. 2, the meeting accepted it unamended.

5. With regard to Proposition No. 3, the Chairman referred to a draft proposition of Mr. P. Bastard on the formation of a joint Working Group between IALA, PIANC and IAPH on navigation aids for large and very large ships in port approaches, accesses and areas (Appendix I). A few members raised the questions of defining the work for the proposed joint Working Group and of determining its membership composition. Some pointed out that the terms of reference for the proposed joint Work Group cover the areas already charged to the three working groups of COLS. Capt Mason explained that although there had been some co-operation between the three organisations and each had its own observers to attend meetings organised by the other organisations, a better way is to form the proposed joint Working Group. He added that as the members at the meeting were not adequately aware of what specific areas the other two organisations are studying or have studied it would not be appropriate for this meeting to work out the job description for the joint Working Group. The Chairman gathered the consensus of the members and concluded that the Committee of large ships considering the possibility of duplication of work and necessity of effective co-operation, should recommend to the Conference that the Secretary-General approach the other two organisations to ascertain whether they are in favour of forming the joint Working Group. He added that if the proposal was accepted for implementation, the joint Working Group would have to formulate its tasks.

6. Item (a) of Proposition No. 3 was accepted by the meeting without much discussion.

7. With reference to Item (b), Capt Mason pointed out that

he could see that the subject covers a wide field and the Working Group No. 3 would face a gigantic task. He doubted that the group could complete that task. Mr. Horscroft suggested that perhaps the Head Office Secretariat could work in conjunction with Capt Mason and other members to draw up a questionnaire to which the answers obtained may be interpreted differently but could afford a search for some commonality of thought. At the request of the Chairman, Miss Takeda explained that that proposal might be accepted by the Secretariat after careful consideration of its details and other factors involved.

Mr. Brandenburg pointed out that aids to navigation and other instrument are as important in the control and regulation of large ship movements. As such, he proposed that the word ‘procedures’ should be followed by ‘and equipment’. The members expressed consent to his proposal.

8. With reference to Item (C), Capt Mason emphasized the problem of accommodation and administration of an office for the establishment of a bibliography for the main works. He clarified that bibliography should not be taken to mean a library of books but rather some co-ordination whereby members could be guided efficiently when in search of required information and research materials regarding large ships. He added that with co-ordination a centralised bibliography would prevent duplication of work and waste of time.

Capt Brandenburg commented that initially a catalogue may be set up from information obtained from the various institutions, for example, the Netherland Maritime Institution where extensive research may have been conducted in certain fields regarding large ships. Some members expressed the need to have the word ‘bibliography’ replaced with ‘directory’ for further clarification. However, item (C) remained unchanged when the members accepted that ‘bibliography’ be taken to mean ‘directory’.

9. The full text of the three propositions on the continuation of work for the Special Committee on Large Ships are hereby presented:—

I. Keep the subject of Working Group No. 1 whole. This group will be charged with actualizing the study undertaken concerning the technical characteristics of the large ships. Also, to deepen the study of the manoeuvrability characteristics particularly at slow speed and in shallow waters. Ships’ manoeuvres inside port when approaching berth should also be studied.

II. Keep the subject of Working Group No. 2 who would continue to work, focusing its action on the following points:

a) study of the port authorities responsibilities: this point will be studied by means of investigation of the main world ports.

b) study of safety problems relative to large ships: this point could also be studied by means of an investigation on the accidents of large ships in the ports.

III. The study fields coming from the report of Working Group No. 3 are numerous and varied. Before anything, it is necessary that a co-ordination of work between the interest organisms (I.A.L.A., PIANC, IAPH) avoids duplications and unnecessary overlaps. The Committee recommended that the Working Group No. 3 studies, in particular, the following points:

a) study of the common and fundamental recommendations for berthing the very large ships in the ports.

b) study of the customs employed by the large world



ports for the control and regulation of the large ship movements: synthesis, simplification and harmonization study of the procedures and equipment.

- c) establishment of a bibliography for the main works treating port control.

In connection with Proposition III, the Chairman reiterated that the Committee would recommend to the IAPH to consider the need and possibility of forming a joint working group between IALA, PIANC and IAPH on navigational aids for large and very large ships in port approaches, accesses and areas.

10. The Chairman reminded the members that in three minutes' time he had to leave the meeting for another one beginning at 5.00 pm. He enquired whether the Committee should have another meeting sometime later to discuss Items 2 and 3 on the Agenda. Miss Takeda advised that might not be necessary as the discussion and outcome of the Committee meeting summarised, would form the Item 2 and be reported by the Chairman to the plenary assembly. With regard to Item 3, Miss Takeda explained that it only required the Chairman of COLS to list the members of COLS, if there are any changes, for the next two years. Mr. Ullman replied that he would prefer Mr. P. Bastard to handle that item as he is still the Chairman of COLS. The members then agreed to end the meeting at 5.00 pm.

### Appendix I

Joint Working Group (IALA-PIANC-IAPH) on navigation aids for large and very large ships in port approaches, accesses and areas.

#### TERMS OF REFERENCE

Taking account of, regarding port approaches, accesses and areas,

- possibilities and accuracy of manoeuvring of large and very large ships,
  - her own navigation and manoeuvring technical means,
  - safety,
  - general environmental (particularly concerning the dimensions of the site) and operational circumstances,
  - economical criteria,
- 1) To study the needs of large and very large ships for navigation and manoeuvring,
  - 2) To define the navigation aids able to improve the navigation and the manoeuvring of large and very large ships in port approaches, accesses and areas,
  - 3) to draw up recommendation:
    - i) on navigation aids to be provided in port approaches, accesses and areas visited by large and very large ships,
    - ii) On studies to be undertaken or developed for allowing to precise and to apply the former recommendations.

No. 2-2. Session Title: Meeting of Committee on Large Ships

Date of Meeting: 13 Mar 75 Time: 0830-1040 hrs  
Chairman: Mr. Sven Ullman  
General Manager  
Port of Gothenburg  
Sweden

The Chairman informed that this meeting was called to

discuss the four proposals (Appendix I) submitted jointly by Mr. Dixon and Capt Mason regarding the future work to be undertaken by the Working Group No. 3. He then requested Mr. Dixon and Capt Mason to brief the members on their proposals.

Capt Mason explained that basically the proposals consist of guidelines as to what details the Working Group No. 3 would need to assess two main factors affecting the manoeuvres of large ships. He added that these two factors are firstly the efficiency of ships and secondly the abilities of pilotage, tugs, navigational aids, berthing facilities and ancillary activities etc. He pointed out that it would be necessary to have an individual in a port who understands ships, tugs, pilotage and requirements of the port etc. so that actions and interactions of these elements can be objectively and independently assessed. Mr. Dixon suggested that the Committee perhaps could work out a questionnaire requesting ports handling large ships to outline types of failures, e.g. plant loss, rudder failure, tug malfunction etc., what could be done about them, the conditions under which they happen and their preventive measures. He added that the Committee could also look into the method by which ships could be forced to report those failures. He further explained that if masters of ships could be forced to report any failures or malfunctions of the machinery and other equipment on board the ships before arriving at the port, the pilots, tug masters and berth operators etc. could take the information obtained into consideration for the safety of their operations. Capt Brandenburg enquired whether international records would be necessary to capture all this information and he also brought up the problem that on some occasions ships might not report such failures. He pointed out that some port authorities being in charge of certain responsibilities might not have the legal means of enforcing this requirement in traffic control. Capt Mason explained that initially it would be sufficient to have something particular with respect to each port and that the objective is to gradually encourage people to report ship and other failures. With regard to Mr. Brandenburg's second problem, Mr. Dixon again stressed that it would be up to the Committee to recommend the most suitable way of achieving the coordination and collection of the required information. Capt Mason however remarked that based on the sincere wish of pilots, captains and port operators to have safety in their operations, the only way to improve safety would be to create more cooperation between shipowners and ports and that it could be optimistic that some results might be obtained through successful teamwork.

Capt Brandenburg suggested that traffic control should be included and studied in Proposal II. Mr. Dixon remarked that though traffic control might be considered to have been covered by item (2) of Proposal II he had no objection to including traffic control as item (7) in a broader sense. The Committee agreed to Mr. Dixon and Capt Brandenburg's suggestion.

With regard to Proposal No. IV, Mr. Dixon explained that after possible determination of all kinds of risk as could be identified from ship breakdowns and other failures etc., general rules of operations could be formulated for protecting ships and ports. Mr. Horscroft emphasised the need to train the pilots and tug masters to ensure that rules are complied with. Mr. Dixon supported Mr. Horscroft's point and he remarked that training programmes could be drawn up for navigational personnel in ports. He also

stressed the importance of good relationship between pilots and masters in manoeuvring a ship.

Capt Mason drew the attention of the members to the necessity for up-to-date information for the compilation of report and he suggested that there should be coordinators working in ports instead of having pilots, tug masters, berth operators travelling to and from ports to exchange ideas. He added that such coordinators could get bigger and better exchange of views between ports because they will have a complete picture to exchange with one another.

The Chairman enquired whether the members agreed to accept the four proposals. With affirmative answers from the members, the Chairman indicated that he would report them to Mr. Bastard, the Chairman of COLS.

## Appendix I

### ORGANISING FOR PORT SAFETY TRAFFIC CONTROL IN BROAD SENSE

#### I. DEFINE DUTIES & RESPONSIBILITY OF PORT NAVIGATION OFFICER

Each Port Authority regardless of how organized has the ultimate concern for safety—through examination of physical layout of Port, its pilots, tugs, navigational aids and environmental (tide, wind, waves, etc.) will determine safest mode of operation.

COLS should make observations and recommendations as to how and where this function should fit.

#### II. DEVELOP TECHNICAL AUDIT SCHEME

In tune with idea of Port cooperation develop and propose scheme with ground rules for in depth review of all elements of ship entry and departure as well as anchoring and berthing. This could be done with or without any financial arrangements.

The purpose would be to share the latest techniques (and perhaps technology) to identify problems and strong points in:—

- (1) Pilots—in their proficiency and discipline
- (2) Communications—effectiveness
- (3) Tugs—their adequacy and usage
- (4) Navigational Aids
- (5) Layout of Harbor
- (6) Adaptation of Rules and Regulations appropriate to conditions and
- (7) Traffic control.

Finally how well does each component integrate to get proper teamwork.

#### III. DEVELOP SIMPLE DATA SYSTEM FOR RISK IDENTIFICATION

- (a) Pilot logs will show modes of ship failure in Ports while manoeuvring—plant loss, rudder failure, tug malfunction—share these data through COLS.
- (b) Appraise ships entering/leaving for equipment failure and inoperative status—of redundant units for example generators, rudder engines, radars etc.
- (c) Identify through PRL cable advice status of (b) as well as breakdowns in manoeuvring in past two years.

#### IV. DEVELOP PRO FORMA SET OF RULES AND REGULATIONS TO COPE WITH RISKS IDENTIFIED IN III

These Rules would be generalized so that any Port



Mr. Ben E. Nutter

could apply them according to their own conditions, for example—speed limits—on routes past anchorages, marginal wharves, tug assistance or augmentation with high risk vessels, turning manoeuvring methods etc.

No. 3-1. Session Title: Meeting of Committee on Containerization and Barge Carriers  
Date of Meeting: 9 Mar 75 Time: 0900–1145 hrs  
Chairman: Mr. Ben E. Nutter  
Executive Director  
Port of Oakland  
USA

#### 1. REPORT OF IAPH SURVEY OF CONTAINER FACILITIES

As copies of the Report of the IAPH Survey of Container Facilities were not available to members, there was no discussion on this.

#### 2. CONTAINER CHARGES

Discussions on the enormous variations in container charges by different container terminal operators, even where the mode of operation is very much similar, produced a consensus of opinion on the value of exchange of information on container charges to enable ports to know how their charges compare with those in other parts of the world. The difficulty was in the comparison and evaluation of the statistical information as between basic and incidental charges. After several suggestions were put forward, viz a statistical return to be submitted or a form of questionnaire, it was decided that the matter be discussed in a future meeting. Meanwhile, ports interested could get in touch with one another to pursue this.

#### 3. SETTING OF DUES ON A BARGE SYSTEM

A part of the original concept of the BACAT system was for Carriers at some locations to avoid ports; but because of the often unfavourable conditions in the river estuaries it has necessitated the ship calling at the wharves and poses the problem of port charges for the required facilities. The experience of various members were related, including the handling of containers on the LASH ships. It was suggested that as the LASH system developed further, this topic

could be raised. It was also left for Mr. Stanley Johnson and Mr. Edward Reed to put up a paper for the magazine for the benefit of all.

#### 4. UNIFORM STATISTICAL RETURN OF CONTAINER TERMINAL OPERATIONS

Explanation was given on the format of the statistical return which would be useful for the various port authorities in viewing and comparing the performance at the container terminals around the world. It was suggested that the return be voluntarily submitted by members on a quarterly basis, and be circulated to members submitting such returns.

The Committee agreed that Mr. Brotherson and Mr. Mayne pursue the matter and through the magazine ask for the co-operation of all members. The Chairman agreed to produce the statistical results from the returns submitted. It was pointed out that because of the different problems encountered by the larger multi-user terminals, that the total volume throughput be indicated in the return, as it was generally agreed that various ports with varying frequency of ship calls would produce widely varying crane rates. Discussion ensued on the different expression of container moves, whether a restowage or a shifting of a container from a hatch to another be included and if so, as one or two moves. The Committee agreed that a simple form be started and that modifications and refinements could be made in the light of experience.

#### 5. ADHERENCE TO ISO STANDARDS

It was pointed out that variations from ISO standards make the entire transportation system rather awkward. Economic factors, however, preclude the strict adherence to the standards. The Committee realised that very little can be done to insist on adherence but rather shipping companies be encouraged to use the ISO standards, where feasible.

#### 6. SOLICITATION OF ADVICE OF GLOBAL ORGANISATION REGARDING FUTURE CONTAINER HANDLING SHIPS

On the question of future ship sizes, it was pointed out that there should be greater cooperation between shipping companies and port authorities on the planning of sizes for future ships but doubts were expressed whether the shipping companies themselves would be able to know far in advance. Ports may use the Panama Canal Maximum as a guide to rely upon in planning their facilities. As the Committee for Large Ships was also handling container vessels, this Committee could look to them to be helpful.

#### 7. INTERNATIONAL LIABILITY—PROGRAMME FOR DOCUMENTATION COVERING LIABILITY FOR CARGO HANDLED IN CONTAINERS

This was discussed at Amsterdam and Auckland. As no one present at the meeting was aware of the progress made in this direction, no discussion was possible. The Committee agreed to revert at the next meeting.

#### 8. SAFETY—ACCIDENTS & DAMAGE TO PERSONS & EQUIPMENT

Information was sought on the experience of terminal operators in respect of the basis of safety in the terminal areas. It was pointed out that there were wide variations in practice, namely defined areas, defined passageways for

crew members, movement of vehicles within the terminals, etc. but the insurance companies appear to set the guidelines and the standards in many cases. There are generally no standard guidelines. Labour Unions have a large say in the formulation of safety regulations.

#### 9. FUTURE WORK TO BE UNDERTAKEN

Until the Survey of Container Facilities is studied by the members, there could be no in-depth comments. It was hoped that copies of the report could be available in the next day or two.

10. It was agreed that a further meeting be convened on Saturday, 15 Mar 75, at 0830 hours to discuss the report and future work to be undertaken.

**No. 3-2. Session Title:** Meeting of Committee on Containerization and Barge Carriers  
**Date of Meeting:** 15 Mar 75 Time: 0830–1000 hrs  
**Chairman:** Mr. Ben E. Nutter  
Executive Director  
Port of Oakland  
USA

The Chairman opened the meeting with the view that the Committee be broadened and suggested that the following members to serve in it:

- (a) Mr. Don Welch from South Carolina Port Authority
- (b) Mr. Yamazoe as a replacement for Mr. Kinouchi

There was also a request from Mr. Guy Griffiths from the Australian National Line to serve in the Committee. Some lively discussion ensued whether he should be accepted into the Committee and generally on the advantages and disadvantages of having shipping companies represented, it was decided that there was already sufficient representation from Australia.

Two other representatives from the Soviet Union were invited to attend the meeting by the Chairman who also recommended that they participate in the Committee.

#### IAPH Report on the Survey of Container Facilities

The report have been received and sufficient copies were available for distribution.

#### Future Work to be Undertaken

1. The Chairman remarked that in such an organisation, except for Committee Meeting, there tend to be very large meetings giving rise to speech-making viewpoints; and there was a lack of the feel of man-to-man discussions. He suggested that there should be smaller seminars on topics of containerisation and barge carriers, LASH and RO/RO problems. It was the consensus of opinion that such seminars in small groups were more productive than large meetings, and that the Chairman would put this suggestion to the meeting at Houston.
2. With regard to the IAPH Survey Report, it was generally felt that there was a lack of clear-cut definitions on the type equipment that should be listed in the returns, as a result of which various types of equipment were given making comparison or assessment rather difficult. After some discussion, it was suggested and agreed that Mr. Reed undertake to put up the form with proper explanations for the right kind of information with respect to LASH

facilities. Similarly Mr. Mayne would undertake to do this for the RO/RO, while Mr. Ben Nutter for the container facilities.

3. Mr. Morgan suggested some work be done by the Committee on the evaluation of different types of equipment and methods of high-stacking of containers. The Chairman remarked that this would be an excellent subject for a paper, but rather unweildy for a Committee to deal with. Some discussion followed as to how the members of the Committee could help each other in exchange of information on stacking systems, the advantages and disadvantages of various modes of operations, for example, chassis against transtainers, straddle carriers etc. The Chairman remarked that while the Committee has dealt with berths and equipment, it has not gone into container yard configuration and systems. It would be therefore be an excellent subject for someone to do a paper on. He suggested that Mr. Morgan attempt such a study to which Mr. Morgan agreed to discuss with Mr. Carr on how best this project be undertaken and if this was not possible by virtue of the size and complexity of the task, to find some other means.

#### **Scheduling of Future Committee Meeting**

The Chairman suggested and the members agreed that the next meeting be held on 29th and 30th April 1976 in Curacao following the meeting of the Executive Committee. The Chairman then proposed a designation of Vice-Chairman of the Committee and asked if Mr. Mayne would agree to stand for election. Mr. Mayne agreed and the Secretariat was asked to take note.

#### **Representation by the Soviet Union in the Committee**

Mr. Riazanov requested that Mr. Terekhov be excused from serving in the Committee for the time being because of the problem of language and his heavy commitment in the Port of Leningrad. It was suggested that this question be kept in abeyance and that there could be contact between the Soviet Union and the other members as and when the need arises.

<b>No. 4. Session Title:</b>	Meeting of Committee on Legal Protection of Navigable Waterways
<b>Date of Meeting:</b>	9 Mar 75 Time: 1600–1700 hrs
<b>Chairman:</b>	Mr. Andre Pages Ingenieur General Bureau of Ports and Harbours Ministry of Equipment France

1. The Committee had on its agenda the following two main items:—

- (1) Main Question—Limitation of Liability of Owners of Sea Going Vessels. Compensation of Damage to Ports.
- (2) Other Questions—Bulbous Bow Vessels Marking, Regime of Ships in Foreign Ports and Collision Regulations 1972.

2. The summary of the discussion is presented below:

#### **(a) FUTURE FORM OF WORKING FOR THE COMMITTEE**

The view has been expressed that the future work of the Committee would be most suitably carried out by means of a working group with both flexible composition and terms of reference to take account of the dynamic issues affecting



**Mr. Andre Pages**

the legal affairs of ports in particular as it develops within the IMCO.

#### **(b) CONCEPT OF INTERDEPENDABILITY OF SHIPOWNERS AND PORT AUTHORITIES**

Efforts should be made to develop the concept of inter-dependability which has long been in existence between shipowners and port authorities. Through a better and deeper understanding of this concept will be the problems involving these two separate bodies be solved in a way best possible. It is however realised that commercial interests on the part of either parties would give rise to a possible conflict of interests.

#### **(c) RISK OF REDUCTION IN SAFETY STANDARDS**

It is felt that ship accidents will increase in number in the future. It is at least questionable whether these accidents can be attributed to possible deterioration of the standard of crew's capabilities and the extent to which vessels become more prone to mechanical failures or in combination of both. Most highly sophisticated vessels requiring a high degree of skills may well be unable to obtain for an expert complement because of shortage of suitably well-trained personnel.

#### **(d) DRAFT RESOLUTION**

The Committee would propose a draft resolution to the IAPH plenary session for consideration. Its observations therein are gaining support within the delegations of IMCO. The problem of non-sea going vessels is certainly not within the scope of consideration.

#### **(e) INSURANCE TO COVER LIABILITY OF SHIPOWNERS**

The view has been expressed to IMCO by insurance interest that the insurance capacity will likely be of the order of US\$100 to 120 million per incident per ship given a strict limitation of liability. The claims on this capacity will arise from all sources including personnel, hull, property and passengers and wreck removal etc.

#### **(f) BULBOUS BOW VESSELS MARKING**

IMCO in 1969 issued a recommendation to the effect that bulbous bow vessels should be marked by notice board

in English and to be illuminated by night. There were all sorts of reasons why particular ships do not co-operate in that system. It was suggested that IAPH should request IMCO Maritime Safety Committee to re-open this matter and to consider amending the recommendation to permit vessels having bulbous bow to be marked by a profile symbol illuminated at night. The International Chamber of Shipping are prepared to support this proposal. There is therefore every reason to believe that an appropriate resolution from IAPH to IMCO will have great success. It was also pointed out that introduction of a check list consisting a number of questions (including bulbous bow vessels, their stern power etc.) to be answered by the Master before his ship is admitted to the port, could be of use in identifying bulbous bow vessels. A common international check list could be established with number codes to represent same answers in different languages and this would avoid difficulty in communication due to language problem.

#### (g) REGIME OF SHIPS IN FOREIGN PORTS

The normal formalities e.g. immigration, police, customs procedures etc. required on the arrival of ships in a port are under the respective authorities of the government or the organisation controlling that port. These basic requirements are bona fide and it is to be borne in mind that the articles of any Convention dealing with regime of ships in foreign ports should in no way be in conflict with the local by-laws, regulations and statutory requirements and rights. It means that every consideration by the governments of the Convention should have regard to the views of port authorities.

#### (h) COLLISION REGULATIONS 1972

Reference was made by the Committee to the rules attached to a Convention on the International Regulations for Preventing Collision At Sea 1972 under IMCO. The Committee agreed to suggest to IAPH that safety of navigation in port waters requires that stated rules should clearly indicate their intended purpose and that the Maritime Safety Committee of IMCO should re-examine the aforementioned rules and in particular, Rules 3, 9 and 18. The Committee was of the opinion that the potentially dangerous situation for port authorities exists with regard to the construction of these three Rules. It was considered necessary that these Rules be clarified by the insertion in Rule 3 (General Definitions) Section (g) of the word "may" instead of the word "shall" in the sentence "The following vessels shall be regarded as vessels restricted in their ability to manoeuvre". There should be absolutely no doubt as to the right of way to be enjoyed by a ship which is "severely restricted in her ability to deviate from her course" and port authorities will be obliged to exercise their option recognised in Rule 1 (b) to make special rules. The fact that ports acting independently will differ in the special rules they wish to make, is precisely the situation which the Committee felt, the IAPH should wish to avoid.



