TRANSPORTING ENERGY THROUGH BRIDGESTONE TECHNOLOGY!

Off-shore terminals increasingly larger! Tankers are gradually becoming larger in size. This trend requires hose of the newest technology: larger bore, greater working pressure, higher flow velocity, etc. With 20 years of experience, Bridgestone marine hose has won the trust of 33 S.P.M. out of 125 in the world. Available up to 24" bore hose. Even larger? We are willing to consider—drop us a line!
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 leftovers. 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 swiveling upper lower 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.

Contact PACECO or the office nearest you.

Headquarters Office—PACECO, Dept.24-H, 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.
90 years of experience, a total integration of worldwide facilities, and a fast, friendly service have made NYK what it is today - one of the world's largest shipping company.

The latest figures speak for themselves. 338 vessels, or over 13 million DWT of shipping working for NYK. Part of this, an active fleet of 41 tankers of which 14 vessels are over 200,000 DWT.

No other shipping company is growing faster. In the last 18 months alone we have added over 3 million DWT to this fleet, while introducing technical innovations through as many as 31 new ships (2.75 million DWT) in the last three years. And we have spread into new services. NYK containerships now serve six of the world's main routes.

All this growth has one purpose - to help us serve you better.

NYK LINE

Head Office: Tokyo, Japan

London Branch: Beaufort House 15, St. Botolph Street, London EC3A 7NR Tel: (01) 283-2099

New York Branch: Suite 5031, One World Trade Center, New York, N.Y. 10048 U.S.A. Tel. (212) 466-2800

Agents: At all major ports throughout the world
In the New York-New Jersey Port there is good reason to harbor your ships and your cargo at a Port Authority Marine Terminal.

Our aim has been and will continue to be: To give your ships and your freight the benefits of the most efficient, most modern Marine Terminals in the world. These terminals are designed to accommodate all the latest cargo handling techniques including containerization, unit loading and conveyor operations.

We invite you to join the innovators who handled more than 700,000 containers and millions of tons of unitized cargo at the Port Authority facilities in 1973.

If your business is moving cargo shouldn't you consider a Port Authority Terminal?

Call or write
THE PORT AUTHORITY OF NY & NJ
Marine Terminals Department
Room 71 E, One World Trade Center, New York, N.Y. 10048 - (212) 466-7982
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. Altvater  
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  
The Port of Antwerp

R.O. Ajayi  
Deputy General Manager  
Nigerian Ports Authority

Y.M. Raja Azam  
Chairman  
Kelang Port Authority

Robert Boeuf  
General Manager  
The Port of Dunkirk Authority

R.W. Carr  
Chairman  
Auckland Harbour Board

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

P.K. Kinjanui  
Chairman  
East African Harbours Corporation

Fumio Kohmura  
Vice President  
The Nagoya Port Authority

A.S. Mayne  
Chairman  
Melbourne Harbor Trust Commissioners

Ben E. Nutter  
Executive Director  
The Port of Oakland

Bruce Procope  
Chairman  
The Port Authority of Trinidad and Tobago

Thomas T. Soules  
Port Director  
The Port of San Francisco

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

---

### CONTENTS

<table>
<thead>
<tr>
<th>IAPH Head Office Announcements:</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretary-General asks for Members' cooperation to the New Dues from 1976—10th Conference Theme Under Consideration—Mr. Katsuya Yokoyama Leaves IAPH—Safety in Congested Waters Looked into by E.M.P.A.—ICS Port Code—Mr. Bastard Moves to Paris—Membership Directory '76 Now on the Go—ICC met at Madrid—2 decades of IAPH featured—Mr. Malinowski of UNCTAD dies</td>
<td>7~13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Topics:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Seaway—Debt and tolls are the issues (Port of Toronto News)</td>
</tr>
<tr>
<td>Heroic rescue efforts by tug’s crew are commended (Northland Harbour Board, New Zealand)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ports:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port of Abu Dhabi, U.A.E.</td>
</tr>
<tr>
<td>Port of Baltimore Impact Set at $2.5 Billion Annually</td>
</tr>
<tr>
<td>Cargo Tonnage Strong As Ever in 1974 (The Port Authority of NY &amp; NJ)</td>
</tr>
<tr>
<td>Costliest Re-Construction Project Completed (Melbourne Harbor Trust)</td>
</tr>
<tr>
<td>The Ports of Philadelphia</td>
</tr>
</tbody>
</table>

| Orbiter Probe (International News) | 31~52 |

<table>
<thead>
<tr>
<th>The Cover:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ships along Berths 5-9, Port of Abu Dhabi. See also story on page 17.</td>
</tr>
</tbody>
</table>

---

Price US$ 2.00 per copy  
US$ 20.00 per year

PORTS and HARBORS—AUGUST 1975 5
The Port of Brisbane goes ahead...

$100 million development

Planning has already commenced on a new $100 million dollar development. The new Port of Brisbane, in 1977, the first facilities including container/RORO type wharves and road/rail connections are expected to be operational. The Port will be capable of taking ships of 60,000 dwt.

The site is The Fisherman Islands at the mouth of the Brisbane River, less than 16 km from the heart of the City. They lie along the western shores of Moreton Bay and flank the deep water channels of the Port of Brisbane. They are separated from the mainland by a 200 metre wide stretch of shallow water.

There are three islands in the group. Extensive reclamation is in progress to consolidate the islands into a single land mass which in the initial stages will yield about 150 hectares of usable space. In addition to this space, an extremely large expanse of land is easily recoverable from the shallow water on the eastern and southern fringes of the islands, also to serve the future needs of the port.

It is anticipated that the new Port with its modern facilities will attract many more international shipowners. This—coupled with Cairncross Dockyard and its support facilities which form the nation’s largest commercial complex of its type—should make The Port of Brisbane...first port of call in Australia.

All enquiries to:
General Manager
PORT OF BRISBANE
Box 2195, Q.P.O. Brisbane, Australia 4001
Queensland Telegraphic address: ‘Harbours’ Brisbane
Phone: 24 0717
In accordance with the Bill No. 1 relating to the New Dues from 1976, which was adopted at the 9th Conference in Singapore, the Secretary-General has circulated letters dated June 5, 1975, to members of the Association asking for their cooperation with the raise of the membership dues from 1976. (Full text of the Bill No. 1 is reported in the May-June joint issue of this journal).

In his letter, Dr. Sato stressed that the revision of the dues would be an essential mile-stone toward the achievement of the self-sufficiency of the Association, the goal of which is set at January 1st, 1978, being originated from the Association’s resolution adopted at the 8th Conference in Amsterdam in 1973.

Regular Members are kindly requested to give their continued cooperation with the matter which has been decided upon by the Conference of the Association. The followings are reproduction of letters and enclosure Forms (A) and (B), while the Bill No. 1 which has been attached to each of letter, is omitted in this edition.

1) Letter addressed to Regular Members, who had replied to the Questionnaire on the Tonnage

Dear Sirs:

A Bill relating to the revision of Section 5 of the By-Laws of our Association which provides the dues scheme, has been proposed to the 9th Conference held at Singapore in March this year, and been unanimously approved by the members and duly adopted by the Conference to become effective from and after January 1st, 1976. This will duly be publicised in the May-June Joint issue of our journal, while a draft of which was carried in the February issue of the journal.

We are confident that this revision will be an essential mile-stone toward the achievement of the self-sufficiency of our Association, the goal of which is set at January 1st, 1978 being originated from the Association’s resolution adopted at our 8th Conference in Amsterdam in 1973, development of which as reported in the June 1974 issue of the journal.

The basic point in this revision is that the new dues for Regular Members shall be assessed upon the annual tonnage handled by each of member port.

In this context, may we extend our sincerest thanks and appreciation for your kind cooperation in supplying us with the annual cargo tonnage handled at your port in response to our Questionnaire dated November 11, 1974 (No. 5C-32-75).

May we take this opportunity to reproduce the tonnage figures you have kindly given to us on the attached sheet form and ask you to return the form to us until the end of July 1975 so that we can send you a bill toward the end of this year for your membership dues for the year of 1976 in accordance with the revised Section 5.

Just in case you find it necessary to alter the figures as mentioned in the form, please let us know by writing to this office at your early convenience.