Mr. Thomas J. Thorley

No. 5-1. Session Title: Meeting of the Finance Committee  
 Date of Meeting: 8 Mar 75 Time: 0900-1115 hrs  
 Chairman: Mr. Thomas J. Thorley  
 General Manager  
 Port of Long Beach  
 California  
 USA

#### I. The items of the Agenda of the meeting were discussed briefly.

##### 1. REPORT OF THE FINANCE COMMITTEE ACTIVITIES AFTER EIGHTH CONFERENCE— AMSTERDAM

The replacement of Mr. Caughlin as the Chairman of the Committee by Mr. Thorley was reported.

The Committee met in New Zealand to consider several types of formulae for the re-structure of dues in an endeavour to make the Association self-supporting as soon as possible.

##### 2. PROCEEDING OF OLD WAYS AND MEANS COMMITTEE AT AUCKLAND, NEW ZEALAND— MARCH 25-26 1974

As the Association had been besieged ever since its creation by financial problems, the intent was that this Committee should attempt to resolve these financial problems. The Association had only continued to exist because of the personal dedication of Mr. Akiyama and the generous contributions by the Japanese Foundation.

The Ways & Means Committee at Auckland, New Zealand had come up with a solution which was later put into a Bill which would be recommended to the Board of Directors for adoption at this Conference.

##### 3. AMENDMENT OF SECTION 5 OF THE BY-LAWS AND THE NEW MEMBERSHIP DUES STRUCTURE

The Bill should be recommended for adoption by the Board of Directors at this Conference and any recommendations with innovations should be dealt with at a later stage.

The three questions which were brought up by members of the Association in respect of the above Bill were then examined and discussed.



i. THE NECESSITY OF DEFINING THE YEAR ON WHICH CARGO TONNAGE STATISTICS ARE BASED

It was opinioned that the statistics of the last published report of the member ports could be used.

ii. THE SENTENCE OF "REGULAR MEMBERS AND ASSOCIATE MEMBERS SHALL HAVE THE PRIVILEGE OF SUBSCRIBING FOR ANY NUMBER OF UNITS" SHOULD BE AMENDED TO "SUCH REGULAR MEMBERS AND ASSOCIATE MEMBERS SHALL HAVE THE PRIVILEGE OF SUBSCRIBING FOR ANY NUMBER OF UNITS OVER AND ABOVE THOSE DETERMINED BY STANDARDS SET OUT ELSEWHERE IN THE SECTION

The meeting noted that this was only a matter of rewording of the original sentence proposed in the Bill.

iii. IT SHOULD BE DEFINED WHEN AND HOW FREQUENTLY THE REPORTED TONNAGE IS TO BE REVISED AND REPORTED

Both the Chairman and Mr. Lunch were of the opinion that the questionnaire should be sent out at least once in two years or maybe three years and not more frequently than that.

An observation was made that the sums of money payable under the new structure would be high by some ports' standards. The Chairman thanked the member for his observation and opinioned that he did not think the new rates to be oppressive. There was, however, a need to be conscious of acceptance required by the member ports of developing countries. Mr. Howe expressed his opinion that a port joining the Association would not be over-burdened if asked to pay the new rate at US\$500.

A question was then raised as to whether the proposed rates were really high enough to enable the Association to be self-supporting. The Chairman replied that the discussion on this revision of rates at Auckland last year, indicated the rate should be in the region of US\$640-US\$700 and not US\$500. Mr. Yokoyama was invited to comment on whether it was likely that some ports would withdraw from the Association if the dues were increased in excess of US\$500.

Mr. Yokoyama explained that in the survey conducted to request members to declare "their tonnage" only 70% of the Regular Members replied, with only about 30% not replying. The results of the survey as tabled in the General Report of the Secretary-General was then examined by the Committee. The meeting noted that under the present system, the number of units subscribed by Regular Members was 270 units but this would be increased to 395 units under the proposed new structure of dues. The total income from dues collection would increase from US\$94,500 to US\$197,500, an increase of 209%.

Mr. Yokoyama then explained to the meeting that 3 possible reasons for the Secretariat being unable to obtain any response from 55 members ports out of a total of 182 regular members in the survey were listed by Dr. Sato to the Chairman of the Finance Committee in his "Final Report on Tonnage Survey", Ref: 5C-77-75 dated 28 Feb. 75. It was noted by the meeting that under the new dues structure the total number of units subscribable by the 55 members under the new structure might only amount to 67 units.

Suggestions were offered by Mr. Soules that the Finance Committee should make a direct approach to those members in order to obtain replies from them.

Mr. Lunch suggested 2 ways of looking at the situation: (1) To go out on a "Sales Campaign"

Literature in several languages should be extended to those members or direct approach should be made to those members to obtain the required information from them.

(2) Alternatively, some ways of reducing the operating costs of the Association Head Office should be looked into.

Mr. Cavey commented that it may not be possible for the Association to solve its problems overnight but should perhaps start implementation of its proposed solutions in 2 stages.

Mr. Howe reminded the meeting that the decision was made at the Auckland meeting, 1974 to implement the increase in dues in one stage. Count Moltke further observed that even if the increase in dues to US\$500 was implemented immediately, the Association would still not be able to attain self-sufficiency by 1979. The Association should hence increase its membership dues to US\$500 as a basic unit upon which an increase by a percentage could be made subsequently.

4. LOCATION OF THE HEADQUARTERS OF THE SECRETARIAT

In June 1974, the Chairman of the Finance Committee had made a personal observation of the Association's headquarters in Tokyo, Japan in order to carry out a review of the situation at the headquarters. The Chairman was satisfied that the operation at the headquarters was carried on a business-like basis and that the high expense of the headquarters was attributable to the inflation factor in Japan. The matter of re-location of the headquarters of the Secretariat was one of policy which could only be determined by the Board of Directors.

The Finance Committee would help to implement whatever decision taken by the Board of Directors.

Mr. Tsuboi brought up the point that in view of the high standard of living in Japan, it would be to the Association's benefit if an alternative site could be found for the Head Office. The Chairman commented that the decision of the relocation of Head Office would have to come from the Board of Directors.

After much discussion, it was decided that the issue was premature at this stage and that until a specific location had been considered, it will be futile to examine this issue in infinity.

Appreciation was then expressed by the meeting for the excellent work carried out by the Secretariat at the Head Office.

The Agenda was then approved unanimously.

The Committee unanimously recommended to the Board of Directors for approval the draft of the Bill to amend Section 5 of the By-Laws to establish a new dues structure for regular and associate members, which draft will be found on Page 103 at the report of the Secretary-General.

II. Settlement of Accounts 1973/1974

The Settlement of Accounts 1973/1974 was examined and it was referred to the Board of Directors for their review as reported by the Secretary-General.

### III. Budget for 1975-1976 and Forecast for 1975-1979

Both the budget for 1975-1976 and the forecast for 1975-1979 were referred to the Board of Directors for their review.

No. 5-2. Session Title: Meeting of the Finance Committee  
Date of Meeting: 15 Mar 75 Time: 0900-1000 hrs  
Chairman: Mr. Thomas J. Thorley  
General Manager  
Port of Long Beach  
California  
USA

The meeting was convened to discuss some of the points raised in a memorandum written by Mr. Akiyama to the Chairman of the Finance Committee.

#### 1. THE CHAIRMAN'S REPORT TO THIS CONFERENCE

Mr. Akiyama enquired as to whether the Chairman's report to the Conference, in respect of the issue of the relocation of the Head Office could be interpreted as being final.

The Chairman explained that the direction in respect of the relocation of the Head Office must come from the Board of Directors who, however, have not made any decision regarding the matter. The Finance Committee would assist in carrying out the decision of the Board of Directors once it has been made.

#### 2. CONVICTION ON THE EXPENSES OF THE HEAD OFFICE

Mr. Akiyama informed the meeting that he would be arranging for a year-by-year analysis of the expenses so that members of the Association could see that the expenses incurred by the Head Office were minimal and necessary.

This information would be disseminated from Tokyo once it was prepared.

#### 3. REMUNERATION FOR THE SECRETARY-GENERAL

It was decided that the Secretary-General should be remunerated by the Association at a quantum which commensurated with the time spent by him in carrying out the Association's work.

#### 4. CONFERENCE EXPENSES

The Chairman invited Mr. Cheng to enlighten the meeting on the extent the Head Office was sharing in meeting the expenses of the Conference.

Mr. Cheng informed the meeting that apart from the cost of the Secretarial services provided at the Conference, all other Conference costs were being met by the Port of Singapore Authority as the Conference Host.

Mr. Akiyama observed that although the Conference Host was meeting the cost of simultaneous translation at this Conference, a policy had to be formulated for subsequent Conferences, especially the 1977 Conference at Houston, where simultaneous translation to several languages was envisaged, as to whether the Secretariat Head Office should bear this item of cost.

After much discussion it was agreed that the cost of

simultaneous translation and the cost of printing should be budgetted as expenses of the Association.

#### 5. PAST EXPENSES OF THE HEAD OFFICE

The meeting agreed to Mr. Akiyama's suggestion that he prepare a comparison of the past expenses of the Head Office for presentation at the next meeting of the Finance Committee at Curacao.

#### 6. EXPLANATION OF BUDGET ITEM

The meeting approved of Mr. Akiyama's proposal that a paper be prepared to explain and clarify all contents of the Budget.

#### 7. CONVERSION OF CURRENCIES

The meeting was informed that owing to the fluctuations in rates between the US Dollar and the Yen from time to time, great difficulties were experienced by the Secretariat in Tokyo, in recording transactions and reporting the Settlement of Accounts in US Dollar.

He proposed that for the purpose of accounting, a fixed rate of exchange between the US Dollar and the Yen be adopted, and any differences from this 'fixed' rate be debited or credited to a Reserve Fund.

The meeting agreed to Mr. Akiyama's proposal.

Mr. Akiyama drew the meeting's attention to the fact that as no transactions in foreign currency were allowed in Japan, losses/gains arising from conversion of the US Dollar to Yen must be expected.

Arising from this subject, a request was made by Count Moltke that for ease of reference the financial matters be reported separately from other matters by the Secretary-General.

#### 8. CREATION OF A RESERVE FUND

The meeting agreed to the creation of a Reserve Fund, equivalent to one-sixth of the annual expenses of the Association, from which the Secretary-General would make payment of all bills, once the Association had been separated from the Foundation.

#### 9. OTHER MATTERS

The Chairman requested the representative from the Secretariat to convey to the new President, Mr. Howe, his recommendation that Mr. Ir. J. den Toom of the Port of Amsterdam be appointed as a member of the Finance Committee.

No. 6-1. Session Title: Meeting of Constitution and By-Laws Special Review Committee  
Date of Meeting: 8 Mar 75 Time: 1400-1600 hrs  
Chairman: Mr. D.E. Taylor  
Chairman  
National Harbors Board  
Canada

The meeting was informed that the following matters were discussed at Amsterdam and that the draft Bill reflects the decisions made:

- (1) The fact that a number of Conference Committees were usually appointed by the President was noted, and it was felt that there might to be another method whereby the appointment of such Committees could represent the views of people who had been elected by the members. It was accepted that

the President should select a certain number of members. It was agreed that 14 members would be elected by the general membership and five nominated by the President.

- (2) The Executive Committee which had hitherto been dominant should be more responsive to the Board of Directors. The authority to make policies and provide direction to the organisation should rest with the Board of Directors. The Executive Committee should act as the administrative arm to implement the decisions of the Board of Directors.
- (3) The practice of not necessarily associating the Presidency of the Association from the venue of the Conference was discussed and it was agreed that:
  - (a) The President of the Association would be elected by a Plenary Session of the Conference on the recommendations of the Nominating Committee. The President of the Association should be a man who is an expert and a career man associated with a career in port administration but not one who is solely or specifically associated with the venue of the Conference.
  - (b) The Chairman of the Conference could be the person in charge of the Conference arrangements and hospitality arrangements.

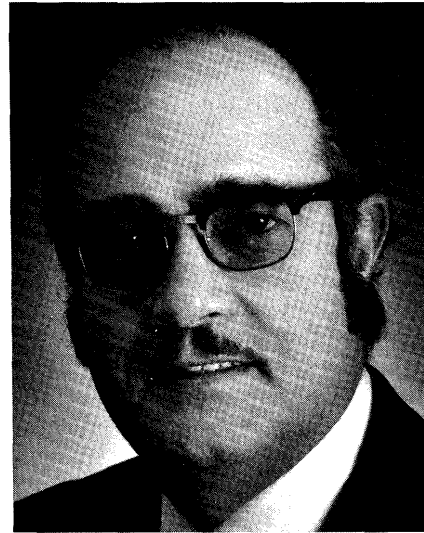
However these arrangements should develop, rather than happen immediately, since the Association has already in operation several other procedures.

- (4) The number of Vice-Presidents should be increased from 2 to 3 and these Vice-Presidents will be elected according to the same procedure as in the election of the President and again not necessarily be related to the venue of the Conference.
- (5) There should be a Credentials Committee to scrutinize people who enrol for Conferences and to see that they represent proper authorities in their areas.
- (6) The Ways and Means Committee could become a permanent Finance Committee which would not only be a Conference Committee but also a Standing Committee and at the same time, it was indicated that the President would have the right to name the Standing Committees and the Conference Committees related to Finance; but it was also suggested that the selection to this Standing Committee on Finance might be nominated and selected by the Board of Directors.

**No. 6-2. Session Title:** Meeting of Constitution and By-Laws Special Review Committee  
**Date of Meeting:** 11 Mar 75 Time: 1030-1200 hrs  
**Chairman:** Mr. D.E. Taylor  
Chairman  
National Harbors Board  
Canada

The meeting was called to consider areas of work of the Constitution and By-Laws Special Review Committee. After discussion the Committee agreed on the following points:

- (a) At the next IAPH Conference the procedure for electing members to the Executive Committee and the Conference Committees should be more adequately spelt out and communicated to the members before the commencement of the conference. Under this new procedure,



Mr. D. E. Taylor

members of the three regions could consider meeting in advance, possibly one day before the commencement of the conference to review among themselves the nominations from their own region for the Executive Committee and the various Conference Committees. This proposed procedures should enable a greater number of members to participate in the affairs of IAPH and also ensure that the members of these Committees would be more sensitive to and represent the views of the general membership.

To effect such a procedure the Constitution and By-Laws of IAPH may need to be further examined, and if necessary, amended.

The Committee however noted that the procedure adopted at the Singapore Conference for the selection of the Executive Committee and the Conference Committees was necessary in view of the transitional stage from an old constitution to a new constitution which IAPH is now presently undergoing, and completely supports the process used at this Conference.

(b) In addition to the General Report prepared by Secretary-General for the biennial IAPH Conference, the Committee suggested that a separate summary of the accounts and budget of IAPH should be prepared and circulated to the members. This summary of the financial performance and position of IAPH should condense the existing and complete details given in the General Report. It could also be prepared using methods which might be more easily reviewed by member more accustomed to standard financial statements of companies and institutions. The Committee viewed that such a summary would assist the general membership to have a better and clearer understanding of the financial position and the activities of IAPH, and thereby to feel competent to participate in the discussions at the Conference.

(c) The Committee took note of the anticipated financial self-sufficiency to be attained by IAPH within the next few years. It proceeded to consider the effects of such proposed self-sufficiency on the membership, and its relationship to the present by-laws and the budgetary process of IAPH. Regarding in particular the budgetary process, the Secretary-General Emeritus pointed out that the Directors of the Foundation would welcome the comments and advice of IAPH on the total Foundation budget, and the IAPH membership should not feel restrained

in examining the total financial picture. It was further suggested that the Board of Directors should first consider and define the activities of IAPH including its Committees for the coming two years, and that the Secretary-General should then review the 1975 and 1976 budgets, and propose plan of activities. Specific members of the Committee were then requested to circulate further details of their views to the other members, regarding the present budgetary process, and its relationship to the By-Laws, particularly indicating how these might be improved in anticipation of self-sufficiency.

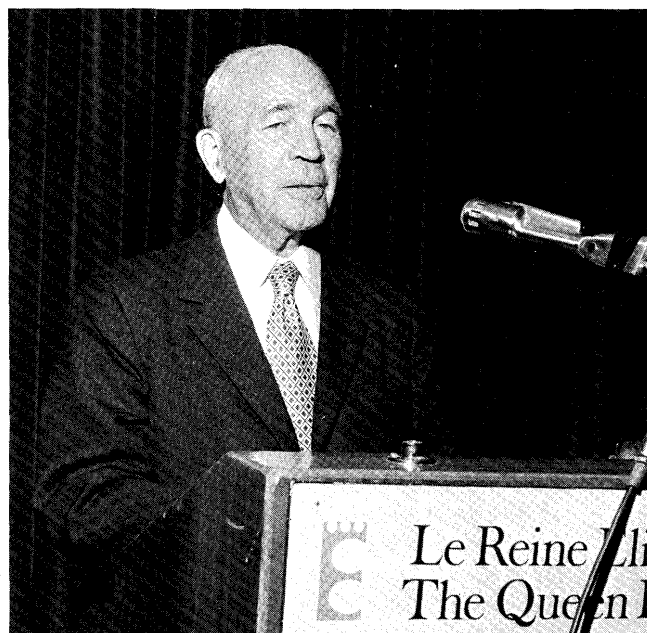
(d) To ensure that members are fully responsive to changes in the organisation of IAPH, the Committee was of the view that IAPH Secretariat should continue to maintain and improve the communication of IAPH matters to its members. It noted that presently much of its communication has been done through the IAPH publications "Ports and Harbors". While the Committee noted contents of "Ports and Harbors" had improved in this aspect during the past year, the Committee suggested that the administrative matters and news of IAPH should be highlighted in the publication, so as to keep such IAPH matters distinctive from the rest of the contents of the magazine and thereby the members would be encouraged to improve their awareness of the operations of IAPH.

The Chairman of the Committee noted that in closing, the recognition of this Special Committee of the particular function of the Finance Committee, and that the objective of this Special Committee should only be supportive to the work of the Finance Committee, in anticipating the effect of dues increases on the membership; and to utilize the flexibility in the present Constitution and By-Laws, to respond to the proper requests from the membership for a greater participation in the organisation and work of IAPH. To the same degree, the members of this Special Committee should try to act as the "eyes and ears of IAPH" in their particular regions, by regularly communicating with their various member ports, and thereby recognizing areas of the Constitution and By-Laws, which could be improved in the opinion of the general membership, to make IAPH more responsive and more useful to the member ports.

The value of the continuation of this Special Committee would be therefore to monitor the effects of the changes which have been introduced at this Conference, and be prepared to provide to the Executive Committee and the Board of Directors further suggestions prior to the 1977 Conference, depending on the success of IAPH, in its efforts toward financial self-sufficiency. The Chairman of the Committee agreed to forward to each member shortly, a summary of what the Committee might try to accomplish during the next two years, and how we might suggest to the President of IAPH, how we would intend to serve as a continuing communication link, related to this transitional period during which we are passing.

## IAPH 1st President, Mr. B.J. Roberts Passes Away

The sad news of the death of Mr. Bennett J. Roberts reached the Tokyo Head Office from Mr. Guy Beaudet, Vice-Chairman, National Harbours Board, St. Lawrence Region by telex on the morning of May 27th, Tuesday, 1975. It read "Regret to advise that Mr. B.J. Roberts, Honorary Member of IAPH, passed away last Saturday. Funerals to be held May 27th. Family contact Mr. and Mrs. Paul R. Waymann, 272 Logan Street, St. Lambert, Que. Canada. Kindly advise Mr. Toru Akiyama, a personal friend."



The late Mr. J.B. Roberts (at the 7th Montreal Conference, 1971)

Mr. Roberts was one of 127 delegates to participate in the 1st Conference of this Association convened at Hollywood-Roosevelt Hotel, Los Angeles, California, USA, November 7-10, 1955, representing the National Harbours Board, Canada, of which he was the Chairman. At this historical meeting of IAPH, Mr. Roberts was elected President and served as the first President until February 1958.

At the 7th Conference held in Montreal, Canada, June, 1971, Mr. Roberts presented himself to greet the delegates as the 1st President of IAPH. He delivered a special welcome address expressing his satisfaction at the remarkable growth of the Association and the privilege it attained as a world-wide ports organization. The accompanying photo was taken while he was making the speech at the Montreal Conference.

Mr. Howe Yoon Chong, President, and Dr. Hajime Sato, Secretary General, jointly have sent the message of condolence to the bereaved family as reproduced below, by telex on May 27th, 1975, through the office of Mr. Beaudet, Vice-Chairman, National Harbours Board, St. Lawrence, Canada.

Dear Mr. and Mrs. Waymann:

It was our great sorrow to learn of the sudden death of

(Continued to Next Page Bottom)

# IMCO Report

by Mr. A.J. Smith

IAPH members who attended the 9th Conference in Singapore will recall how actively Mr. A.J. Smith of British Ports Association, IAPH Liaison Officer with IMCO, rendered services to the Association through various sessions and meetings of the Conference.

As a matter of fact, Resolution No. 6, 8 & 9 that were submitted to the United Nations relevant organizations, were originated and drafted by Messrs. A. Pages and A.J. Smith.

With the same efficiency and promptness, Mr. Smith airmailed us the following report on meetings of Facilitation Committee and Legal Committee, IMCO, at which he attended after his return from Singapore. We have the pleasure of publishing it in this edition, which, we believe, will be of great use to IAPH members, especially in connection with Resolution No. 6 and No. 9 adopted at the 9th Conference. (K. Yokoyama)

## Facilitation Committee

The 9th Session of the Facilitation Committee of IMCO took place in London during the period 14–18 April, 1975.

It is evident that port authorities will have a general interest in aspects of the discussion of formalities connected with the arrival at, stay and departure from ports of ships, persons, cargo and other articles.

There will be particular interest however, in two of the matters discussed by the Committee.

1. Measures to involve developing countries more directly in IMCO Facilitation activities

The Committee felt that stimulation of interest in IMCO facilitation activities would be achieved in port if such activities were initiated in the regions. A number of ways of doing this were examined as were also the related financial implications. Activities of other bodies in this field, such as UNCTAD and regional economic commissions, were also

---

Mr. B.J. Roberts, the 1st President of our Association.

On behalf of the members of IAPH and the Secretariat, we send our deepest sympathy and condolence to you for the loss of the great man of warm personality, without whose endeavors and achievements in the early stage, the glory of the present day International Association of Ports and Harbors could not have been hoped for.