Anticipating your continued cooperation, and with our best regards,

Yours very truly,

Hajime Sato
Secretary-General

2) Letter addressed to Regular Members, who did not answer to the Questionnaire on Tonnage

Dear Sirs:

A Bill relating to the revision of Section 5 of the By-Laws of our Association which provides the dues scheme, has been proposed to the 9th Conference held at Singapore in March this year, and been unanimously approved by the members and duly adopted by the Conference. And, therefore, the Revised Section 5 shall become effective from and after January 1st, 1976.

We are confident that this revision will be an essential milestone toward the achievement of the self-sufficiency of our Association, the goal of which is set at January 1st, 1978 being originated from the Association’s resolution adopted at our 8th Conference in Amsterdam in 1973, development of which as reported in the June 1974 issue of the journal.

The basic point in this revision is that the new dues for Regular Members shall be assessed upon the annual tonnage handled by each of member port.

In this context, as repeatedly reported in the past issues of our journal, the questionnaire on tonnage handled has been circulated to our members (No. 5C-32-74, dated November 11, 1974) and reminder letter (No. 5C-38-74, dated December 20, 1974) asking for their cooperation in supplying the tonnage figures to the Head Office.

However, we could not have the pleasure of receiving replies from you in this regard.

At this stage, therefore, we would like to ask for your cooperation in supplying us with such figures for the (Continued on Page 9 Bottom)
Notice of Membership Dues Unit

To: The Head Office
   The International Association of Ports and Harbors
   Kotohira-Kaikan Building, No. 1 Kotohira-cho
   Minato-ku, Tokyo 105, Japan

This is to notify you that our organization’s annual cargo tonnage as categorised in the Revised Section 5 of the By-Laws of the International Association of Ports and Harbors which is to become effective on and after January 1st, 1976 and the number of membership unit of our organization in the International Association of Ports and Harbors are as follows:

I - Tonnage Handled:

<table>
<thead>
<tr>
<th>Items</th>
<th>Metric Tons (a)</th>
<th>Weighted Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>General cargo</td>
<td>(a) x 100%</td>
<td></td>
</tr>
<tr>
<td>Bulk cargo</td>
<td>(a) x 20%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II - New Membership Unit/s:

[Enclosure Form (B): Attached to the Letter 2]

Notice of Membership Dues Unit

To: The Head Office
   The International Association of Ports and Harbors
   Kotohira-Kaikan Building, No. 1 Kotohira-cho
   Minato-ku, Tokyo 105, Japan

This is to notify you that our organization’s Membership Dues Unit/s for the year of 1976 and after shall be ________ Unit/s, in the light of the provisions contained in the Revised Section 5 of the By-Laws of the International Association of Ports and Harbors which shall become effective on and after January 1st, 1976.

And, undermentioned is the explanations about the characteristics of our organization.

Name of organization:

Signed by:

Date: , 1975
10th Conference Theme are Under Consideration

Suggestions from Members Welcome

The 10th Conference of IAPH convenes in Houston, April 24-28, 1977, and the theme of the conference is to be discussed and finalized by the Executive Committee which is meeting at Curacao next April.

Some suggestions and comments concerning the forthcoming conference are already being turned in to Secretary General in Tokyo.

"Suggestions as such from members are positively welcome," says Secretary General Sato. "All contributions of constructive thoughts will be duly taken into consideration by the Executive Committee through this office."

"The information regarding the Houston Conference will all be published in this journal, from time to time, as they may develop to be decisive. (MK)"

(Continued from Page 7)

assessment of your membership dues for the coming years. Enclosed herewith is the Form (A) in this respect and we would like to ask you to fill in the necessary items and return it to us by the end of July 1975.

May we reproduce here some of the provisions of the Section 5, for your reference in the hope of facilitating your replying to us.

Section 5 . . . . . .

"For the purposes of this section, the term 'tonnage handled' shall be deemed to mean the cargo tonnage in metric tons which passed in and out of the member's port or the port's boundaries, whether ocean going, coastal, or by lake, river or canal. Such tonnage shall be calculated on the weighted formula of 100% for general cargo and 20% for dry and liquid bulk cargo.

"Notwithstanding the foregoing, those Regular Members consisting of public and governmental agencies, or whatever kind, performing purely governmental functions and not charged with any duties relating to the operation of the port, shall not be subject to membership dues based upon tonnage handled and shall instead pay membership dues of US$500.00 per annum per subscribed membership unit. For purposes of this section, Regular Members who contract with others for the operation of their port facilities shall be subject to membership dues based upon the tonnage handled in that port.