Mr. Roberts served for this Association as its 1st President for the period November 1955–February 1958, laying out the basic foundation for the Association. He was elected an Honorary Member of this Association in 1967 for his meritorious services to the growth of the Association.

Mr. Toru Akiyama, Secretary General Emeritus, who personally enjoyed Mr. Roberts' friendship joins us in expressing his sincerest sympathy with you.

Howe Yoon Chong, President, IAPH  
Hajime Sato, Secretary General, IAPH



Mr. A. J. Smith

noted and the need to maintain close cooperation with these understood.

The Committee unanimously concluded its discussion of the matter by recommending the Council:

- (a) that its sessions continue to be held on an annual basis;
- (b) that its activities be publicised, from time to time, through the issue of material such as the Facilitation Brochure;
- (c) that its activities be featured in a proposed IMCO Bulletin;
- (d) that IMCO's Regional Advisors play a significant role in the dissemination of more general information on facilitation activities and in furthering action to implement facilitation measures in the developing countries of their regions.
- (e) that preparations be made over the longterm to hold facilitation seminars in the various regions.

## 2. Maritime Ports Operation Systems

The Government of Canada submitted a proposal to the Committee for the development of a manual on maritime ports operation systems as a guideline for administrations wishing to establish a standardised procedure of port operations in areas capable of benefitting from rationalisation. These might include:

- (a) Ship relationships with Port Authorities
  - Radio pre-clearances and notifications of ship arrival; Port and berthing controls; vessel movements; navigation aids
  - Emergency and pollution procedures
  - Certificates, surveys and inspections; ship, equipment and cargo
  - Damage to vessel or port installations
  - Discharge of wastes and pollutants
  - Dangerous cargoes procedures, ship-shore interface
  - Safety of shore workers
  - Accident or marine casualty reports and investigations
- (b) Ship-agent relationship with Port Authorities
  - Declarations, affidavits and bonds
  - Crew and passengers ashore, illness, accident and arrest
  - Shore workers aboard, contracts and guarantees



- Terminal facilities vessel, passengers, cargo
- Procedures for cargo handling and the provision of equipment
- Port security procedures
- Lighterage and service vessels
- (c) Administrative controls affection ships
- Legislative jurisdiction
- By-laws, Orders, Regulations
- Operational procedures

Emphasis was made in discussion of the need to concentrate studies on a limited range of basic elements susceptible to international agreement and to the necessity of establishing an unambiguous demarcation between aspects of a practical, pragmatic nature on the one hand and of a legal character on the other; these latter should not be included.

The Canadian delegation undertook to prepare a more detailed proposal for consideration at the 10th Session of the Committee.

### Legal Committee

Two topics of specific interest to port authorities were discussed at the meeting of the Legal Committee held in London during the period 7–11 April, 1975.

#### 1. A. USSR Proposal for a Convention on the Regime of Vessels in Foreign Ports

The USSR delegation considered that the persistent efforts which had been made internationally over a long period to codify international law and unify practice relating to the regime of vessels in foreign ports appeared to suggest that measure of agreement could be realised within the international community for inter-governmental regulation in this field. The USSR has therefore issued its proposals for a Convention with full regard to earlier drafts, proposals, belated agreements and the like. These proposals were described in the February edition of Ports and Harbours.

Discussions centred on the degree of priority to be given to work on the proposals, the Committee having agreed that the subject was both significant and appropriate for consideration by IMCO. At a later stage therefore, possibly in 1976, the Committee will determine if and how the matter should be progressed.

The IMCO Secretariat will, if Council agrees, invite Governments to submit written comments on the USSR proposals.

#### 2. Proposals for a Convention on Wreck Removal and Related Issues

IAPH members will recall earlier reports on this important matter culminating in that of the session of the Legal Committee held from 11th to 15th November 1974.

It was evident then and continues to be so, that the major problems posed by wrecks to the safety of navigation occur in areas relatively near coastlines.

The Committee is therefore aware that a convention would have to have a wide geographical scope and cannot be limited to the high seas only. This very fact however poses problems which inhibit the early preparation of a convention particularly when it was emphasised by some delegations that the removal of wrecks located within the jurisdiction of individual states is satisfactorily regulated by national law in many cases. This view is of course, debatable.

In the event, the Committee agreed that it would not be opportune to proceed immediately with the preparation of a convention dealing with wreck removal and related issues. The matter would be borne in mind however in the light of any related developments which may occur and in particular, any relevant results which might accrue from the current United Nations Law of the Sea Conference. Additionally, the Committee hopes that it will be possible for the IMCO Secretariat to undertake a detailed analysis of existing national laws on the subject with a view to making results of the study available to Governments in advance of any future discussions.

Finally, the Committee examined and agreed its current and future work programme. Its work on the review of the 1957. Convention on the Limitation of the Liability of the Owners of Sea-Going Ships will, it is hoped, be concluded in 1975. Both the June and November/December sessions of the Committee will therefore be devoted to this matter leading to a diplomatic conference in June/July 1976.

The first session of the Committee in 1976 will deal with the question of civil liability for pollution damage from substances other than oil as defined in the 1969 Civil Liability Convention.

## Singapore Resolutions circulated in Japan

Mr. Gengo Tsuboi, IAPH Director for Japan, Vice-President, The Japanese Shipowners' Association, has recently informed the Head Office that along with the provisions contained in the resolutions adopted at Singapore he has circulated them, after translating into the Japanese language, to some 20 governmental agencies and public organizations related to transport, shipping and navigation as well as the Ministry of Foreign Affairs. (RIN)

## PIANC responds to IAPH Resolutions

Eng. H. Havandervelden, Secretary-General, PIANC, has given a letter to the Head Office and informed us that IAPH Resolutions No. 6, 7 and 8 will be published in PIANC Bulletin No. 21 for the interest of their members. (RIN)

## ICHCA met in Florence

ICHCA (International Cargo Handling Coordination Association) had its 12th biennial Conference in Florence, Italy, from 12th to 15th May this year.

Dr. Hajime Sato, Secretary-General, has sent an IAPH's good-will message to the Conference, which is as follows:

"On the occasion of the 12th Conference of International Cargo Handling Coordination Association, Mr. Howe Yoon Chong, President of this Association, conveys his warmest and fraternal greetings to the Conference now sitting in a beautiful city, Florence. On behalf of all members of the International Association of Ports and Harbors, many of whom are also members of ICHCA, we wish your Conference all success and look forward to continued fruitful cooperation between the two organizations in the future." (RIN)

## IALA recommendation for a definition on day-time signal lights

Mr. J. Prunieras, Secretary-General, International Association of Lighthouse Authorities, has informed us of the availability of copy of Recommendation for a definition of the nominal daytime range of maritime signal lights intended for the guidance of shipping by day in his recent letter to the Head Office.

He informed also that IALA has already published a 'Recommendation for the notation of luminous intensity and range of lights' in November 1966, but since there are now maritime signal lights especially intended for use by day, it was felt necessary to indicate navigators the performance which may be expected from such new lights.

He advised us that IAPH members interested in this particular matter can obtain copy of this recommendation by writing to IALA General Secretariat in Paris, the address is: 43, av. du President-Wilson, 75116 Paris. (RIN)

## PIANC's 24th Congress in Leningrad 1977

Prof. G. Wiliems, the President of PIANC (Permanent International Navigation Congresses), has informed us in his recent letter of April 23, 1975 to the Head Office that PIANC's 24th Congress will be held in Leningrad from 6 to 14 September, 1977.

He has also advised us that IAPH will be invited to submit papers by May 30, 1975 on any of subjects included in the programme, which is as follows;

### SECTION I: Inland Navigation

1. Method of increasing the capacity and safety of waterways:

- by improving channels, locks and terminals;
- by a judicious choice of the means of transport and their equipment;
- by control and traffic management systems;
- by various ice control measures.

2. The effects of the progress made in the transshipment, loading and unloading of general cargo, bulk cargo, by containers and by ship-borne barges (including dangerous cargo), on the design and equipment of waterways and inland ports.

3. (Common to Section I and II) Behaviour of waterway vessels and ocean going ships during transit, overtaking and passing in canals and channels of limited width and depth, taking into account the increase in their size and speed.

The extent of the damaging effect on banks and bottom.

The means of prevention and correction.

4. Improvement and protection of the waterways and the environment taken together.

5. Water supply for waterways, particularly for canals with summit reaches, taking into account the various uses of water.

Economic and technical aspects.

### SECTION II: Ocean Navigation

1. Improvement in the design and building of major port structures.

2. Improvement and maintenance of navigation channels and control of the regime in estuaries in relation to the energy due to tidal movement, waves and swell at the entrance.

3. The effects of new systems and devices for cargo

handling on the design of ports and offshore terminals with special reference to the existing inland transport network.

4. The design of fenders for very large cargo carriers, fast container ships and other large ships taking into account the degree or elasticity of fenders, quay walls, etc.

Experimental work and data collection

5. (Common to Sections I and II) Maintenance and improvement of depths including the application of developments in dredging plant and new methods of excavation and disposal of material.

As to an IAPH participation in the Congress, it is now being deliberated by Messrs Robert Boeuf, IAPH Director for France (Port of Dunkerque), Paul Bastard, Chairman, IAPH Special Committee on Large Ships (Director of Maritime Ports and Waterways, Ministry of Equipment and Ex-Director-General, Port of Le Havre) and Mr. Andre Pages, Chairman, IAPH Special Committee on Legal Protection of Navigable Waterways (Ingenieur General, Bureau of Ports and Harbours, Ministry of Equipment).

Any member who is interested in presenting paper is requested to write to those gentlemen above mentioned or to this Head Office. (RIN)

## Membership Notes

### Regular Members:

Oshawa Harbour Commission  
P.O. Box 492, Oshawa, Canada  
Office Phone: 416-576-0400  
(Mr. W.A. Gillberry, Port Manager)

Ente Autonomo del Porto di Trieste  
34100 Trieste (Italy)-Punto Franco Vecchio  
P.O. Box 569  
Office Phone: 37041  
Telex: 46 257 DG EAPT  
(Dr. Ing. Lorenzo Colautti, General Director)

## IMCO Book

The printed version of the REGULATIONS ON SUBDIVISION AND STABILITY OF PASSENGER SHIPS (as an equivalent to Part B of Chapter II of the International Convention for the Safety of Life at Sea, 1960) is now available in English, Sales No. 74.09.E, price £1.55 (including packing and postage).

One copy is being issued free of charge in either English or French (IMCO Member States will receive two free copies). The publication is on sale from IMCO and any additional copies required may be ordered by completing the form overleaf.

All orders must be accompanied by a remittance, in sterling, to cover the cost of publications (including packing and postage).

Order to: IMCO Secretariat, Publications Section,  
101-104 Piccadilly, London W1V OAE

## Japanese Port Circle Welcomes Port Seminar Participants

On May 27th, 1975, a reception welcoming 15 participants in the Seminar in Ports and Harbours was held in Tokyo by the six port related organizations, the Japan Port and Harbour Association, The Japan Cargo Handling Mechanization Association, The Japan Dredger Technical Society, The Japan Port Consultants Association, Japan Reclamation and Dredging Engineering Association and the World Trade Center of Japan, Inc.

15th Seminar on Port and Harbour Engineering organized by the Japan International Cooperation Agency (Ex-Overseas Technical Cooperation Agency) has been held in Tokyo inviting 15 participants from 13 nations. This 2-months Seminar has been conducted since 1961 with the close cooperation with the Bureau of Ports and Harbours, Ministry of Transport and other port-related private enterprises, and JICA.

The 2 months Seminar is sponsored by the Japan International Cooperation Agency (Ex-Overseas Technical Cooperation Agency) and there, in addition to this Seminar, is a 4 months Training Course on Ports and Harbours Engineering.

The Seminar and the Training Course are being conducted by the Agency since 1961 as a government basis technical cooperation project as a link of the Colombo Plan. The Agency now conducts some 150 seminar and courses in the various fields.

To this 15th Port Seminar, 15 persons from 13 countries have been invited, invitees are from Costa Rica, Egypt, Ethiopia, Guatemala, India, Iraq, Peru, Papua New Guinea, Chile, Korea, Singapore, Sri Lanka and Thailand.

Mr. Yoshio Takeuchi, Director-General, Ports and Harbours Bureau of the Ministry of Transport, Japan, a guest speaker at the reception, disclosed that Seminars and Training Courses are being operated with the close cooperation with the JICA and the Bureau of Ports and Harbours and some 400 persons have participated in and graduated from the seminars and training courses.

The Late Mr. Gaku Matsumoto, the First Secretary-General of this Association was the initiator of establishing such port seminars and training courses within the Agency.

IAPH, along with its Executive Committee's decision made at its New Orleans in 1968, has been extending its cooperation by sending "Ports and Harbors" to each participants for three years by surface mail, free of charge as did to other seminars or training courses which were conducted in an international basis. (RIN)

### Visitors

- Mr. Kim J. Loroch, an International Trade Consultant, now sub-contracted with EASAMS Limited, Surrey, England, has visited the Head Office and was met by Mr. Yokoyama, Deputy Secretary General and Mr. Hayashi, Editor, on April 24, 1975, during his recent trip to the Far East. Mr. Loroch has been associated with our Association since he worked for the Port Authority of NY & NJ some ten years ago and then worked for FAO as a Director of Food Transport, Rome, Italy. He has been contributing articles from time to time to the Association's journal.

- Mr. Chr. Overhoff, President, Gateway Consultants BV and Chairman, Air Cargo Section of ICHCA, Holland, has visited the office of Mr. Toru Akiyama, Secretary General

Emeritus, on April 23, 1975 during his recent trip to Japan. He has also visited the ICHCA Japan Office and was met by Dr. Shizuo Kuroda, President, Japan Cargo Handling Mechanization Association and President, Japan Port and Harbour Association.

- Mr. C.R. Campbell and Mr. Walter Vestal, Commissioners of the Port of San Diego, visited the Head Office on the morning of May 7, 1975, in company with Mr. G. Yanagihara, its Representative in Japan, and were welcomed by Messrs. K. Yokoyama and M. Kinouchi, Deputy Secretaries-General and other staffs.

In the evening of the same day, Mr. and Mrs. K. Yokoyama were invited to a reception at the Palace Hotel sponsored by the Port of San Diego Trade Mission. They were introduced to the following ladies and gentlemen.

Mr. and Mrs. Frank L. Hope, Jr., Chairman, the Board of Port Commissioner

Mr. and Mrs. Don L. Nay, Port Director

The following snap-shot taken by Mr. Yokoyama shows the warm atmosphere of the get-together. (K.Y.)



From right to left: Mr. Walter, Mr. Frank L. Hope, Mr. C.R. Campbell, Mrs. Yokoyama, Mr. Russ Johnson (APL), Mr. Yokoyama (IAPH) and Mrs. R. Johnson.

- Mrs. L. Hill, secretary to Papua New Guinea Harbours Board, visited the Head Office on May 14th, 1975 during her recent trip to Japan asking for some referential information on port development and improvement and was met by Mr. Kinouchi, Deputy Secretary-General. Since there is no representation in IAPH from Papua New Guinea, Mr. Kinouchi has emphatically stressed the importance of their participation in this Association. (RIN)

- On Thursday, May 22, 1975 morning, Mr. René Génin, Trade Development Director of Port of Le Havre Authority, visited the IAPH Head Office accompanied by Mr. Jean A. Monnin, Japan Far East Representative. At noon time, Deputy Secretaries General Mr. K. Yokoyama and Mr. M. Kinouchi were invited to lunch at Hotel Okura, Orchid Room where Mr. Alexandre P. Laget, Transports Councilor of the French Embassy in Tokyo, joined the party.

According to Mr. Génin, Mr. P. Bastard was promoted end of March 1975 (from the General Managership of Port of Le Havre) to the post of Director of the Sea Ports and Waterways in the Ministry of Equipment in Paris. Mr. Génin agreed to send us news on the opening of the Antifer Port for "Ports and Harbors".

PACECO MACH Systems give you

# **50% MORE PRODUCTION NOW MODULAR UNITS TO ADD AS YOU GROW AUTOMATION WHEN YOU NEED IT**



Take a step into the future with basic MACH (Modular Automated Container Handling) Portainers® and Transtainers®. You'll get greater throughput, because these cranes are faster—they have hi-speed power packages and operate with less dependency upon the skill level of the operator. Low cost automation modules can be added step-

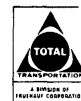
by-step as your volume increases to maximize the return on your investment and minimize the obsolescence factor.

Automation providing the lowest cost per container handled will be available when you need it with Paceco's MACH system. Don't buy cranes that are already obsolete. Plan on MACH.



**PACECO**

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

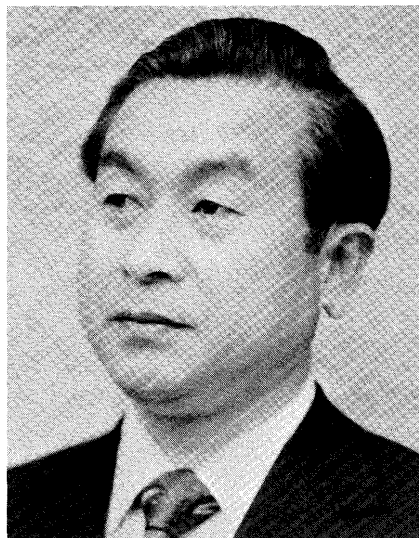


Contact PACECO or the office nearest you. Headquarters Office—PACECO, Dept. 24-G, Alameda, CA 94501 • (415) 522-6100, Telex 335-399. New York Representative—ROBERT MOORE CORP., 350 Main St., Port Washington, N.Y. 11050 • PACECO European Sales Office—PACECO INTERNATIONAL LIMITED, London. PACECO Licensees: Australia—VICKERS HOSKINS PTY. LIMITED, Bassendean; Canada—DOMINION BRIDGE COMPANY LIMITED, Montreal; France—ATELIERS ET CHANTIERS DE BRETAGNE, Paris. India—BRAITHWAITE & CO., LIMITED, Calcutta. Italy—REGGIANE O.M.I. S.p.A., Reggio Emilia. Japan—MITSUI SHIPBUILDING & ENGINEERING CO., LTD., Tokyo. South Africa—DORMAN LONG VANDERBIJL CORPORATION LIMITED, Johannesburg. Spain—FRUEHAUF S.A., Madrid. United Kingdom—VICKERS ENGINEERING GROUP LIMITED, South Marston, Swindon, Wiltshire.

# Anti-Marine-Pollution Sheet Pile System Is Tested Successfully

**Great speed and freedom from seawater-pollution have led to quick acceptance**

**by Tomoharu Ishiwata  
Dr. of Eng., and  
Mr. Masaki Konno  
Nippon Steel Corporation**



**Dr. Tomoharu Ishiwata**

## **1. Proposal on Prefabrication of Sheet Pile Cells for Quick Installation**

### **1.1. Conception of the proposed engineering method**

In recent years, marine pollution due to refuse, oil, sludge, toxic heavy metals, etc., being discharged into the sea, has reached such proportion that destruction of aquatic resources and contamination of marine products are already hard realities. Under such circumstances prevention of marine pollution is a hotly debated issue.

In order to cope with this ever-worsening situation, the Marine Pollution Prevention Law was put into effect on June 25, 1972 in Japan. According to the May, 1972, issue of "Port and Harbor" published by the Japan Port and Harbor Association, this law stipulates that measures must be devised against pollution of seawater, prohibits as a general rule discharge of wastes into seawater and specifies the standards applicable to the choice of seawater areas within which certain wastes may be discharged where inevitable. Forming a part of such measures against marine pollution is a new regulation which puts certain restraints on the method of dredging pollutants in reclamation of land, on the discharge of dredged pollutants into seawater, and on their treatment.

The law seems to directly affect the conventional method of engineering adopted widely in the construction of structures for ports and harbors. Often known as the "displacement method", the conventional engineering system involves dredging and disposal of sand and other seabed deposits and their displacement by better sand and earth.

This method inevitably involves treatment of dredged pollutants in some way or other, and therefore is subject to the Marine Pollution Prevention Law. Moreover, if the dredged pollutants contain harmful substances, the methods adopted in their treatment are subject to strict control.

It is then quite natural for us as engineers in this field to wonder if there is a viable alternative which, unlike the "displacement method", requires neither removal nor replacement of seabed deposits and yet gives sufficient strength to the port and harbor structures.

The proposal on prefabrication of sheet pile cells for quick installation described below is an alternative we have devised in our effort come up to the expectations placed on us.

A sheet pile cell wharf, when used as a quay-wall or as a

wharf built on a sea bottom foundation of diluvium covered by a deep layer of soft alluvium, has a significant advantage: it can be constructed by simply installing sheet piles in the foundation soil and filling the cell with sand, eliminating the need for any special engineering facilities. The conventional sheet pile cellular system has a serious drawback, however, in that installation of cells at the site of construction takes a long period of time—i.e., until the cells are completely filled up with sand they are structurally so weak that they often suffer from accidents.

We propose to make the best use of the merits of sheet pile cells by improving the rigidity of the sheet pile cells and by shortening the construction period through application of special engineering facilities to some areas of construction works. Free from all the troublesome engineering procedures that are in conflict with the provisions of the Marine Pollution Prevention Law, such as dredging and discharging of the seabed clay and its removal and replacement, the improved sheet pile cell system, should it be actually adopted, will prove very efficient in the construction of structures for ports and harbors.

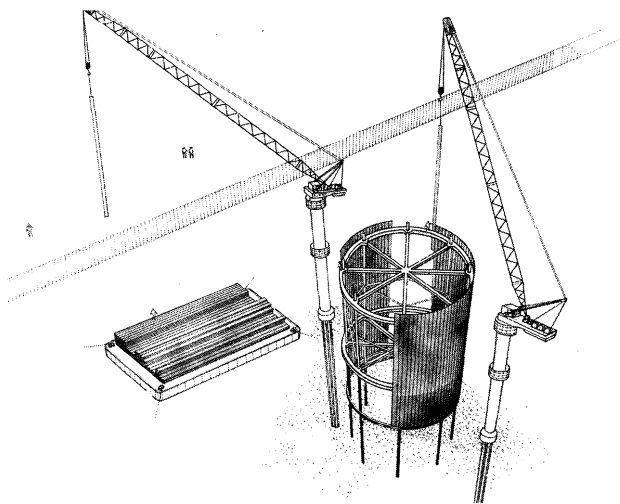
### **1.2. Evaluation of cell structures**

Cell structures are generally classified into two types: steel cellular bulkheads and sheet pile cells. The former can be further classified into two: flat steel cellular bulkheads and steel cellular bulkheads made of corrugated steel plates.

Though unstable for only a short while during its construction, the steel cellular bulkhead cannot be driven down into a solid foundation but is simply placed on the seabed. In order to support a steel cellular bulkhead, therefore, the seabed soil must be solid enough to withstand the load of the bulkhead shell.