When you deem that your organization is to be classified as a member who shall fall into the definition as provided in the underlined part of the above, in the light of the provisions of this Section, you are kindly requested to give your explanation for your taking the decision to this effect by using the Form (B).

This request is necessary for us because we may not have proper understanding about the characteristics of your organization.

Here, we would like to have your favorable consideration and continued cooperation on the matter supporting the decision taken by the Association, and give us your reply by the end of July 1975.

We shall be sending you a bill for your membership dues for the year of 1976, based upon the reply given by you, in accordance with the revised Section 5 of the By-Laws toward the end of this year. Therefore, we would like ask you to take this revision of membership dues into your budget planning for the coming years.

Anticipating your continued cooperation with us,

With best regards,

Yours very truly,

Hajime Sato
Secretary-General

3) Letter addressed to Associate Members
Dear Sirs:
A bill relating to the revision of Section 5 of the By-Laws of our Association which provides the dues scheme, has been proposed to the 9th Conference held in Singapore in March this year, and been unanimously approved by the members and duly adopted by the Conference.

And, the revised Section 5 is due to become effective from and after January 1st, 1976.

The situation in this regard will be reported in the May-June Joint issue of our journal, while a draft of the Bill and other information have been publicized in the February issue and other issues of the journal.

We are confident that this revision will be an essential milestone toward the achievement of the self-sufficiency of our Association, the goal of which is set at January 1st, 1978, having been originated from the Association's resolution adopted at our 8th Conference in Amsterdam in 1973, development of which as reported in the June 1974 issue of our journal.

Here, we sincerely ask for your special cooperation in supporting the Association's decision in this respect.

May we take this opportunity to request you to take the above decision and the consequent raise of dues into your consideration in taking necessary steps for the change.

Please be advised that we shall be sending you a bill for your membership dues for 1976 in accordance with the revised Section 5 of the By-Laws toward the end of this year.

Anticipating your continued cooperation with us, and with our best regards,

Yours very truly,

Hajime Sato
Secretary-General
Mr. Katsuya Yokoyama Leaves IAPH

1. Message of Secretary-General

June 20, 1975

Dear Member,

Re: Retirement of Mr. Katsuya Yokoyama

I find it rather reluctant to inform you that Mr. Katsuya Yokoyama, my deputy, will leave the Head Office in the end of this month and return to his home company.

Mr. Yokoyama, since his joining us in June 1972 as a full-time senior officer, has been quite actively strived for development of the activities of our Association. Success of our past conferences in Singapore as well as Amsterdam, as you observed in person, owe not a small portion to his talents and ability.

He is also a pioneer in forming up liaison channels with such international organizations like ECOSOC, IMCO and UNCTAD, with the good cooperation and understanding of those people concerned.

He now leaves us and resumes a position in the steamship company from which he has been dispatched to IAPH during the past three years, but I would like to express my sincerest appreciation and thanks for his devotion and contribution to him as well as to you for your kind support for him.

Please be assured, however, that I shall do my best with the help of my deputy, Mr. Masatoshi Kinouchi who has been introduced to you through the March issue of the journal, and my staff members for the continued development of the Association, although we suffer from his leaving us.

With my best regards,

Yours very truly,

Hajime Sato
Secretary-General

2. Message of Mr. Yokoyama

June 20, 1975

Dear Members,

Re: Farewell and thanks

As you are informed by a Secretary-General's message in this edition, now I am sorry I must say good-bye to you and IAPH.

In a few days I will leave the IAPH's Tokyo Head Office and return to the steamship company from which I had been dispatched, although I am inclined to work for IAPH for a long time as an individual.

It was in June, 1972, that I joined IAPH as a Deputy Secretary General, a full-time senior officer, with the consensus of the Executive Committee which met at Lisbon in May, 1972. Time flies indeed. Exactly three years have passed since then. During these three years I have learned much from IAPH, the future usefulness of which, I should say, is beyond description.

Thanks to your great contribution and cooperation, IAPH has been activated to a considerable extent for these years. Owing to this growing development of IAPH, I have been able to carry on the worth-doing-job, from day to day. I have to extend my sincerest thanks to you for your great guidance and encouragement given to me by this time, and at the same time I have to apologize to you for my being unavailable to serve for you any longer.