The sheet pile cell, on the other hand, is made up of several flat-web steel sheet piles which are driven in piece by piece fairly easily to the desired depth of the seabed unaffected by the soil condition. However, experience has taught us that sheet pile cells, when constructed under the conventional method, are of very weak structure during the





**Figure 1. Assembly site (tower crane type)**

construction period because it takes rather a long time to position and drive them into the foundation at the site of construction.

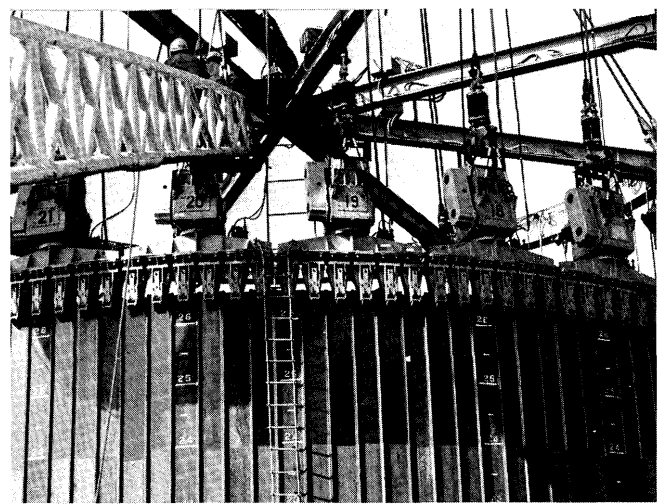
### 1.3. Significance of prefabrication of sheet pile cells

The steel cellular bulkhead is unstable for only a short while during its construction, but before the structure is actually erected, the foundation must be put into good order by removing soft and weak earth and replacing it with a layer of solid sand blanket.

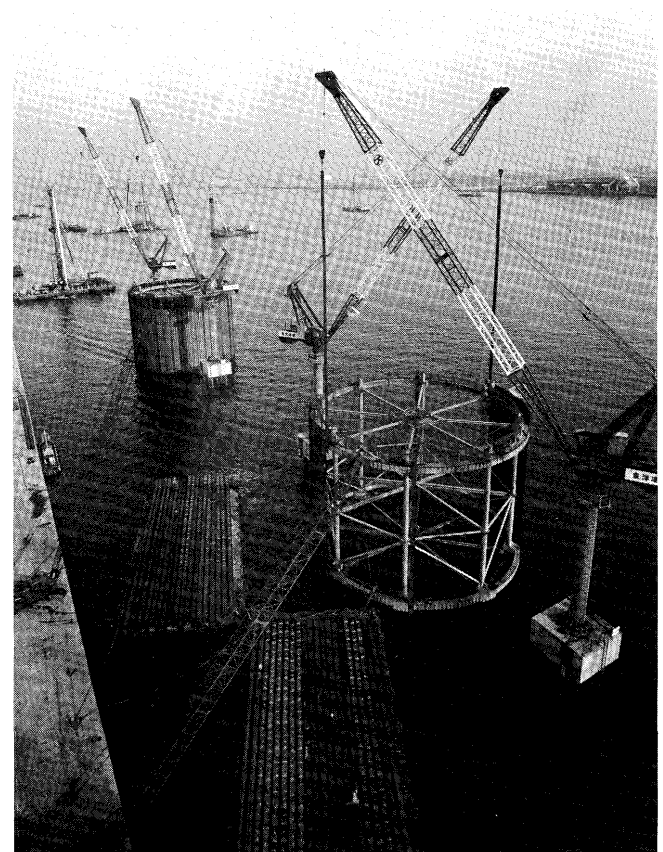
In other words, the steel cellular bulkhead method, despite its acknowledged advantages, still involves basic problems such as discharging and treatment of dredged soils and is not able to meet the regulation standards set forth in the Marine Pollution Prevention Law. On the contrary, a sheet pile cell can be driven down to the solid foundation even if the seabed surface is not solid. Under the sheet pile cell method it is possible to drive steel sheet piles down to the diluvium, provided that it does not lie too far beneath the seabed. All that is needed for preparation of the foundation is to improve, if necessary, the clay layer after it has been enclosed and shut off from the outside by the bottom part of the cell. In other words, the sheet pile cell method does not involve prior removal of soft and weak soil.

It is apparent from these observations that the steel cellular bulkheads have an advantage exactly where the sheet pile cells have a disadvantage, and vice versa, even though both have the same designation "cell structure". These facts prompt the conjecture that an engineering method embodying only the advantages of the two methods will be the ideal one.

If we assemble sheet pile cell in advance at a place somewhere other than the site of construction as in the case of steel cellular bulkheads—let us call such assembly work "prefabrication of sheet pile cells"—then we may at least be able to shorten the time required for erection if not eliminate the entire period of instability during construction. If, in addition, we succeed in shortening the time required for driving operation by improving the cell driving procedure, then we may be able to establish a new sheet pile cell construction method which embodies in itself the advantages of both steel cellular bulkhead method and conventional sheet pile cell method.



**Photo 1. Vibro-hammers with multiple chucks attached to the cell**

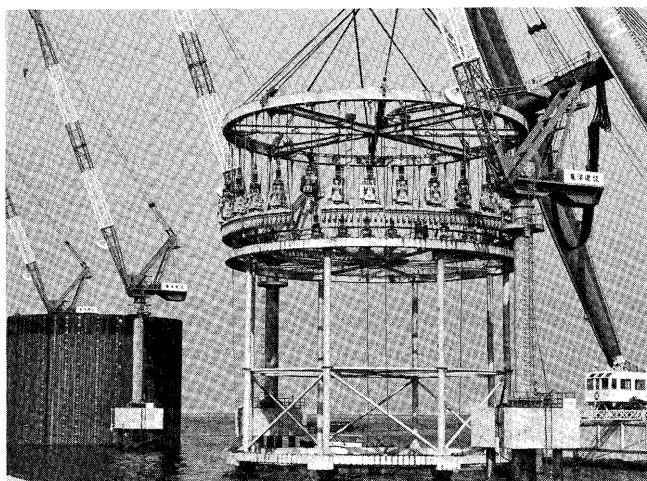


**Photo 2. Prefabrication of sheet pile cells at assembly site**

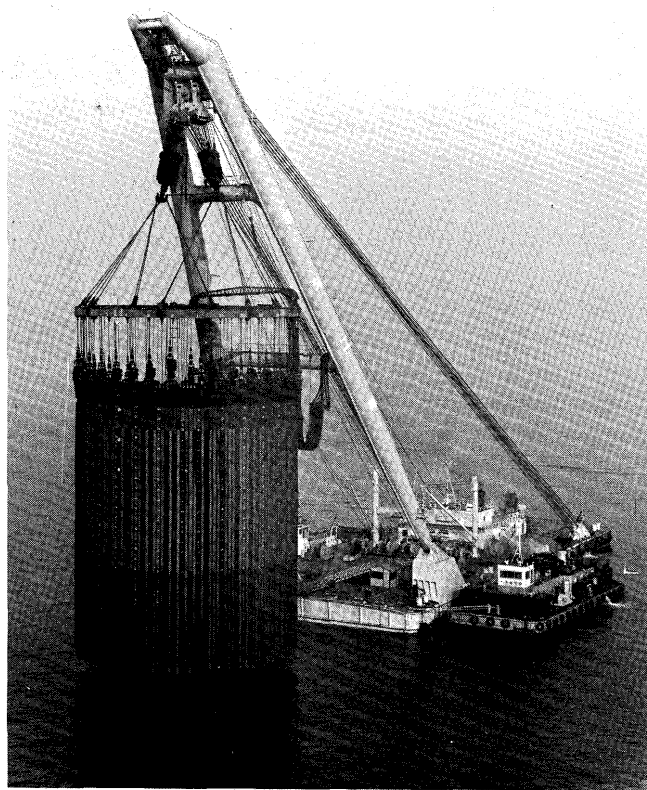
### 1.4. Proposal on quick installation of prefabricated sheet pile cells

From the viewpoint expressed above, the authors propose herein a method of prefabricating sheet pile cells and a method of quickly installing the cells.

The operational procedures under the proposed method are: (1) prefabrication of sheet pile cells on land, or on an assembly deck set up in the sea, or on a barge built especially for such works; (2) transportation of such prefabricated cells to the site of installation and placement at the predetermined spot by means of floating crane or vessels especially designed for the purpose; and (3) quick



**Photo 3. Prefabricated sheet pile cell upon completion of assembly work**



**Photo 4. Prefabricated cell being lifted**

installation of each cell with the use of many pile drivers.

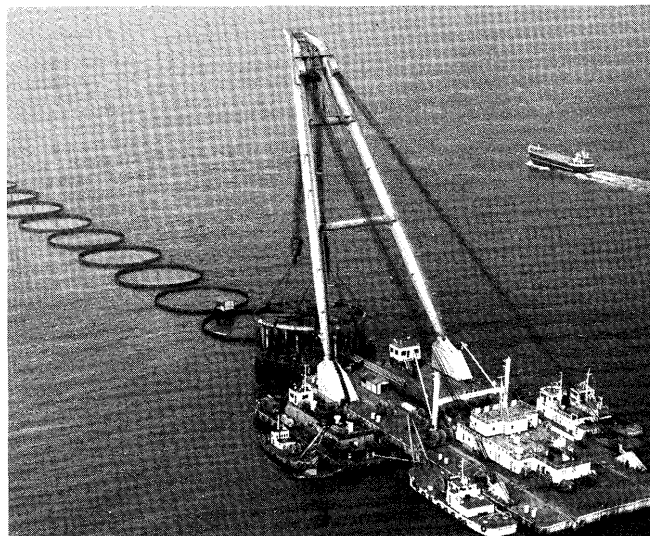
Pile drivers are fixed to a cell immediately after it has been assembled, and are set in motion all at once as soon as the cell is positioned at the site of construction.

The vibro-type pile driver, is best suited for driving these piles.

## **2. Successful tests led to quick acceptance**

### **2.1. Trial construction at Naruo Port**

Theoretically, this method whereby prefabricated sheet-pile "cells" are carried to the construction site and driven in place quickly by means of a group of vibro-hammers operating simultaneously is doubtless a revolutionary conception. Obviously, it offers improved speed and environmental advantages. Whatever the advantages, however,



**Photo 5. Installation of prefabricated cells**

practicability of a process must be borne out by tests.

Responding to the proposition of Nippon Steel Corporation, therefore, Toyo Construction Co., Ltd. joined in a trial construction using several cells at the Port of Naruo from November to December, 1972.

The test was a resounding success. It verified that celldriving time was about three hours, making it possible to complete a cell in one day, including sand-filling.

The test cells used were 16 meters in diameter and 22 meters in length. The driving depth was 12.5 meters.

Twenty-one 40 Kw vibro-hammers were employed in the test.

### **2.2. Quick acceptance realized at Sakai Port, Osaka**

With the success of the test at Naruo, which ascertained great speed and freedom from seawater-pollution of this method, more eyes began to turn to it. The first instance of practical application was the contract awarded from the Prefecture of Osaka for the reclamation and revetment works now in progress in Zone 7-3 of Sakai.

By virtue of this method, which has since been improved, more progress is being made on the job site than initially planned. One of these improvements is the development of a vibro-hammer with multiple chucks capable of grabbing six piles simultaneously. (See Photo 1.)

Here at Sakai, each cell measures 23.4 meters in diameter and 26.5 meters in length and is driven to a depth of about 18 meters. Each cell consists of 184 piles. Thirty-one 60 Kw vibro-hammers are working on the job.

Photos 2 through 5 show the construction work in progress. A standard time study is shown in Table 1. As can be seen, cell-driving was completed in about 1.5 hours, smashing all previous records and demonstrating the practicability of putting a cell in place in one day, including filling works.

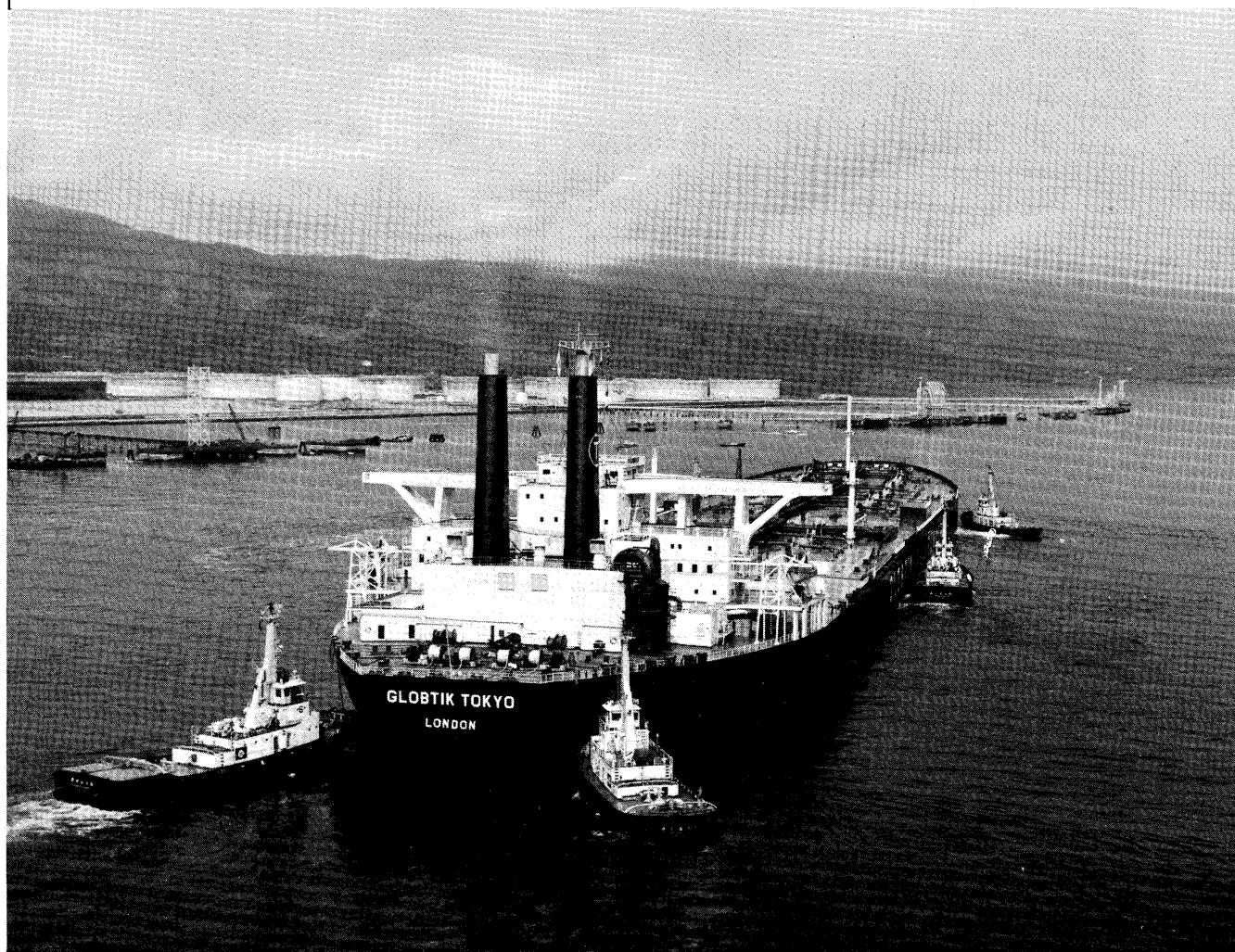
At the project site, cell-driving is being performed only on fine days. Data showed that when favored with fine weather, it was possible to complete three cells in a week.

Cells are put together using two guide rings, which stand repeated use, at a marine fabrication base set up in calm waters nearby.

## **3. Conclusion**

Safety, speed and environmental potentials of this  
(Continued on Page 31)

# Port of *Kure*

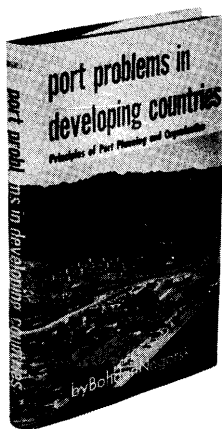


*"GLOBTIK TOKYO" at Nippon Oil Staging Terminal*

## CONSERVE OIL

No one will disagree that oil—lifeblood of the world's economy — is a limited natural resource. Coal, water, natural gas and nuclear fission are the better known alternative sources of power but individually or collectively they are no substitute for oil which in addition to its thermal qualities is a basic raw material. Both the producing and consuming nations owe a sacred duty to posterity to conserve this precious, irreplaceable resource in a sensible, safe and economical manner. Time is not on our side.

**TOKYO TANKER CO., LTD.**



160 x 233 mm hard-cover  
book, 293 pages covering  
every aspect of principles  
of port planning and oper-  
ation.

IAPH Publication—

# port problems in developing countries

by Bohdan Nagorski

US\$12.00 (including surface mailing charge)

Order to:

**The International Association of Ports and Harbors**

Kotohira Kaikan Bldg., 1, Kotohira-cho, Minato-ku, Tokyo 105, Japan

*"I am sure, the book will be readily accepted a "bible" by the port industry throughout the world".*

*—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*

## ANNOUNCING !!

**Bohdan Nagorski's "Port Problems in Developing Countries"**  
**is also available from the following distribution centers.**

- |            |  |
|------------|--|
| New York : | Marine Terminals<br>The Port Authority of New York and New Jersey<br>One World Trade Center<br>New York, N.Y. 10048, U.S.A.<br>Phone: (212) 466-7000 |
| Houston :  | Office of the Executive Director<br>Port of Houston<br>P.O. Box 2562, Houston<br>Texas 77001, U.S.A.<br>Phone: (713) 225-0671                        |
| Oakland :  | Office of the Executive Director<br>Port of Oakland<br>66 Jack London Square, Oakland<br>California 94607, U.S.A.<br>Phone: (415) 444-3188           |
| London :   | Office of the General Manager<br>The Port of London Authority<br>World Trade Centre<br>London, E. 1, England<br>Phone: 01-476 6900                   |
| Le Havre : | Office of the General Manager<br>Port Autonome du Havre<br>Terre-plein de la Barre, 76600 Le Havre<br>France<br>Phone: (35) 42.51.01, (35) 42.51.40  |

# Orbiter Probe

## ICHCA President reelected

London (ICHCA Press Information):—At the 12th Biennial General Assembly and Conference of the International Cargo Handling Co-ordination Association (ICHCA) in Florence, Mr. Stanley Turner, Ports and Shipping Adviser, PA Management Consultants Limited, was re-elected as International President for a further term of two years.

Mr. R.P. Holubowicz, Chairman and Managing Director, Marine Ventures Limited, was re-elected Chairman of the Council and Executive Board.

ICHCA has accepted an invitation to hold its 1977 Biennial General Assembly and Conference in Australia.

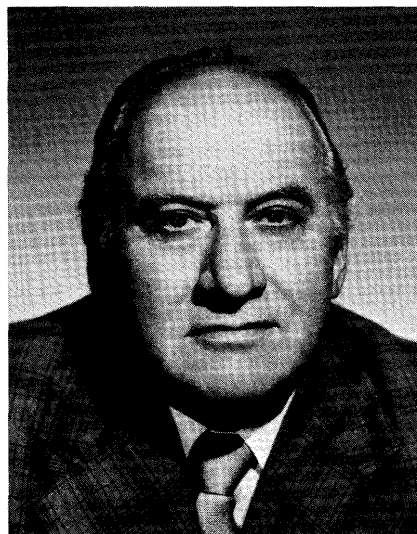
## Guy Beaudet named for National Transportation Man of the Year

Ottawa, Ontario, May 9 (Ports Canada Press Release, National Harbours Board):—Because of his present national leadership in developing port policies in Canada, as well as his 25-year devotion and effort on behalf of the Port of Montreal, Mr. Guy Beaudet of Montreal was unanimously selected as the Province of Quebec nominee for National Transportation Man of the Year 1975.

In making this announcement National Transportation Week chairman for Quebec, Mr. G.G. Bourgeois of CP Rail, stated that Mr. Guy Beaudet was chosen by a provincial selection committee composed of representatives of some of ten leading business and government organizations comprised of the City of Montreal, the Traffic Club of Montreal Inc., Grunt Club, Canadian Exporters Association, Canadian Railway Club, Montreal Women's Traffic Club, Canadian Industrial Traffic League and Trucking Association of Quebec.

National Transportation Week 1975 will be observed June 8 to June 14. Under the theme "Keep Canada Moving", each day of Transportation Week will be singled out for special emphasis on some aspect of the industry. Opening with a salute to Canada's Coast Guard on "Sunday, June 8, Railway Day will be observed on June 9, Marine Day on June 11, Highway Transportation Day on June 12, Careers Day on June 13 and Aviation Day on June 14.

On Tuesday, June 10, designated All Modes Day, there will be a National Dinner in Winnipeg when the guest speaker will be Transport Minister Jean Marchand who is honorary chairman of National Transportation Week. All Modes Day luncheon in Montreal will be held at the Windsor Hotel and tickets may be obtained from member associations.



Mr. Guy Beaudet

(Continued from Page 28)

## Anti-Marine-Pollution—

method make it uniquely desirable.

One other important merit of this method is economy. As some estimates have it, this method will have a decided edge over the conventional methods in cases where the total length of execution works extends beyond 500 or 600 meters.

Prefabrication of sheet-pile cells is no novel idea. In fact, quite a few similar techniques have been reported, the latest example being an interesting paper carried in page 20 of the April, 1974 issue (Vol. 19, No. 4) of this journal.

What sets this method apart from other methods, however, is the fact that, with technological ingenuity, the simultaneous operation of a plurality of vibro-hammers is made possible to achieve the speed-up of execution.

This method holds great promise for marine construction applications.

In concluding our report, we would like to express our heartfelt gratitude to Dr. Shizuo Kuroda, President of Japan Port and Harbor Association, and many others for their cooperation and encouragement.

Table 1. Actual installation of prefabricated steel sheet pile cells

Contents of work	Calendar hour	Length of time required
Transportation	8:00~ 9:00	1:00
Positioning	9:00~ 9:30	0:30
Driving operation	9:30~10:50	1:20
Sand filling	12:00~18:00	6:00



## Harbour boosts economy

Nanaimo, B.C., Canada (Nanaimo Harbour News, April 1975):—The Nanaimo Harbour Commission has prepared a 20-minute slide presentation covering the history and development of the harbour, its activities as a forest products terminal and what the harbour means to the economic life of the community.

For instance, while the Harbour Commission employs, directly, management and staff administering the facilities it is also responsible for payment to the longshoremen. Total salaries and wages in 1974 exceeded \$1,000,000.

But there are also many indirect jobs created through the many forest industries using the port, merchants who supply goods and services, truckers, railroads, engineers and mechanics and many others.

In addition, crews of the ships who visit the port spend a considerable amount of money in Nanaimo while their ships are loading.

Any company, school, group or organization that would like to see the slide presentation may do so by writing or telephoning the Nanaimo Harbour Commission offices.

## APL servicing Vancouver

Vancouver, B.C., April 21 (Port of Vancouver, National Harbours Board of Canada):—One of the United States' leading container carriers has decided to commence direct weekly calls at the Port of Vancouver starting next month.

"American President Lines" will service the Port with four high speed container vessels beginning with the arrival of the "Japan Mail", May 20. The other three vessels which will call at Vancouver are the "Washington Mail", "Oregon Mail" and "Philippine Mail".

The announcement was made jointly by Port Manager F.J.N. Spoke, Gordon E. Bart, Vice-President Marketing, "American President Lines" in San Francisco and H. Moore, President, "Trans-Pacific Steamship Agencies Ltd." of Vancouver.

"This very important shipping line is, of course, no stranger in Vancouver, but the start of this new service is particularly good news in light of the increasing container capabilities of the Port of Vancouver." Mr. Spoke said, "American President Lines has carried a major part of Canadian cargo now passing through Seattle. I extend a very warm welcome to the ships coming to call here in the very near future."

Mr. D.E. Taylor, Chairman of the National Harbours Board in Ottawa, said he is very pleased with this very valuable addition to the shipping lines calling at the Port of Vancouver, and that he will inform the Honourable Jean Marchand, Minister of Transport, of this happy event.

"This decision by a long-established major world trader is most significant at this time when the planned new container berths and other port improvements are on the threshold of going into operation", he said.

"American President Lines" decision to use Vancouver is viewed as a major step in the port's growth in the container sector by G.W. McPherson, Chairman of the Vancouver Port Authority.

"I see this action by American President Lines as approval of the expansion of services and facilities that the Port of Vancouver can offer the container trade," he said.

"The American President Lines" and its predecessors have for over 100 years provided a premium service to the West Coast of Canada and the Pacific Coast of the U.S. Their decision to commence regular scheduled calls at Vancouver with their fully containerized C-6 class vessels commencing with the "Japan Mail" has been taken in light of the increased capabilities that the Port of Vancouver has to offer and their desire to maximize their service to their Canadian customers.

In welcoming "American President Lines" to the Port, Mr. Spoke noted that this line placed particular emphasis on providing a complete transportation package to receivers and shippers alike through its subsidiaries, "Trans-Pacific Steamship Agencies Ltd." and TPSA Forwarders. Additionally, these companies through their direct connection with all offices and agents of the "American President Lines" is able to offer a complete and unique service in trade promotion both in Canada and abroad.

"American President Lines" fleet of 18 full container vessels and 5 semi-container vessels cover the full Southeast Asia market and A.P.L.'s present sizable share of the Far East and Southeast Asia market reflects their strength.

The weekly fixed day of arrival schedule offered by A.P.L. conforms in every respect to their modern philosophy of vessel operation and this, when combined with the marketing and sales expertise offered through their own offices in Calgary, Toronto and Montreal, provides optimum service to clients in both Eastern and Western Canada.

The four vessels engaged in this service are all of a capacity of 988 twenty-foot equivalent units and operate at a service speed of 20 knots which makes it possible of reaching the Pacific Coast in nine days from Japan. Additionally, "American President Lines" will continue to operate their C-5 semi-container vessels fortnightly, offering supplementary break/bulk and container service to and from the Far East and Southeast Asian markets.

## New Governor assumes post

Cristobal, Canal Zone (The Panama Canal Spillway, April 4):—Maj. Gen. Harold R. Parfitt arrived on the Isthmus on Tuesday to assume his new duties as Governor of the Canal Zone and President of the Panama Canal Company.

### Governor's Message

Returning to the Canal Zone after an absence of nearly 7 years, I am delighted to renew the associations and the friendships I enjoyed with so many of you during my tour as Lieutenant Governor.

I am certain that in these changing times, the challenges of the office will be ever greater, but I am confident that with the efficiency that has always characterized the Canal organization we will continue to meet the demands of world commerce.

It is a pleasure to again become a part of such a highly professional group of people and I look forward to working with old friends and making new acquaintances.

Governor Parfitt was sworn in March 24 in Washington by Secretary of the Army Howard H. Callaway. At the time of his appointment, he was serving as Commanding General of the U.S. Army Engineer Center and Commandant, U.S. Army Engineer School.

Having served as Lieutenant Governor of the Canal Zone from June 1965 to September 1968, Governor Parfitt is thoroughly familiar with all phases of the Canal operation.

Almost immediately after his arrival, he began a busy schedule of meetings and conferences, starting with a visit by members of the Panama Canal Subcommittee of the House Merchant Marine and Fisheries Committee. The congressional group, headed by Congressman Ralph H. Metcalfe (D-Ill.), arrived on the Isthmus on Wednesday for a scheduled 4-day visit.

Since his graduation from the Military Academy at West Point in 1943, Governor Parfitt has served in a number of key assignments including combat duty during World War II, Korea and Vietnam.

As Governor of the Canal Zone, he succeeds Maj. Gen. David S. Parker, who in 1969 presented him with the Army's Legion of Merit for his outstanding service as Lieutenant Governor of the Canal Zone. The presentation ceremony took place in Vietnam, where both were serving at the time.

## 1974 trade picture

Houston, Texas, 4/22/75 (Port of Houston News Release):—HOUSTON (Special)—Heavy petroleum imports realigned Houston's foreign trade picture in 1974 and jumped Venezuela and Saudi Arabia into third and fifth place, respectively, among the Port's top ten trading partners, while Japan and West Germany continued to run one-two as they have for the last several years.

In all, Houston's foreign trade last year came to more than 34.3 million tons, worth more than \$7.8 billion, for an all-time record in both categories, surpassing 1973's previous high by a million tons and more than \$2.5 billion.

Imports from Saudi Arabia rose more than twenty-fold, from \$20 million in 1973 to more than \$200 million last year, while imports from Venezuela were five times higher than the previous year at \$250 million as against \$46 million in 1973.

In both cases petroleum was the major factor for the increase and both of the oil-rich nations moved into a favorable balance of trade with Houston, joining Japan and West Germany as the only countries shipping more into the Port than they purchased through it.

Brazil, which previously had ranked third, dropped to fourth position, although its 1974 trade value was higher than 1973, \$402 million as against \$347 million. In both instances heavy shipments of wheat to Brazil were largely responsible for its large share of Houston's foreign trade.

The remaining five countries among the Port's 1974 top ten, in order, were: The Netherlands, with \$310 million, down from fourth place in 1973; Iran, continuing in seventh place with \$302 million; the United Kingdom, down from sixth place to eighth place with \$279 million in exports and imports; Mexico, with \$209 million, and Nigeria, with \$177 million. Both of the latter were unranked in the 1973 totals.

Russia, fifth in 1973 due to the heavy wheat shipments



San Francisco, California, 3/28 (Marine Exchange of the San Francisco Bay Region):—**HISTORY RELIVED**—Although Sir Francis Drake's original **GOLDEN HINDE** was perhaps welcomed only by a few Indians and a barren shoreline when he arrived near San Francisco Bay nearly 300 years ago, the same cannot be said for the tremendous welcome offered by the San Francisco Bay Region to the recent arrival of the second **GOLDEN HINDE**. The exact replica of Drake's small vessel slowly made its way from England to San Francisco Bay and will become a permanent part of the Golden Gate Region's floating maritime history. To officially welcome the vessel were (left to right) Robert H. Langner, Marine Exchange of the San Francisco Bay Region; vessel master Captain Adrian Small; Al Elledge, president of Harbor Tours, sponsor of the replica; and George Brokaw, district director of customs. The hand-built **GOLDEN HINDE** will be available for public inspection on San Francisco's waterfront and promises to be a major attraction to history and maritime buffs alike.

that year, dropped clear out of the 1974 rankings with only \$135 million in trade. India, with \$159 million, and France, with \$175 million, dropped from their 1973 rankings of eighth and ninth to thirteenth and eleventh, respectively. Belgium—Luxembourg remained in twelfth position with \$170 million in trade.

Petroleum accounted for 10.8 million tons, or 58 per cent, of the Port's total imports in 1974 while 5.7 million tons of wheat dominated its exports for 35 per cent of the total. In value, the 10.8 million tons of petroleum were worth \$815 million, or 16 per cent of the Port's import total, while the 5.7 million tons of exported wheat were worth \$833 million and accounted for 27 per cent of export value.

In general cargo, as against bulk cargo such as petroleum and wheat, steel continued to dominate the Houston's imports, with 1.7 million tons worth \$492 million, followed by 165,000 automobiles valued at \$380 million. Both came primarily from Japan and West Germany.

In general cargo exports, Houston continued to lead the nation in oil field construction machinery with 181,000 tons of equipment and material worth more than \$535 million, accounting for 17 per cent of the Port's export dollar value. The Port also was a leader in shipments of all types of petro-chemicals, ranging from plastics and carbon black to resins and synthetic rubber.

# California Navigation Group Hits Federal Funding

## C-MANC=California Marine Affairs and Navigation Conference

San Mateo, Calif., 4/9/75:—In sweeping recommendations bracketing Federal coastal projects in California from Crescent City Harbor on the north to the Port of San Diego in the south, navigational spokesmen have called for increased funds for the Corps of Army Engineers of up to 82%.

At its spring meeting held in San Mateo (Friday, April 4), the California Marine Affairs and Navigation Conference members agreed on recommendations they will present later in the month to Congressional appropriations committees, covering 58 California ports, small craft harbors and beach erosion project. But the sponsors also heard warnings from the three district Army Engineers whose responsibilities include all California projects, that the rate of progress in studying and improving ports and navigable channels is no longer solely dependent on Congressional appropriations.

Presided over by Long Beach chief harbor engineer Bob Hoffmaster, C-MANC president, the conferees agreed to seek maximum Corps of Engineers funding capabilities in their 17th annual presentations to the Congress—but questioned several of these Corps limits as possibly inadequate. By resolution, the members agreed also to seek by every means increases in such capabilities, and outlined new and expanded activities on Capitol Hill for this purpose.

C-MANC witnesses, with support from the California Congressional delegation, will testify April 28 before House and Senate subcommittees, and the following day, present their annual Golden State Luncheon in the Rayburn House Office Building.

Total estimated Federal cost of the projects espoused will be almost \$121 million. For 17 navigational studies, the President's budget calls for \$1,005,000 for the fiscal year starting July 1st, while the Corps of Engineers capability—the amount estimated which could be spent efficiently and without waste—totals \$1,826,000, a 82% increase which C-MANC will seek.

A funding increase of 55% over the President's recommendations—to \$5,890,000—is also targeted including work at Port San Luis, San Diego harbor, Humboldt harbor and bay on the north, and the largest Federal channel project in the State's history—improved access through the Golden Gate and the Bay system, to the Port of Stockton. Proponents from the two industrial counties most affected—Contra Costa and Solano—were on hand to express concern with the delays and slow pace which have plagued the undertaking, which they cite as essential for the waterborne commerce needs of major new industries and expansion of existing facilities.

Seven beach erosion studies and planning projects were similarly endorsed, with a request for \$218,000 funding.

Maintenance and operation of 29 existing projects will be supported by a request for a 62% increase in Federal expenditures, to \$19,418,000. Because the Federal budget is shifting to a new fiscal year basis in 1976, a "one-time" additional budget for the three-month period July through September has also been projected. Increased funding of 49%, for a total of \$5,644,000, is also recommended for this period.

Overall, \$32,000,966—or more, if the capabilities are increased—will be the target of the California spokesmen later this month, representing a 60% increase for the 15-month fiscal year over the \$20,660,000 requested by the President.

In other action, the conference unanimously expressed support for retention of the California Department of Navigation and Ocean Development, and endorsed a request of the Humboldt Bay Harbor, Recreation and Conservation District for north coast representation of the DNOD Commission. A measure is pending in the California Legislature to eliminate the Department and Commission, and transfer its responsibilities and services to other State agencies.

Dealing with recommendations developed the previous day at meetings of the C-MANC board and program committee, the conference approved a report of the latter's chairman, Port of Los Angeles chief engineer Lawrence Whiteneck, calling for sponsorship of at least one or more symposia later in 1975 on the issues raised by the California Coastal Zone Conservation Commission. The latter's comprehensive plan for control of all coastal land uses—undergoing public hearings and soon to be sent to the Legislature—was termed as unnecessarily restrictive or even prohibitive of needed new and improved commercial and recreational navigation facilities on the coastline. The recommendation matched a similar report by C-MANC policy planning committee chairman, William Dick, director of community and government affairs for the Port of San Diego. Noting significant policy changes and trends recently occurring in both Washington, D.C. and Sacramento, he called for re-evaluation of the conference's objectives and programs, and probable need for stepped-up activities involving state proposals for planning and regulations.

An example of successfully dealing with both technical issues as well as broadening understanding by public officials and others involved in the regulatory processes was given by Frank Boerger, chairman of C-MANC's regional dredging committee. Formed two-and-a-half years ago, the Bay Area task force has been a major industry response agency to proposals by state and Federal regulatory bodies affecting maintenance and improvement of navigational channels. Calling on nationally-recognized experts in engineering, marine biology and other disciplines, the committee has also sponsored two dredging conferences to increase public awareness of the issues and problems, calling for balanced solutions which encompass not only the environment but also, navigational needs for trade, recreation and national security. The latest—a two-day San Francisco conference in February—drew almost 200 partici-

pants. Full proceedings of the event will soon be published, he reported.

"A Candid Appraisal of California Navigation Projects" was the featured panel at the spring meeting. Moderated by deputy division Army Engineer, Col. Robert Rufsvold, Cols. Fred Rockwell, Jack Foley and Henry Flertzheim—respectively, district engineers for Sacramento, Los Angeles and San Francisco—cited problems plaguing their efforts to maintain and improve navigation facilities in their areas, and in the case of the Los Angeles district, major beach erosion prevention projects. Col. Rockwell noted that his inland district has relatively minor difficulty—as compared to the coastal areas—in maintaining shipping channels. Disposal of dredged material—the most difficult process affecting the San Francisco and Los Angeles district—is accomplished when maintaining the Sacramento and San Joaquin river channels by shoreside deposition, including for construction of Federally-financed highway projects.

The most constant problem in Southern California is maintenance dredging, Col. Foley reported. "Moving sand has never been a respecter of our planning process, and in recent years, it has been thumbing its nose at our budgeting processes as well." He noted \$5 million has been budgeted in the current fiscal year for maintenance and operations in his district, and his request for \$9 million for the coming fiscal year was cut to \$1 million in the President's budget. Escalation of dredging costs have gone from 60c per cubic yard of material removed in the Port Hueneme project 10 years ago, to \$1.33 last year and the most recent bid of \$2.80. Following review of work and planning at San Diego Bay and Harbor, the Ventural marina, Imperial Beach and the twin ports of Los Angeles/Long Beach, the district engineer lamented that the value and importance of coastal harbors and beaches are inadequately understood and appreciated. Noting that the Corps of Engineers cannot carry on such an informational campaign, he urged the California organization to do so.

New regulations, environmental assessment and review, and other requirements of recent origin not only affect current and planned projects, but in certain instances, have been applied retroactively to already approved projects, Col. Flertzheim reported. In the process, he said the Corps has learned three things. "No matter how beneficial a project may be, someone, somewhere, will challenge it. Because of the growing complexity of environmental laws and regulations, there are always bases on which to oppose action. The legal basis for opposition need not, and seldom is, the real reason for that opposition." The third lesson, the district engineer reported, is that the public must be concerned, involved and in support of a project.

Since "the whole legal process is reversed in environmental law . . . you are guilty until proven innocent", Col. Flertzheim stressed need for public understanding through development of maximum information—including economic and social benefits of projects, even when causing some degree of environmental degradation. He said the Corps of Engineers through the San Francisco district is spending over \$2.5 million to find out "what happens when you dredge". Results look promising, in that many of the study elements tentatively indicate that most fears and concerns as to the polluting effect of dredging are unwarranted. A draft report will be out for public comment within several months, he concluded.



San Francisco, Calif., 4/10/75 (California Marine Affairs and Navigation Conference):—EXPERTS AGREED that it wasn't going to be easy to continue to maintain and improve Golden State coastal harbors and boating channels, plus reduce beach erosion, at a recent statewide navigation conference in San Mateo. Presiding over the day-and-a-half session was Bob Hoffmaster (center), chief harbor engineer for Long Beach, who is also president of the sponsoring California Marine Affairs and Navigation Conference. Participants in a special corps of Army Engineers' panel included (from left) Cols. Fred Rockwell, Sacramento district engineer, Robert Rufsvold (South Pacific Division deputy engineer), Henry Flertzheim, San Francisco district engineer, and John Foley, Los Angeles district engineer. K.C. "Kris" Klinger (2nd from left)—C-MANC vice president and general manager of the Ventura Port District—agreed that "extra efforts will have to be made this year" if minimal needs of the state's waterborne commerce and recreational boaters are to be met.

Local hosts for the C-MANC meetings were the San Mateo County Harbor District and the Port of Redwood City.

## Trade Mission to Latin America

Long Beach, Calif. (The Port of Long Beach News):—Four high-ranking officials from the Port of Long Beach are currently in South America on a three-week trade mission to further increase the present \$262-million in annual commerce between Latin America and Long Beach. During their visit, they are meeting with business leaders in Rio de Janeiro, Porto Alegre, Sao Paulo, Santiago, Lima and Bogota.

Heading the Long Beach delegation are Llewellyn Bixby, Jr., president of the Board of Harbor Commissioners, and Thomas J. Thorley, general manager of the Port of Long Beach, which is the undisputed tonnage leader among U.S. West Coast ports. Others in the group are Dean J. Petersen, Director of Trade Development, and Francis J. Pard, Executive Secretary to the Harbor Commission.

Long Beach was the first of all Pacific Coast ports to send a trade delegation to South America, inaugurating the practice in 1961 as part of its 50th anniversary. At that time, trade tonnage between Latin American ports and Long Beach was relatively minor, but harbor officials anticipated that this oceanborne business would increase dramatically if actively solicited.

As recently as six years ago, Latin American tonnage moving in and out of Long Beach accounted for 1.4 million



Long Beach, 51375 (Port of Long Beach News):—Last-minute briefing on Brazil by Oswaldo Castro Lobo, Brazilian Consul General in Los Angeles, was given recently to members of the Port of Long Beach Trade Mission to South America. Pictured are, from left, T.J. Thorley, General Manager; Consul General Lobo; Llewellyn Bixby, Jr., President of Board of Harbor Commissioners; and Dean J. Petersen, Director of Port Operations.

tons or 11 percent of all foreign commerce. This has now grown to 24 percent and more than 4.5 million tons.

Trade between Brazil and "America's Most Modern Port" registered a substantial 17 percent increase during 1974 over the year previous, with steel comprising 40 percent of all imports into Brazil and chemicals 24 percent. Machinery comprised another 13 percent of imports.

Among Brazilian exports to the United States via Long Beach, steel again led the way with 31 percent, followed by chemicals at 19 percent and machinery at 14 percent.

Steamship lines linking the two areas include Lloyd Brasileiro and Prudential Lines.

Long Beach's commerce with Chile registered an outstanding 81 percent increase during 1974 over the year previous, with wheat comprising 70 percent of all Long Beach shipments to Chile. Machinery and petroleum also ranked high on the list.

Among Chilean exports to the United States via Long Beach, it is interesting to note that wine is one of the highest valued cargoes. Chilean wines are increasingly popular—even in wine-producing California. Dollar value of commerce handled was up 68 percent over the year previous.

Trade between Peru and Long Beach registered an outstanding 26 percent increase in tonnage and 132 percent in value during 1974 over the year previous. Principal commodities handled include steel, chemicals, machinery and petroleum inbound to Peru, while the principal exports to the U.S. via Long Beach were molasses, coffee, fresh and canned fish and lead.

Peruvian State Line and Prudential Line are the two principal steamship lines linking Peru and Long Beach.

Commerce between Colombia and Long Beach enjoyed a 23 percent increase in tonnage and 59 percent gain in valuation during 1974 over the year previous. Principal commodities shipped to Colombia were machinery, vehicles, chemicals and steel, and leading exports to Long Beach were coffee, confections and textiles.

Steamship lines linking Colombia and Long Beach include Flota Mercante Grancolombiana and Prudential



Long Beach, Calif., 51275 (Port of Long Beach News):—"Best in the West" award for Total Communications Program was presented to the Port of Long Beach recently by the Business-Professional Advertising Association. Making the presentation to Long Beach Harbor Commission President Llewellyn Bixby, Jr., right, is Jack Kay, Vice President—Western Operations for Chilton Publications and B-PAA awards Chairman, center. At left is Chuck Davis, President of Davis & Associates Advertising of Long Beach.

Line.

During the last fiscal year, the Port of Long Beach handled a record high of nearly 30 million tons of goods, which is an increase of more than 142 percent during the last decade. During that same ten year period, the dollar value of goods handled has risen some 367 percent to an all time high of \$5.6 billion.

With 68 deep water berths accommodating virtually every variety of commodity, Long Beach confidently looks ahead to further expansion of port facilities to handle the ever increasing commerce between the two great continents.

## Award of Excellence

Long Beach, Calif., 51375 (The Port of Long Beach News):—The Port of Long Beach and its advertising agency, Davis & Associates, have been awarded the Business/Professional Advertising Association's "Oscar" for the top "Total Communications Program" in the West.

Long Beach Harbor's entry was among the more than 260 judged in 16 different categories. Presentation of the Award of Excellence to Long Beach was the highlight of the Business/Professional Advertising Association's recent 6th annual West Awards banquet. On hand to receive the award on behalf of the Port was Llewellyn Bixby, Jr., President of the Long Beach Harbor Commissioners, and Chuck Davis, President of Davis & Associates Advertising agency of Long Beach.

During the last four years, the Port of Long Beach has been awarded more than a dozen honors for its advertising and publications, including the American Association of Port Authorities Admiral Byrd trophy for outstanding communications efforts.





San Francisco, California, 4/10/75 (Marine Exchange of the San Francisco Bay Region):—The maiden voyage arrival of Matson Navigation Company's SS LURLINE was recently feted in special ceremonies aboard ship at Matson's Oakland facility. On hand were (left to right) Frank Ewers (Marcona Corp.), Marine Exchange of the San Francisco Bay Region; vessel master Captain Paul W. Heard; and Miss Maritime Marlene Pituch (General Steamship Corp.). The 25,000 ton, 700-foot trailership will serve Northern California shippers on the Oakland-Honolulu run. The 24-knot LURLINE can carry 278 40-foot trailers or equivalents, including 100 refrigerated trailers, 207 autos and 1600 tons of molasses. The ship can be unloaded and reloaded in less than 24 hours. The LURLINE is the fifth Matson ship to bear the name, which started with a 125-foot brigantine acquired by Captain William Matson, the company's founder, in 1887.

## U.S. tuna boats illegally seized

Los Angeles, Calif., May 21 (Port of Los Angeles):—The Los Angeles Board of Harbor Commissioners today (Wed., 5/21) formally requested Presidential and Congressional action to stop the harassment and kidnapping of American fishermen by the navies of Peru and Ecuador.

Contained in a Board resolution, the request referred to the recent seizure of seven American tuna boats and their crews 75 miles off the coast of Ecuador. The American fishermen had been detained for over one month, their releases not coming until their catch had been confiscated and they had paid fines totalling (including the catch) of \$3 million.

Citing this as only the most recent of a long history of such illegal incidents, the resolution petitioned the President and Congress to "reasonably and effectively resolve the critical issue without delay."

The resolution, which requested also the support of Mayor Tom Bradley and the Los Angeles City Council, follows on the heels of a nation-wide outcry for top level action. Organizations such as the Tuna Boat Owners Association and the tuna fishermen's union contend that Ecuador's claim to a 200 mile offshore territorial limit is invalid as the United States and most other nations recognize only a 12-mile offshore boundary.

## N. Y. Port Handbook 1975

New York, N.Y., March 25 (The Maritime Association of the Port of New York):—The 1975 edition of the New York Port Handbook, the authoritative sourcebook of



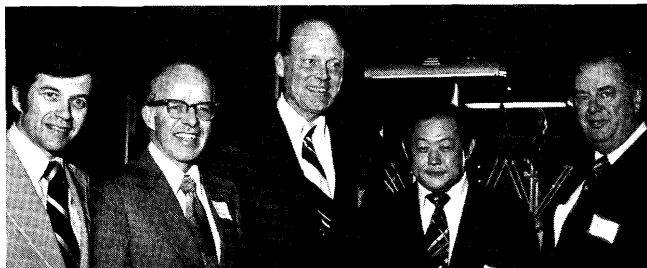
New York, N.Y., 5/23/75 (The Maritime Association of the Port of New York):—ON BOARD FESTIVITIES: Gathered on the Promenade Deck of the Royal Viking Sea recently to celebrate the vessel's maiden arrival in the Port of New York are (1 to r) Anthony Tozzoli, director of marine terminals, Port Authority of New York and New Jersey; Warren Titus, president, Royal Viking Line; Ms. Deborah Smith, Maritime Queen of the Port of New York and E. C. Fabber, commissioner, N. Y. City Department of Ports and Terminals. The 22,000 ton Norwegian-flag liner is the third and newest of Royal Viking Line's fleet of all-first-class cruise ships.

information on shipping and maritime-related service and supply organizations, world trade and government agencies in the port region, has been published by the Maritime Association of the Port of New York.

The 174-page Handbook contains complete information on Port Administration, Navigation Safety, Cargo Controls and Security, Private Bureaus and Associations, Government Services, Ship and Shipper's Services, Air Transportation, Rail and Truck, Management and Longshoremen's Labor Relations, Industrial Development, International and Ship Satellite Communications and a Visitor's Guide to the city.

It is profusely illustrated with pictures of the port's activities. There are 17 detailed maps showing the boundaries of the official port district, general cargo and petroleum terminals, federal water front facilities and major federal ocean channels. Included are charts defining steps in the import-export procedure, rates for tugboat assistance, international telephone rates and pilotage rates and formulas.

An 87-page directory, alphabetized, lists every important



San Francisco, California, 4/10/75 (Customs Brokers and Freight Forwarders Association):—"THE COWBOYS AND THE FARMERS MUST BE FRIENDS" might have been the theme of the recent World Trade Club dinner meeting of the San Francisco Customs Brokers and Freight Forwarders Association. The event marked the first "dialogue" between the group's membership and steamship industry officials. Participants included (from left) Robert Knowles, Arthur J. Fritz Co.; association director William Bosque, J. E. Lowden Co.; Alex Wallace, General Steamship Co., Ltd. vice president for Johnson-Scan Star; Paul Paik, Frank P. Dow Co., and director James Burns, Thornley & Pitt, who moderated the session. Not pictured is Jack Dore, States Steamship Co. sales manager, among the panelists who fielded questions from the more than sixty forwarders and brokers attending. The group earlier received concentrated advice on "More Money"—a special seminar presented by Roanoke Companies of Illinois, with a team of experts headed by board chairman Bruce Wilson. It featured presentations tailored to the industry's needs in cash and risk management, marine insurance and Customs bonding.

maritime or industry related service and supply organization in the region, consulates, world ports served and steamship companies.

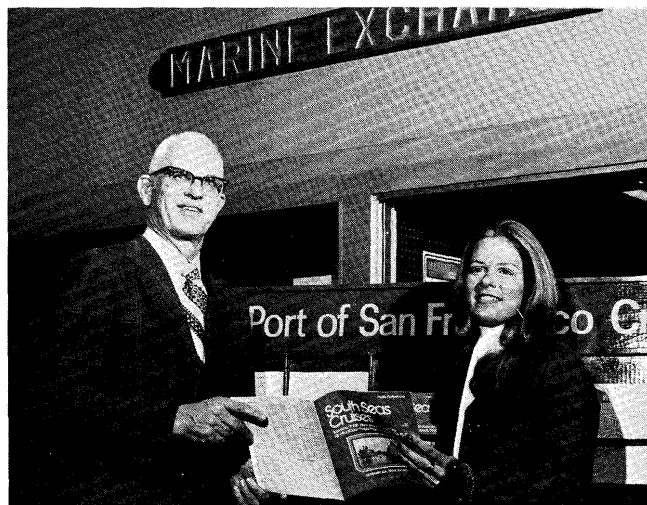
The cover is illustrated by a dramatic picture of the Statue of Liberty, superimposed on a background of 140 steamship stack insignia, in full color, depicting funnel markings of vessels most frequently calling at the Port of New York. Copies of the Handbook are available from the Maritime Association of the Port of New York, 80 Broad Street, New York, N.Y. 10004, at \$2.50 plus 50¢ for postage and handling. Discounts are available on quantity purchases.

## Groundbreaking

Oakland, Calif. (Port Progress, April 1975):—A Shinto ceremony was the highlight of ground-breaking ceremonies held recently by the Port of Oakland for a new Outer Harbor container terminal. The terminal will be used by a consortium of four Japanese steamship lines—Japan Line, "K" Line, Yamashita-Shinnihon Steamship Company and Mitsui-OSK Lines. Port and city officials welcomed representatives of the four lines, who now operate from the Port's Seventh Street Terminal. The new facility will be finished in 1977.

## Shipyard ton days up 90%

Portland, Oregon, May 20 (Port of Portland News Release):—Ton days at the Swan Island Ship Repair Yard



San Francisco, California, 4/21/75 (Marine Exchange of the San Francisco Bay Region):—THE ONLY WAY TO GO! Port of San Francisco's port director Thomas T. Soules and Miss Maritime Marlene Pituch (General Steamship Corp.) admire one of the many brochures available from a display rack outside the main office of the Marine Exchange of the San Francisco Bay Region. The rack contains a complete line of literature describing various passenger line services from the Golden Gate region. It is "berthed" on the third floor of the World Trade Center. Lines represented are: Barber Line, Pacific Far East Line, American President Lines, Knutsen Line, Orient Overseas Line, Swedish American Line, P & O, Princess Cruises, Royal Viking Line, and Prudential Lines. The rack was recently installed by the Port of San Francisco in response to increasing interest in ocean travel.

for the first four months of 1975 are 90 per cent higher than for the same period last year. The 1,900,521 ton days for January–April 1975 compare with 1,001,777 in 1974. Ton days are measured by multiplying a vessel's tonnage by the number of days worked.

Fiscal-year-to-date totals at the Port of Portland-owned yard show a ton-day increase of 20 per cent, and 331,432 ton days were recorded in April, up from the 235,434 ton days during the same month last year.

Total berthings for the month increased also, with 20 in April 1975 compared to 11 in April 1974, although the fiscal-year-to-date figure shows a 6 per cent decrease. One ship, the M.S. SHINTO MARU, made her first call at the yard in April and was presented a certificate noting the occasion by the Port of Portland and the contractor, Northwest Marine Iron Works.

Gross revenue figures were up, due in part to 98 per cent occupancy of the lay and repair berths during April. A total of 12 vessels are expected to call at the shipyard in May.

## NCITD "red tape" cutters

San Francisco, California, 4/29/75 (Marine Exchange of the San Francisco Bay Region):—A nationwide effort is underway to reduce the number of "original" bills of lading to reduce paperwork. "Each party desiring this habitual luxury... has caused full sets of originals to become routine" notes the national industry body spearheading the program to reduce the estimated \$8 billion annual cost of "red tape" involved in U.S. international trade.

A deadline of October 1, 1975 has been proposed, to assure agreement of steamship companies serving the world's largest trading nation to issue only one "original" bill of lading (but as many copies as requested). Significance is that "originals" are often—like checks or other legal instruments—negotiable, or at least, subject to security, recordkeeping and other expensive processing.

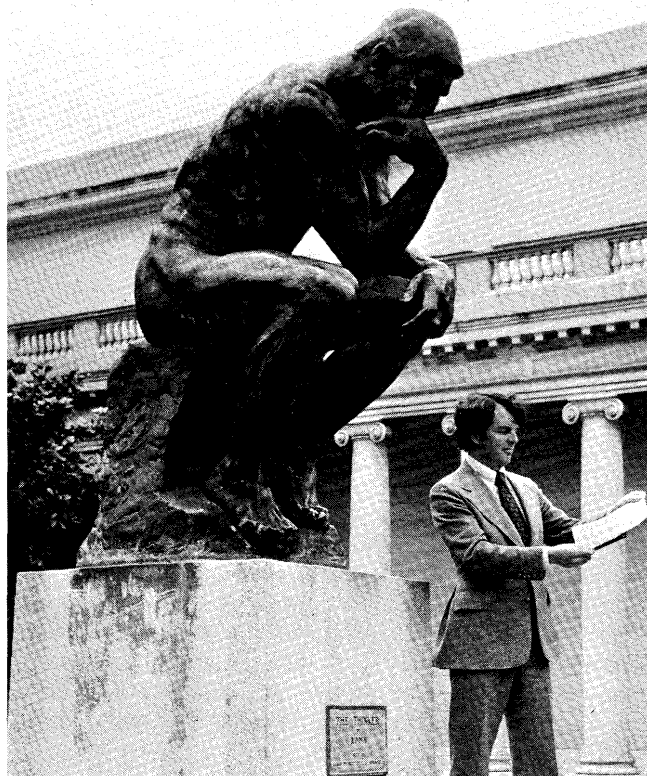
The practice of shipping companies to issue "full sets of originals" (sometimes as many as 25 negotiable documents) grew out of the needs of commerce and banking of past centuries, combined with lack of reliability of ships and communications. Loss of a central document attesting to the ownership or control of the delivery of cargo could be disastrous, unless a duplicate "original" was available. As is so often the case, this recognized need solidified into the practice by buyers and importers (and their banks) for multiple issuance of "control" paperwork.

With advent of international air mail, increasingly supplemented by telecommunications, satellite relay and other space age technology—sailing ship era procedures nevertheless prevailed. High speed container ships, one-day port turnaround on cargoes, and a burgeoning volume of international commerce, failed to modify the "timetested" reliance on redundant and increasingly excessive issuance of multiple cargo ownership documentation.

Commenting on the question, San Francisco Marine Exchange facilitation chairman and General Steamship Corp. vice president John Greene, called for recognition by the many parties involved in international commerce of ready availability of all informational needs (by as many copies of shipping documents as required), without the legal complexities and significant costs involved in issuing "original" control documents.

"Each party to the transaction—the bank issuing the letter of credit, the advising bank, the buyer and importer, the shipper and exporter, the ocean carrier and other transportation elements, the insurer of the cargo—all agree that there is no need generally for more than one "original" bill of lading. What is so frustrating is that with such consensus, each party also points to the demands by others (to which he must be responsive) for such excessive documentation. The only way to break this expensive, redundant chain is to call upon all simultaneously to require and request (and issue), whenever possible, no more than one original shipping document. The October 1st deadline is a reasonable target date, and allows ample time to phase-out use of existing supplies of forms, to modify letters of credit formats, satisfy any insurance questions, and taking any other actions necessary to accomplish this desirable goal."

The issue has been a key one for more than two years of a technical committee of the National Committee on International Trade Documentation, the U.S. industry-



San Francisco, Calif., 4/29/75 (Marine Exchange of the San Francisco Bay Region):—**THERE'S ONLY ONE ORIGINAL "THINKER" BY RODIN** and there should be only one original bill of lading, says J. J. Greene, San Francisco Marine Exchange facilitation chairman and General Steamship Corp. vice president. "Already enough effort goes into producing a bill of lading to make it a work of art, so why should we add unnecessary paperwork?" Greene's "red tape" cutting task force joins efforts initiated by the National Committee on International Trade Documentation to reduce the estimated annual \$8 billion cost of excessive paperwork in U. S. world trade. An October 1 deadline is proposed for steamship companies, banks, exporters and importers to agree upon using only a single "original" ocean bill of lading (except in special cases).

sponsored task force which has already made major in-roads in cutting trade and shipping "red tape". The latest action by the New York-headquartered, nationally-sponsored body was at its February meeting in New Orleans, when its carrier group adopted a resolution calling for the Fall cutoff deadline.

In its action, the NCITD task force—joined by the San Francisco Marine Exchange—recognized that there are instances—relatively few—that demand the availability of more than one original bill of lading. But the experts involved concluded from their extensive research that these exceptions are unusual, and seldom relate to the unfortunate, general practice by all concerned to ask for and be responsive to the issuance of multiple original documents.

Greene concluded, "How many duplicate and negotiable checks do each of us issue to pay for a single transaction? How many original deeds to our homes do we have? Personal wills? Certificates of automobile ownership? Driver's licenses or Social Security cards?"

Copies of the NCITD brochure, "Be Original", are



San Francisco, Calif., 5/20/75 (Marine Exchange of the San Francisco Bay Region):—The maiden voyage arrival of the MV LLOYD CUIABA was recently feted in special ceremonies aboard ship at San Francisco's Pier 32 facility. On hand were (left to right) Thomas T. Soules, port director, Port of San Francisco; Philip Frace, vice president of Kerr Steamship Corp.; vessel master Captain Luiz Lopes; Miss Maritime Pamela Leete; Dirk Van Meurs (West Coast Ship Chandlers), Marine Exchange of the San Francisco Bay Region; and Bernard Powell, San Francisco Chamber of Commerce. The new vessel was designed and built in Brazil for coast use. Kerr Steamship Corp. is the local agent for the CN Lloyd Brasileiro service.

available from the San Francisco Marine Exchange, 303 World Trade Center, San Francisco, CA 94111.

## New S.F. agent in Tokyo

San Francisco, Calif., May 21 (Port of San Francisco News):—The Port of San Francisco will be represented again in Tokyo starting July 1 for the first time in two and a half years.

Yasunori H. Matsui, Far East manager for the Massachusetts Port Authority since 1967, will share his services on behalf of San Francisco for at least one year.

Port Director Thomas T. Soules expressed his gratitude to the Massachusetts authority for agreeing to the dual representation.

"The Ports of Boston and San Francisco are virtually non-competitive with one another so there is no conflict," Soules said. "And having worked with Mr. Matsui for eight years, I can say that we are getting the services of an outstanding man."

Soules was port director of Boston before joining the Port of San Francisco last February.

Matsui, 44, is a native of Portland, Oregon, and attended grammar school for two years in Parkland, Washington, before moving with his family to Japan, where he has made his permanent residence since.

He was graduated from high school in Okayama, took a bachelor's degree in economics at Keio University, Tokyo, another B.A. in library science at Columbia University, a degree in commerce from Bombay University, and attended graduate school at the Massachusetts Institute of Technology.

gy.

From April 1953 to August 1959 he served in executive posts for the Yamashita Steamship Company in Okinawa, Tokyo, Bombay, and New York.

He represented the Asano Bussan Company of Tokyo in Paris for a year, its successor company, Tokyo Tsusho Company Ltd., in London for another year, and the same company for a year in Seoul.

From January 1965 to October 1967 Matsui was executive vice president, Japanese-American Licensing Corporation, in New York City. He affiliated with the Massachusetts Port Authority as its Far East manager in Tokyo in October 1967.

Matsui is married to Takako Matsui, a graduate of Tokyo Women's College. One son is a high school student, the other in junior high school. Their daughter is a primary school student.

"Mr. Matsui is thoroughly at home in the worlds of shipping, trading, banking, government and politics," Soules said. "I count the Port of San Francisco fortunate in acquiring the services of such an able person."

## New terminal

Tampa, Florida, 4/30/75 (Tampa Port Authority):—Development of a major new general cargo terminal at the Port of Tampa was assured when Eller & Company of Fort Lauderdale, signed a lease for nearly 9 acres of land with the Tampa Port Authority on April 28th.

Eller & Company, stevedores and terminal operators, joins Luckenbach Steamship Company as a tenant of the Port Authority at the Holland Terminal on the East Bay Channel and Turning Basin.

Captain Arthur Erb, president of Eller, announced at the same time his company plans a 100,000 square foot combined transit shed and passenger terminal. Construction of this facility will begin in about 60 days, Erb said.

Eller also has an option on an additional 8.7 acres of land and Erb stated the company plans to exercise it "not too far down the road."

At the same time the Port Authority advertised for bids for an additional 600 feet of general cargo wharf which will be constructed adjacent to 1200 feet of wharf which was completed last year. Eller will have preferential berthing rights on this facility when it is completed. The new berth will be financed by the Authority through funds available from a \$9.8 million revenue bond issue which was sold in 1973.

Erb announced his company is interested in developing containerized cargo in the Port of Tampa.

The 25-year lease calls for a minimum guarantee to the Port Authority of \$170,000 when the new berth is completed.

Eller operates in Port Everglades, Minami, Savannah and Brunswick, Georgia, as well as in Tampa.

## Report on port turnover

Caracas, Venezuela (Carta de la C.A. Venezolana de Navegacion, March, 1975):—The Ministry of Finance is organizing a new information service regarding national ports turnover, which will provide every week statistics regarding the volume of commercial cargo mobilized, as well as the volume of cargo released to importers. This

information corresponds to a greater control of operations in the ports in order to avoid jamming. According to the first information provided, cargo received in the port of La Guaira in December, 1974 was 107,704 tons and in January 1975 it went up to 186,934 tons, this revealing that there is a marked trend for the increase of imports. The increase during the first two-month period of 1975 was 20%, in comparison with the same period in 1974. During the whole year 1974, merchandise received in La Guaira reached a total of 1,885,433 tons.

## Marine Exhibition

Hamburg, 10th March:—The immense success of Ship, Machinery, Marine Technology International 1974 and the still increasing world-wide interest in the Hamburg event determine the course for 1976. More than 100 firms at home and abroad have already applied for the next SMM. Hamburg scheduled for 21–25, September 1976.

For further information write to:

Hamburg Messe und Congress GmbH  
D 2000 Hamburg 36  
Postfach 302360

## Antwerp containerport

Antwerp, 12/3/1975 (Port of Antwerp Promotion Association Press Release):—The General Management of the Port published total container figures covering the year 1974.

The total number of laden containers handled in the port last year, amounted to 251,678, as compared to 214,794 in 1973. The total containerized goods tonnage was 3,864,012 tons in 1974, against 3,228,794 in 1973. This represents an average of about 15.3 tons of cargo per container in 1974.

The number of empty containers (not included in the above figures) handled in the port in 1974, amounted to 31,839 units.

A comparison of the figures for 1974 with those for 1973, leads to following findings:

- number of containers discharged increased by about 26%
- number of containers loaded increased by about 9.5%
- cargo tonnage discharged increased by about 28.5%
- cargo tonnage loaded increased by about 12.2%
- total number of containers handled increased by about 17.1%
- total cargo tonnage involved increased by about 19.6%.

The total of about 3,800,000 tons of containerized cargo represents about 12.7% of the total general cargo in 1974. As to the latter, a provisional calculation worked out at 30.2 million tons.

### Container Traffic 1974 (Total traffic)

	1974		1973	
	No.	Tons	No.	Tons
Discharged	125,021	1,886,621	99,150	1,467,572
Loaded	126,657	1,977,391	115,644	1,761,222
Total	251,678	3,864,012	214,794	3,228,794

## Forth ports make a profit

Edinburgh, May 5th (Forth Ports Press Information):—The Forth Ports Authority turned in a net surplus of £971,000 last year, despite a 400,000 tonne drop in cargoes, caused mainly by the shrinking demand for oil.

With this result came a warning from Mr. Gerald Elliot Chairman of the Authority, that although a target of 10% on capital employed had been achieved, this might still be inadequate in inflationary times to provide sufficient funds for replacing assets and allowing improvements. Furthermore, said Mr. Elliot, prospects for 1975 were not so good, the current world-wide recession showing itself in smaller tonnages passing through the Forth ports.

The Authority achieved an operating surplus of £3.04 million, an increase of £285,000 over the previous year. Interest charges absorbed £1.59 million and depreciation £724,000. Mr. Elliot indicated that virtually the whole of the total net surplus in 1974 had been allocated to supplementing under-depreciation of assets in the past and that this practice would continue for some time to come.

However, a benefit to the Authority had been the completion of the £11 million lock at Grangemouth, officially opened in September, 1974. The bulk of the contract had been finished before the recent steep rise in industrial costs and since there had been a healthy inflow of cash in the last two years, only £4.58 million had been borrowed from Government sources to finance the lock and the highest interest rate had been 9.3/8%.

Rates for port dues and dock services had been increased by about 22½% at the end of the financial year, but these would only cover high wage settlements and other heavy cost increases and did not allow for the effects of any substantial fall in traffic in 1975.

Other works carried out by the Authority included the conversion of the old Grangemouth lock into a terminal for the export of liquified petroleum gas, extracted from the North Sea oil soon to flow to the adjoining refinery. This would be done by the sealing of the seaward end of the lock with a concrete dam.

Still in progress is the construction of the Hound Point Terminal, an island installation which is being built for British Petroleum to handle the production of the Forties Field, and this is expected to be completed by September of this year.

To control the increase flow of traffic and the larger vessels which these projects would attract, the Authority had set up the Forth Navigation Service, which would be operated from Leith and provide information for the safe movement of shipping in the estuary.

Regarding the present Government's intention to bring in a ports nationalisation bill, Mr. Elliot said that as the Forth ports were presently administered by a publicly-owned authority it was unlikely that the measure would involve any real change. This was provided that the new central authority had limited co-ordination and policy powers, similar to those of the present National Ports Council, and was not charged with the operation of the country's ports.

Port authorities, said Mr. Elliot, should be left fully responsible for the operations of their ports, since otherwise they could not serve efficiently their customers and their local hinterlands.



Grangemouth handled a total of 6.96 million tonnes in the year and Leith, without the volume of oil and petroleum products supplied to Grangemouth docks by the neighbouring refining and chemical complex, handled just below two million tonnes.

Methil, with its coal trade, handled 357,000 tonnes and Granton, mainly receiving petroleum and fish catches, handled 390,000 tonnes.

Over 260,000 tonnes passed through Burntisland, primarily a bauxite port, and Kirkcaldy, mainly receiving general cargo for its local industries, handled 64,000 tonnes in the year.

## Best-ever year for cargo

Glasgow (Clydeport News, March, 1975):—A record total cargo of 18,859,773 tonnes was handled by Clydeport last year—a rise of 262,119 tonnes over the previous year.

This is shown by the annual statistics for 1974 and they also reveal that the number of ships using the port was 13,179 which is only five more vessels than the year before.

However, the net registered tonnage of these ships rose substantially by 3,000,582 tonnes to 22,887,764 tonnes.

The difference between the rise in cargo weight and the higher net registered tonnage of ships is due largely to the increasing use of the estuary for lightening VLCC's.

While exports were slightly down, imports were up. A surge in foreign oil imports of 837,399 tonnes to 9,523,543 tonnes more than made up for falls in several other commodities handled by Clydeport.

There were some marked changes last year. Imports of cereals through Meadowside Granary rose by 6,000 tonnes and imports of coal increased by 70,832 tonnes to 278,278 tonnes.

Export of beverages—largely made up of Scotland's national beverage—went up again, this time by 38,499 tonnes to 279,719 tonnes.

## One-ship dredging "fleet"

Glasgow (Clydeport News, March, 1975):—A feasibility study is under way with ship designers and builders to provide Clydeport with a new vessel to meet all of the port's dredging needs.

The plan is that the existing dredging fleet could eventually be replaced by one large grab hopper-dredger.

This vessel would be capable of carrying out all necessary maintenance dredging and could also undertake contract work at, for example, other ports or coastal sites of oil related developments within the Clyde estuary.

The business of maintaining sufficient depth of water in the channel above Greenock and alongside the berthage in Glasgow involves removing about 650,000 cubic yards of silt each year at a cost of more than £500,000.

It is a tremendous tribute to everyone involved in planning, organising and carrying out the work from day-to-day that—despite the escalation in the cost of materials, oil fuel, repairs, wages and salaries—through the rationalisation of plant and improved methods resulting in greater productivity, costs have been more or less contained during the past eight years in striking contrast to the general trend in prices nowadays.

When Clydeport was set up in 1966, the dredging fleet boasted two bucket dredgers, three grab hopper-dredgers

and nine hopper barges.

Today, there is only the bucket dredger *Blythswood*, the grab hopper-dredger *Lennox II*, and four hopper barges: Nos. 25, 26, 27 and 28.

During the intervening years, great strides have been made in increasing the efficiency of the whole dredging operation by devising new methods of loading hoppers and also by the increasing use of silt catchment areas which, in effect, afford better consolidation and thus make dredging in these specific locations more productive.

Now the time has come for another big step to contain rising costs and overcome the problems associated with running an ageing fleet—*Blythswood* was built in 1963, *Lennox II* in 1954 and the hopper barges in 1953-63.

The options of building new, modernising the existing vessels or handing over the job to an outside contractor have all been carefully weighed and the advantages of a new-style hopper-dredger are tipping the scales in favour of Clydeport retaining a one-vessel "fleet".

While plans are still to be worked out in detail, it is envisaged that the new hopper-dredger will be equipped with three or four large grab-cranes and also a suction pipe unit, and that she will be capable of carrying about 2,000 cubic metres of dredged material. Design to delivery is likely to take between two and three years.

## New stevedoring subsidiary

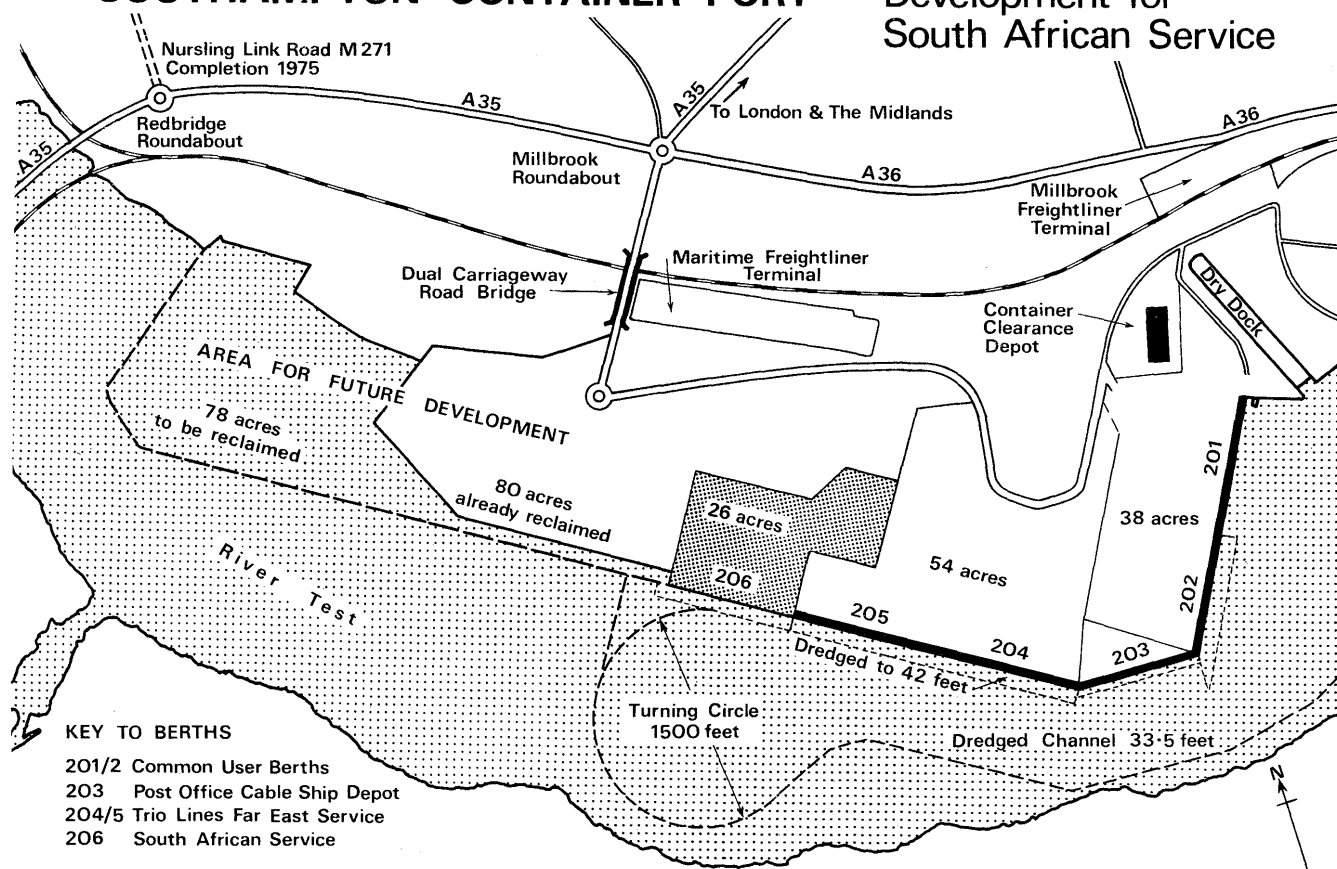
London, 19 March (British Transport Docks Board):—The British Transport Docks Board have further extended their involvement in stevedoring activities within their ports group by the acquisition of the Ayr-based firm of Kenny (Stevedores) Ltd, formerly a subsidiary of Clyde Shipping Company Limited.

The company, which becomes a wholly-owned subsidiary of the Docks Board, will continue to operate under the managing directorship of Mr. T. Kenny. Other directors nominated by the Docks Board are Mr. A.J. Tomsett, who is finance director of the Docks Board, Mr. P. Murdoch, the Board's director of small ports and operational services, and Capt. R.J. Nicholls, docks manager and harbour master, Ayr and Troon. The acquisition of the issued share capital of Kenny (Stevedores) Ltd. was carried out by mutual agreement, and with the consent of the Secretary of State for the Environment under the provisions of the Transport Act, 1962.

Mr. John Collier-Wright, Docks Board deputy managing director, commenting on the development, said today "It is established Docks Board policy to extend their stevedoring activities, wherever this may be in the long term interests of the ports and their service to port users. There are often considerable benefits to be gained from a fully-integrated stevedoring and port service. In many of our 19 ports we are now the sole or major employer of registered dock workers."

## SOUTHAMPTON CONTAINER PORT

Development for  
South African Service



### Southampton handling South African container trade

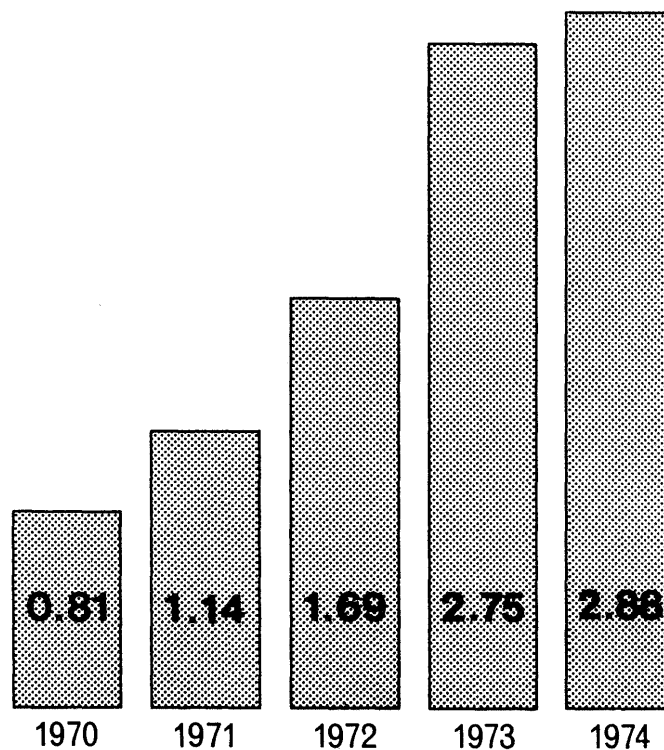
London, 20 March (British Transport Docks Board):—The British Transport Docks Board today, Thursday, 20 March, welcomed the decision of the South African Conference Lines to make Southampton the United Kingdom terminal port when the U.K./South Africa trade changes over to containers in 1977.

Southampton has long been the home port for the weekly Union Castle/Safmarine Cape mail services and it shares with London and Liverpool the greater part of the present South African conventional cargo trade. When the new container service is fully operational it is expected to bring to Southampton an additional annual throughput of some 100,000 container units. During 1974 the port's deep sea container terminals dealt with a total of over 235,000 container units.

Sir Humphrey Browne, chairman of the Docks Board, said today that he was very pleased with the successful outcome of negotiations with the Lines concerned. "The additional business which this trade will bring to the Southampton Container Port is very welcome. There can be little doubt that Southampton is Britain's fastest-growing container port."

"Southampton has been selected in the face of pretty stiff competition from other UK ports," Sir Humphrey said. "It has been a tough time for all concerned, in getting out our tender, preparing the plans, negotiating, and so on. But we still prefer that choices such as this should be decided on the basis of competition and service."

(Continued on Next Page)



THE GROWTH OF UNIT LOAD  
TRAFFIC THROUGH SOUTHAMPTON  
IN MILLION TONNES



**Sir Humphrey Browne, C.B.E., M.A., C.Eng., M.I.Min.E.**

**Chairman, British Transport Docks Board**

**London, 7 April, 1975:**—Sir Humphrey Browne was appointed chairman of the British Transport Docks Board from 1 May, 1971. He has also been chairman of Bestobell Limited since 16 April 1973. He has spent most of his working life in the coal industry, and was deputy chairman of the National Coal Board from 1960 to 1967. Sir Humphrey received his C.B.E. in 1952, and was knighted in 1964. He is a Fellow of the British Institute of Management. (Docks Board Public Relations)

(Continued from Page 43)

Sir Humphrey explained that the new South African container service would be accommodated within Phase 3 of the Container Port Development, adjacent to the existing terminal used by the Trio Lines service to the Far East. The Board's plans for this development had been submitted to the Government for approval some time ago and had been awaiting the Lines' decision. "Now we must set to work quickly, so as to ensure that the new facilities are ready on time," he said.

The facilities to be provided by the Board will include 950 feet of deep-water quay (to be known as Berth 206), equipped with two 35 tonne transporter cranes and backed up by 26 acres of surfaced operational area. The deep-water channel will be extended to give access to the berth for the larger container ships which will operate the service.

Completion of Berth 206 will bring the number of Southampton's deep-water container berths to five, with a mile of quays and a back-up area of 118 acres. Thereafter, there is potential for providing a further 4,000 feet of deep-water quay and 160 acres of back-up land, half of which has already been reclaimed. On the opposite bank of the River Test at Dibden Bay the Board also own an 800-acre deep-water site which is available for development in the longer term.

## Southampton Handbook

**London (British Transport Docks Board):**—A Southampton Port Users' Handbook has been produced by members of the Trinity House Pilotage Service, based on the Isle of Wight.

The book is designed to provide, in pocket-size form, a wide range of information useful to users of the port. It condenses together material which is normally contained in numerous separate publications, diagrams and charts, most of which are too large in themselves to be conveniently carried around.

The Handbook contains:—

1. Navigational information with full details of all V.H.F. coverage, in the Solent, details of tugs, tidal information, distances etc.
2. Photo-reduced chartlets of the British Transport Docks Board charts of Rivers Test and Itchen, the docks and Southampton Water.
3. A berth-by-berth information guide to Southampton Docks, private wharves and oil jetties.
4. Notes on Esso Refinery, coastguard, customs, port health and pilots.
5. A comprehensive address and telephone directory of shipping interests in the Solent area.

This is in a loose-leaf wallet, together with a pack of blank paper to enable users to insert their own pages where required. Corrections and additions to the Handbook will be made available annually.

Copies are available from the publishers, Camper and Nicholson's Marine Equipment Ltd., 55–61 Northam Road, Southampton, SO9 1WB, at £5.00 each.

## A place second to none

**Le Havre (from Port of Le Havre Flashes, March 1975):**—Who could have guessed only a year ago that due to oil imports alone the port's overall traffic would be 3.1% down at the end of 1974, compared with the previous year's total (86.2m tonnes in 1974 against 89m in 1973)?

But rather than lament the fact, we can be proud that the overall drop is not greater, since the 6.2% fall in hydrocarbons has been partially compensated by a continuation of the remarkable progress in all other classes of traffic that began a few years ago. This is equally the case for non-oil liquid bulks, dry bulks (particularly grain) and general cargo.

Among the factors undoubtedly contributing to this result are the modernisation of French agriculture, the improvement of port facilities in Le Havre, the development of the industrial zone and the establishment of seven new shipping lines.

As far as can be judged, the year ahead should see a continuation of the present tendency.

Where oil is concerned, the outstanding event of 1975 will be the inauguration of the new port of Havre-Antifer. As soon as it comes into service, it will act as a magnet, pulling towards the white cliffs of Normandy a large number of vessels of over 250,000 tonnes with a dead-weight capacity too great for them to be able to enter either the present port at Le Havre or the other ports of north-west Europe. As vessels of this type are capable of bringing about an appreciable reduction in transport costs, it will be in the general interest to make as much use of

them as possible, and the Havre-Antifer Terminal should benefit considerably.

Among other categories, general cargo should receive a further fillip, especially where containers are concerned. The first weeks of 1975 saw the introduction of two new lines to South America and the west coast of Africa; the fourth and last best berth of the Quai de l'Europe Container Terminal will be ready later this year; and work will be starting soon on a new wet dock in the port/industry zone.

With the current situation what it is, the port administration is redoubling its efforts to exploit every possible means of keeping Le Havre at "full ahead" on its route towards a place second to none among European and world ports.

## Bremen-Rijeka ties

Bremen (Bremen International 1/2-1975):—The organisation (systematic course) and the equipping of Yugoslavian ports—particularly of the container terminals of Rijeka (some 12.6 million tons turnover in 1974) and Koper (1.6 million tons) as well as the construction of a bulk-cargo ship-discharging plant for Bakar (10 km south of Rijeka)—were the subjects of discussion for a large Bremen economics delegation led by the Bremen Senator for Ports, Brinkmann, in Croatia and Slovenia at the beginning of 1975; comprising mainly of influential representatives of shipyards, shipping, the ports, industry, insurance and trade. The Yugoslavs are at present working out their new 1976–1980 five-year plan. They estimate that the increase in production of Yugoslav industry, together with the opening of the Suez Canal, will result in the ports handling an additional 700,000 tons annually.

Bremen firms, in cooperation with Yugoslavian brokers, will, for instance, deliver (with an eye to the difficult Yugoslavian currency-exchange situation) only the relative machines, electrical systems, engineering or, respectively, the know-how. Already the past has seen specifically high-valued exports goods being delivered from Bremen to Yugoslavia—such as goods-wagons, radar equipment, echo-sounders etc. One hundred specialised employees of a Yugoslavian railcar factory are currently working for a whole year in Bremen, under a cooperation agreement. Bremen's shipyards could participate in the extension project for the Yugoslavian merchant fleet which, it is intended, will expand by some 800,000 GRT, to attain a total of 3 million by the year 1980. The Yugoslavian shipyards are at present working with 90 percent of the orders being for foreign account (Scandinavia, China, India, USSR). On the other hand Yugoslavia still has free capacity for diesel-engine construction. The Yugoslavs also warmly welcome the Bremen offer to grant licenses. Detailed negotiations are expected to take place shortly.

## Expansions at Bremen

Bremen (Bremen International 1/2-1975):—At present under construction in the Bremen port installations on the west bank of the Weser is a 100 × 200-metre large hall (20,000 square metres), with 13-metre wide rolling doors and rampless rail and road connections—with a further 10,000 sq.m open areal. It is planned to have this operational in September 1975, when some 300,000 tons of containers and pallets will then be handled in transit. A gatehouse will control and guide this inland 'extended arm'

of the large Bremerhaven container terminal. The cost will amount to some DM 23 millions.

The shed area for the constantly increasing ro-ro traffic in Bremen's Europa-harbour has been increased from 13,000 sq.metres (in 1974) to 23,000 sq.metres, being so placed into service in January 1975.

## Port studies

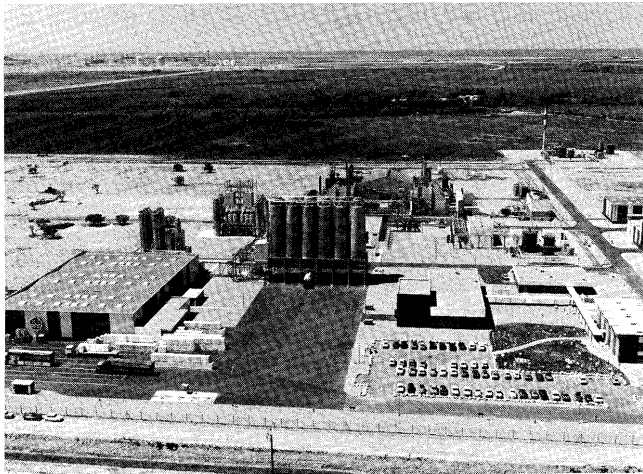
Bremen (Bremen International 1/2-1975):—The Bremen Institute for Maritime Economics reveals, in its latest edition of "Statistik der Schifffahrt/Shipping Statistics", that the United States of America, within the period 1973–77, will invest a total of 404.3 million dollars in the following 8 ports: New York—\$173.3 millions; San Francisco—\$77.6 millions, and a further 20 to 30 millions each for Oakland, Richmond, Long Beach, Seattle, Portland/Oregon and Baltimore. \$376.8 millions are intended for new trading installations, of which alone \$341.8 millions will be for new container installations and \$27.5 millions for modernising existing handling installations.

The 2nd edition, which has just appeared, of "Container Facilities and Traffic" gives, in 189 pages, detailed information in the English language of the container installations, facilities and turnover figures of 89 ports—from Amsterdam/Europe to Wellington/New Zealand. A very precise source of information. The publication can be obtained for DM 35,—direct from the editors: 'Bremer Ausschuss für Wirtschaftsforschung, 28 Bremen 1, Tivoli-Haus'.

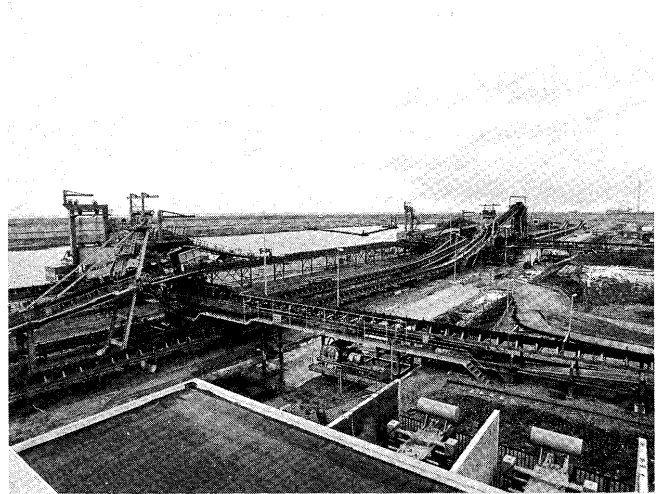
## Canal re-opening summer 1975

Bremen (Bremen International 1/2-1975):—If statesmen, politicians and diplomats can now be as successful in their efforts towards conclusions as have been the German lifting-vessels in the large Europe-Asia canal from Suez to Port Said, then shipping will again be able to flow along the 1859–1869 constructed waterway which has been blocked—but not for the first time—since the Arab-Israel war of 1967. Wrecks were raised and removed by the German floating cranes "Energie" and "Ausdauer" as long ago as 1957. This time it was the turn of the Bremerhaven lifting-vessels "Roland" and "Thor", which freed the 165 kilometre-long waterway, stretching from the Mediterranean to the Red Sea, of ten large and fiftyfive smaller sunken ships—being assisted in the lighter work by the American lifting-vessels "Crendal" and "Crilly"—as the Suez veterans "Energie" and "Ausdauer" are now named, since operating under the USA-flag as from 1969.

European shipping circles prophesy that, with the expected reopening of the Suez Canal in the coming months, the waterway will not again attain its previous importance—except for those countries of destination situated around same. The President of the EEC Shipowners Association, K.H. Sager, asserted: The Canal dues could be higher than the only one day longer trip around the Cape of Good Hope—which, as long as no firm political guarantees exist, is less fraught with danger for, for instance, valuable container ships, which could possibly again be trapped for a period of years in any new outbreak of hostilities.



Fos: factory of Imperial Chemical Industries (Port Authority of Marseilles)



Ore handling site in the Europoort (Rotterdam)

## Dar port position better

Dar es Salaam, Tanzania (Bandari Zetu, Organ of the East African Harbours Corporation, January/February, 1975):—The Port of Dar es Salaam is continuing to record an upward trend in operational performance in a bid to improve and sustain maximum productivity, the Acting Deputy Port Manager, Mr. P. M. Cholobi has disclosed.

Mr. Cholobi said that the operational performance at the port since December last year has been an all round record with the maximum ship waiting time of less than a day, and in most cases nil.

“Any ships seen waiting during that period were doing so, in most cases, at their own Convenience,” he said.

The easing of the situation had been hastened by the Government directive issued to all importers last year to clear their goods by November 15th.

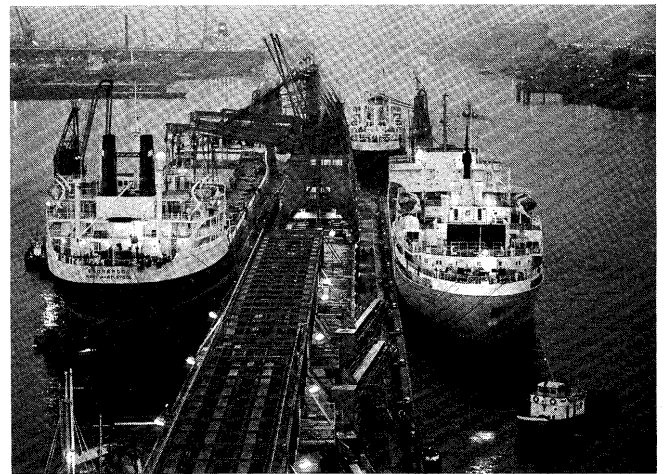
Commenting on the recent reduction of surcharges to 20% and 10% for Imports and Exports respectively by the Europe-East Africans Conference Line, Mr. Cholobi said it was a welcome step towards the right direction, although the retention of any percentage of surcharge at the present moment was irrelevant and has no justification.

However, he gave an assurance to port users that the port would go all out to ensure that the remaining surcharge is removed completely. This of course, would be subject to importers responding positively for greater co-operation.

Despite the present fluidity in the port's transit facilities, Mr. Cholobi cautioned importers, Clearing and Fording Agents, against being complacent as at the moment delivery of goods was being delayed due to delay in documentation.

“In this connection I specifically appeal to these directly involved in the lodgement and processing of documents, including the Banks and Customs and those dealing with the physical transportation of goods from the port to do all that is in their power to co-operate with the port,” he emphasised.

Meanwhile, the Engineering section at the port is giving priority to repair and maintenance works at the back of port installation. These include renewing the badly corroded drainage system around the cargo stacking area.



Grain terminal Botlek (Rotterdam)

## New port at Pending

Kuching, Sarawak, East Malaysia, 18th March (Kuching Port Authority):

### Object

The expansion of Kuching Port at Pending was undertaken to provide the additional capacity needed to cope with the increasing volume of cargo traffic. Dry cargo tonnage handled in 1974 already exceeded the 500,000-ton mark. Complementing Tanah Puteh Port (300,000 tons per annum), Pelabuhan Datuk Sim Kheng Hong (350,000 tons per annum) increases the capacity of Kuching Port from 300,000 to 650,000 tons per annum. In keeping with the development in shipping, the facilities have been geared to deeper draughted pallet ships and feeder container vessels of up to 25 feet as minimum depth alongside the wharf at lowest low water is 28 feet. But conventional ships will also benefit from the close proximity of the Transit Shed, which is separated by a 60-foot apron from the ship alongside the wharf. This coupled with the added capacity should enable vessels calling at Kuching Port to turn round much faster than hitherto possible.

(Continued on Page 48)





"ALANODE"  
Steel Sheet Pilings

Cathodic Protection

# ALANODE

**ALUMINUM - GALVANIC - ANODE**

PAT. No. 254043

PAT. No. 446504

**Applications :**

- Steel Sheet Pilings
- Steel Pile Piers
- Sea Berth, Platform, Rig

**Advantages :**

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



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

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

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

Sole Agent : MITSUBISHI CORPORATION



## Steel Does Not Corrode!

NAKAGAWA'S CATHODIC PROTECTION AND

INORGANIC ZINC RICH PAINT **ZINKY10**

*Protect Your Harbour Structures from Corrosion!*



Oil Unloading Pier protected by Cathodic Protection

Engineering service, survey design,  
installation, supervision, maintenance  
and sales of anti-corrosion materials.

Head Office: 2-2, KAJICHO 2-CHOME,  
CHIYODAKU, TOKYO

Branches: OSAKA, NAGOYA, FUKUOKA  
HIROSHIMA, SENDAI  
NIIGATA, SAPPORO  
SHIKOKU (TAKAMATSU)  
CHIBA, OITA, MIZUSHIMA  
OKINAWA

**Nakagawa Corrosion Protecting Co., Ltd.**



Kobe:—Cunard's S.S. "Queen Elizabeth II" berthed at the "Port Terminal" of Kobe on March 5, 1975.

(Continued from Page 46)

#### Facilities

Situated on a 21-acre triangular site at the confluence of Sungei Sarawak and Sungei Kuap, the main facilities consist of an 860-foot long marginal wharf on the Sungei Kuap side; 80,000 square feet covered storage 60 feet behind the wharf; and 100,000 square feet open storage on a parallel plane to the Transit Shed across a 110-foot roadway. Ancilliary facilities include a berth for tugs; a workshop; a first aid and fire station; and a canteen.

#### Bilateral Aid

Finance was provided by the Government of Japan for the project survey, investigations and design. The completed design was handed over to the Authority for implementation.

In this connection, it would be fitting to record an appreciation to the Sarawak Government, the Federal Government and the Government of Japan for the assistance rendered.

#### Construction Period

Construction which officially began on 7th September, 1971 was successfully completed on 7th March, 1975.

#### Finance

Developed at a total cost of about M\$23 million, the project (including equipment) was financed by a Sarawak Government grant of M\$595,000 by way of land, an Asian Development Bank loan of U.S.\$5 million and the balance from the reserves of the Authority.

In this connection, the Authority wishes to record its appreciation to the Sarawak Government and Asian Development Bank for their financial assistance.

# Townsville—Gateway to Australia's North

Reprinted from  
**Townsville Daily Bulletin**  
 7th February, 1975

**In a little more than 100 years, Townsville has grown from a primitive pioneering outpost to Australia's largest tropical city and second city in Queensland.**

This progressive, confident and rapidly-expanding city, with a population of more than 81,000, has become the gateway to Australia's Great North.

Because it has one of the most modern ports in Australia, it also is becoming rapidly the gateway to the South—a significant landbridge linking Asian, Pacific and American ports with centres throughout Australia.

As Australia continues to strengthen relatively new trading and cultural ties with Asia, particularly Japan, the port of Townsville gains status.

It is the major northern port for Australia—and Australia constantly is turning north for trade. With vast agricultural and mineral resources, Australia has emerged as a major Asian-Pacific trader.

Japan is Australia's major trading partner and Australia is Japan's best trade partner after the United States of America.

Japan depends on Australia for iron, coal, manganese, bauxite, alumina, beef, mutton, wool and salt. We are second-ranked exporters to Japan of nickel, aluminium and sugar.

The two-way trade between Australia and Japan has increased 500 percent during the past 10 years until today it is worth almost \$3000 million a year.

The Japanese experience has made Australia even more conscious of its South-East Asian neighbors and Townsville is ideally situated and equipped to meet future trade with our northern neighbors.

The port, situated on Cleveland Bay, handles nearly two million tonnes of cargo annually and can accommodate ships of up to 59,000 tons (60,000 tonnes) deadweight.

It has roll-on, roll-off facilities and caters for the bulk loading of sugar and minerals, as well as refrigerated berths for meat.

The foresight and competitive character of the Townsville Harbour Board is tangibly reflected in the recently installed \$1,500,000 container crane which augments the already formidable port assets.

## Deep water at berths

With deep water of 12.2 metres at the container berth, and an adjacent area of more than 100 acres for the necessary cargo handling services, Townsville finds itself in the enviable position of having one of the most strategic and potentially viable container ports in the Southern Hemisphere.

Townsville's container crane has a lifting capacity of 60 tonnes to handle all sizes of containers up to 12.1 metres.

The container crane is of unique design and apart from conventional containers, it is equipped with special spreaders to handle metal ingots in loads of 30 tonnes. These can be lifted directly and placed exactly in position in the ship, slewing the load through 90 degrees if necessary.

A 7.5 cubic metre capacity grab is used for bulk handling. The crane's maximum lift height from the water line is 45m., with an outreach from the wharf of 32m. It can also service to 24m. into the container stacking area on the wharf at a direct container placement rate of more than 20 per hour.

The Townsville Harbour Board is continuing its dynamic policy of expansion, with a programme for progressive modernisation of existing facilities, land reclamation and dredging.

With its proximity to international shipping lanes, Townsville can now be the terminal port for ships which would otherwise have to travel further down the Australian east coast.

## Saves costs

By terminating at Townsville and having freight sent South by rail or road, ship owners—especially those interested in trade from Japan, China and North American ports—can save on sailing time and bunker fuel costs and avoid cargo handling time in the more congested Southern ports.

Improved road and rail connections with the Southern States make this an increasingly attractive proposition.

The value of this system in economic terms for shipowners alone is high-lighted when it is realised that freighters from Japan, for example, would be able to make an extra five voyages each year if they terminated at Townsville.

The flow of cargo through Townsville, however, is not all one way. The value of exports from the tropical North has grown from \$542 million in 1971 to \$1285 million, out of a national total of \$6215 million in 1973.

This included minerals (copper, silver-lead, zinc), sugar, molasses, meat and wool. Port authorities are determined to keep abreast of the increasing trade being generated by such companies as Mount Isa Mines Limited and Queensland Nickel Ltd.

Townsville already has a copper refinery and Mount Isa Mines has ordered a feasibility study to examine the viability of building a zinc refinery as well. If the project proceeds, it would be the most modern zinc refinery in the world.

It would be yet another chapter in the incredible non-stop growth of the city.

## City is balanced

Townsville will also benefit from the proposed mining of vast deposits of rock phosphate in the vicinity of Duchess, in North-Western Queensland. If plans go ahead, as expected, in 1975, the phosphate will be railed to Townsville

# AQUAPOLIS—Floating City of the Future

## Aquapolis Pavilion for EXPO '75, Okinawa

Aquapolis, the world's first floating city, was constructed at the Marine Structure Assembly Dock of Hiroshima Shipyard, Mitsubishi Heavy Industries, Ltd., and was launched on February 25. It was towed from Hiroshima to Okinawa, and was officially delivered on May 13, 1975 to the Japan Association for the International Ocean Exposition, Okinawa, 1975. As one of the major exhibits sponsored by the Japanese Government, it will serve as a symbol of the EXPO '75, to be held in Okinawa from July 20, 1975 to January 18, 1976.

The Aquapolis Floating Pavilion is an official project sponsored by the Japanese Government. The basic theme is entitled "The sea we would like to see." Its purpose is to enhance our awareness of the ocean's fundamental importance and to depict aspects of its future relationship to mankind.

### Structural Design

The Aquapolis Pavilion is designed to float on a semi-submersible marine platform just off the coast of Okinawa. As far as is known, it will be the biggest marine structure of its kind ever built. Its purpose is to illustrate the future development of offshore urban communities.

Design provisions have been made to accommodate a mass influx of visitors, with emphasis placed on structural safety, harmony with the natural environment and to be entirely free of pollution. The following design guidelines were observed:

1. Adequate space and facilities are to be reserved for visitors. The pavilion should have a high degree of wind and wave stability.
2. Sufficient structural strength to withstand the force and load factors arising from the action of wind and waves, especially regarding fatigue and repeated buffeting.
3. Sufficient draft and mooring to withstand wind and wave forces.
4. To be moveable within the range of the mooring chains, and to have no internal propulsion. To be stable against all conceivable environmental factors.
5. Operation must be completely pollution-free.
6. Adequate safety facilities must be provided for prevention and control of fire, emergency exiting and prevention of all pollution.
7. Complete tank and structural model testing to be carried out prior to construction to confirm as far as possible the stability, strength and mooring characteristics.

for shipment.

There has been tremendous growth in Townsville but the growth has not been uncontrolled. Indeed, a quick look at the total fabric of the city will quickly reveal the significant and corresponding expansion in the realms of health, education and social and recreational facilities.

The city boasts a comprehensive hospital complex, the James Cook University which is expected to become one of the world's leading centres of tropical medicine, a teachers' training college and a technical college.

A \$1 million dental therapists' training centre is expected to take its first intake of trainees in February, 1976.

The giant Lavarack Army barracks and the RAAF attachment at Garbutt air base give added impetus to the already bustling commercial hub of the city.

Townsville is blessed with year-round sunny weather. In fact it averages around eight hours of sunshine a day. Yearly average rainfall is a moderate 45 inches and the average temperature range is 21 deg. C to 28 deg. C.

Tourism is playing an increasingly important role for Townsville as the city is ideally situated as a stepping off port for the Great Barrier Reef resorts and the luxuriant tropical forest attractions.

Off-shore from Townsville is Magnetic Island, a popular vacationing and picnic spot for locals and visitors alike. The Barrier Reef proper is only 40 miles (64 kilometers) distant from Townsville and many fishing trips emanate from the port.

### Backing of State

When Townsville struggled to establish itself back in 1864, it was as an independent trading village and port, to service pastoral properties recently taken up in the district.

Four years were to go by before the Government of the day formally recognised that Townsville existed.

This was a complete contrast to the politics of today, which recognises that Townsville is of prime importance to the welfare of the State.

The port and the local industries have the considerable backing of State Government departments such as Railways, Harbours and Marine, Commercial and Industrial Development.

These State services, plus Local Authorities such as Electricity, Harbour and Development Boards and Authorities, work together to ensure that Townsville is geared to accept new and growing industries and services.

With rich mining, agricultural and pastoral industries in its hinterland, Townsville has been built on a broad base.

A key to the growth of the Townsville area is efficient handling of the massive two-way flow of goods through the port.

Constant research into materials handling techniques and detailed liaison with all segments of the community who use the port, allows the Townsville Harbour Board to be prepared at each stage of Townsville's growth.





Mitsubishi's Aquapolis afloat

8. To be built in Honshu (mainland Japan) and towed to Okinawa for installation.

#### Cost of Construction

Approximately yen 10 billion, or US\$33 million.

#### Dimensions

Large lower hull	104m(l) × 10m(w) × 6m(h)
Small lower hull	56m(l) × 10m(w) × 6m(h)
Large columns	12 each of 7.5m dia.
Small columns	4 each of 3.0m dia.
Horizontal braces	1.8m, 3.0m dia.
Diagonal braces	1.8m dia.

#### Draft and displacement

State	Draft	Displacement
Towing	5.4m	17,240 tons (approx)
Floating	5.8m	18,600 tons (approx)
Semi-submerged	20m	28,000 tons (approx)
Semi-submerged (storm condition)	12.5m–15.5m	23,100 tons~ 25,000 tons

#### Basic Idea

The Aquapolis is the center attraction of the International Ocean Exposition due to its gigantic construction

and futuristic nature. Two kinds of displays are presented: The entire structure is considered as a display, with the interior regarded as the second display theme. Exhibits are regarded as a third theme. These are defined as follows:

1. Utility of the Aquapolis as an environmental facility aiming at a new order of living with rich natural dynamics and human artistry:
2. Precision control system whereby the environment can be regulated.
3. A healthy, comfortable and safe living space within a natural ocean environment.

#### Display Contents

##### Interior of escalator tube

The depth, temperature and clarity of the sea are expressed by harmonies of music and illumination.

##### Marinorama

This room utilizes mirrors to express the awe, amazement and mystic feelings of primitive man. Sound, images and illuminating equipment are utilized.

##### Sea forest

This space introduces in an easily understandable way the utility facilities necessary for the marine city of the future. The audience can observe the sewage disposal system utilizing chlorella—a microbe strain—in the guise



## THE MOST CONVENIENT HOTEL FOR AIR PASSENGERS

# TOKYO AIR TERMINAL HOTEL

### HOTEL

Single Room with Shower .....	\$11.80
Single Room with Bath .....	\$15.50
Studio Twin Room with bath .....	\$19.70
Standard Twin Room with Bath .....	\$23.50
☆ Completely sound-proofed and air-conditioned rooms.	
☆ TV and information radio sets in each room.	

### RESTAURANTS

AVION .....	French cuisine	3rd floor
YAMATO .....	Japanese cuisine	3rd floor
SAIHO .....	Chinese cuisine	4th floor
COCKTAIL LOUNGE .....		3rd floor



## TOKYO AIR-TERMINAL HOTEL

3rd floor, Tokyo International Airport Terminal Bldg. For reservations Tel: 747-0111 Cable: AIRPORTEL

of enjoying a promenade in the beautiful Sea forest.  
Sea experience

This space is a coupling of display in which images and sound are used, and neighboring utility space where the audience may engage in diversions. At a height of 20m above sea level, visitors can enjoy the vastness and beauty of the ocean, the hugeness of the Aquapolis and ocean breezes.

## World Bank Mission Visits Karachi Port

Karachi, Pakistan (K.P.T. News Bulletin, December 1st, 1974):—A three member I.B.R.D. Mission led by Mr. John Burns and comprising of M/s. Denis Perfrement and J. Rahkonen visited the Karachi Port during the first week of November, 1974, and made a detailed appraisal of the development projects in progress. They expressed great satisfaction on the progress achieved and the phasing of the K.P.T. project works.

The World Bank Group have provided two interest-free Credits to Pakistan for the development of Karachi Port. The first Credit relates to the Construction of Four Shipping Berths and two Transit Sheds at Juna Bunder, Remodelling of West Railway & Storage Yards, and the Reconstruction of the Napier Mole Road Bridge. Tenders for Juna Bunder Shipping Berths and Napier Mole Bridge have been received and are being scrutinized by the

Consulting Engineers. Tenders for the West Railway & Storage Yard complex have been invited on an international competitive basis. The second Credit relates to the Development of 75,000 D.W.T. Oil Tanker Berth, Capital Dredging of the Harbour External Approach Channel and procurements of a Trailer Suction Dredger. Tenders for the Oil Tanker Berth will be invited during December, 1975. The K.P.T. projects have been planned and phased on most up-to-date critical path procedures. The year 1975 will witness peak activity on major construction works.

The World Bank team highly commended the Construction Department, K.P.T., for their outstanding development performance.

## Port contributes to relief fund

Karachi, Pakistan (K.P.T. News Bulletin, January 15th, 1975):—The Board of Trustees of the Port of Karachi at its meeting held on 4th January 1975 expressed its profound grief at the heavy loss of life and property in the tragic earthquake disaster in Swat and offered its deepest sympathies to the bereaved families. The Board sanctioned a contribution of Rs. 5 lacs towards the Prime Minister's Relief Fund from the revenues of Karachi Port Trust.

In response to an appeal from Chairman, Karachi Port Trust, all officers, staff and workers of Karachi Port Trust have also volunteered one day's pay towards the Prime Minister's Relief Fund for the relief of earthquake victims.



$$c^2 = b^2 + a^2?$$

Exactly. The square on the hypotenuse equals the sum of the squares on the other two sides. You see NKK is a kind of right-angled triangle insofar as it has three sides to its business, and the activities of two of them are closely related to those of the third.

Thus the world's sixth largest shipbuilder occupies

one side, with heavy industries on the second side and steelmaking on the hypotenuse...three NKK divisions converging at an angle but working in parallel.

Sharing their individual expertise, they have helped to mould NKK in its present form—a strong, rectilinear structure and the world's fifth largest steelmaker.



Overseas Offices ☐ New York: Telex: 233495 (NKKNY) USA Tel: (212) 826-6250 ☐ Los Angeles: Telex: 910-321-2456 (NKK LA) USA Tel: (213) 624-6651-3 ☐ Duesseldorf: Telex: 8587839 (KOKANDSSD) GERMANY Tel: 27440-27449 ☐ London: Telex: 262639 (KOKANNKLDN) ENGLAND Tel: 01-481-2448/9 ☐ Hong Kong: Cable: STEELTUBE HONGKONG Tel: 453192/3 ☐ Singapore: Telex: RS21308 (NKK SP) SINGAPORE Tel: 376729-376731

**NKK**  
NIPPON KOKAN

Head Office: Tokyo, Japan  
Cable: STEELTUBE TOKYO  
KOKANSHIP TOKYO  
Telex: J22578, J24391



# MITSUI Computer Control System for Container Terminals

## Huge piles of data!

### How do you process them for efficient handling of containers?

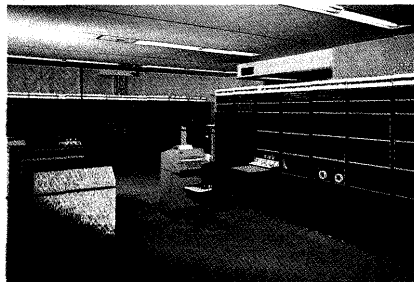
Our System can help solve your problems and enable you to reap the true benefits of container transportation.

Developed in 1972, this System has proved its efficiency at the busy Ohi Pier, Port of Tokyo, and we are now prepared to aid you in solving your terminal problems, particularly those in the fields of cargo information and operations systems.

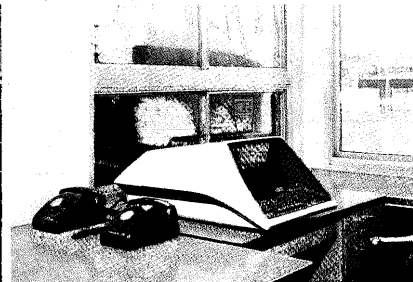
### Major Application Software

1. Planning Support & Management System
2. Receiving/Delivery Operations System
3. Loading/Unloading Operations System
4. Marshalling/Shift Operations System
5. Report Generating System
6. Inquiry System
7. Back up & File Control System

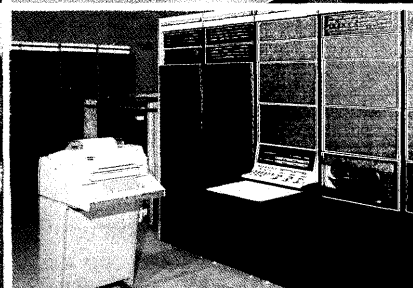
COMPUTER ROOM



GATE OFFICE



OPERATION ROOM



CENTRAL CONTROL UNIT



## MITSUI SHIPBUILDING & ENGINEERING CO., LTD.

Head Office: 6-4, Tsukiji 5-chome, Chuo-ku, Tokyo, 104 Japan

Cable: "MITUIZOKEN TOKYO", Telex: J22924, J22821

Material Handling Machinery Sales Department Tel. (03) 544-3677

Systems Engineering Department Tel. (03) 544-3272

Overseas Offices: New York, Los Angeles, London, Duesseldorf, Hong Kong, Singapore