I am confident that my attachment to IAPH will never turn cold forever after my retirement. As a matter of fact, I will work for the Japanese shipping circle which is intrinsically dependent in business on the ports of the world. Therefore, the strong ties between IAPH, world ports community, and myself will never be shaken off. I sincerely hope to see you again and again either in your country or here in Tokyo. I shall be more than happy if you would kindly drop me a line in care of IAPH Tokyo Office in case you visit Japan in future. I will be glad to be at your disposal anytime you may request.

In closing this, I sincerely hope that you would kindly render to Mr. Kinouchi, my successor as much support as you did to me.

I thank you again for your kindness and sincerely wish you good health, further prosperity and happiness. Good-bye and “Sayonara”!

* * *

With best regards,

Yours sincerely,

Katsuya Yokoyama
Deputy Secretary General
Safety in Congested Waters Looked into by E.M.P.A.

IAPH Members Encouraged to Reflect Opinions

This is a paper presented by the European Maritime Pilot's Association (E.M.P.A.) at the request of the Chairman of the Special Committee on the Legal Protection of Navigable Waterways on the question of "Security in Waters" which involves a number of the problems of major concern to ports.

It was forwarded to President Howe Yoon Chong of IAPH by Mr. Andre Pages, Chairman of the above mentioned Committee and further forwarded here for publication.

Members of IAPH are invited to turn in their candid opinions to Mr. Andre Pages after going over the text of the report, to follow, with a copy to Head Office. (Appendices I, II and III which accompanied the original paper are omitted in this column.) (MK)

EUROPEAN MARITIME PILOT'S ASSOCIATION,

SAFETY IN PILOTAGE WATERS

The present report has been fully agreed upon by the Executive Committee of E.M.P.A (European Maritime Pilots Association), and is supported by IMPA (International Maritime Pilots Association).

It was drafted at the request of the Chairman of the Special Committee on the Legal Protection of Navigable Waterways, (IAPH) in the following circumstances:

In October 1974, an Annual General Meeting of the "Association Francaise du droit maritime", took place in Bordeaux on the subject: "Limitation of responsibility of shipowners for damages occurring in ports and harbours".

It was acknowledged that the views expressed by the Chairman of the above mentioned Subcommittee and by the writer of this report, were basically the same on safety in congested waters. For these reasons, Pilots' Associations were asked to express their views in a report to be submitted to the IAPH Conference (Singapore March 1975).

Action of Pilots' Associations

E.M.P.A. was founded in 1962 by Federations of Pilots of the main European countries. At the moment, it included 12 Members-Countries: Belgium, Denmark, France, Germany, Great Britain, Italy, Ireland, Netherlands, Norway, Portugal, Spain, Sweden.

During the Annual General Meeting of Kiel 1970, following a proposal from the Technical Committee, members unanimously agreed that:

1) The standard of safety in pilotage waters was unsatisfactory.

2) Pilots' Associations were not represented at international Conferences. For this reason, it was agreed that EMPA would get in touch with all Pilots' Associations with the view to creating an international Association. The full support of the U.S.A., South America, Japan (and many others) was obtained, and IMPA was formed in Amsterdam in 1971 and received consultative status in IMCO in 1973.

3) In view of the fact that many ships holding a safety certificate granted by the government of the country in which the ship is registered are in fact unsafe, according to the common standards unanimously agreed by experienced seamen, EMPA decided to circulate amongst its members any complaint concerning ships whose level of safety had been reported to be unsatisfactory.

4) A safety campaign of one week's duration should be organized each year to collect all reports on unsatisfactory conditions and to inform shipowners, underwriters, governments and international conferences. Such safety campaigns were organized at the European level until 1974. For the present year (1975) IMPA Members-Countries from all over the world will participate in a campaign which will take place from the 1st to the 8th March.

The aforementioned resolutions call for some comments:

A)― Despite the efforts made by International Organisations such as IMCO to promote better cooperation between members states and to increase safety, it must be emphasized that international maritime law allows any country to follow its own course of action.

Firstly, by interfering in and possibly thwarting the discussions of special Committees and General Meetings of IMCO before an international Convention is adopted.

Secondly, by ratifying or otherwise any resolution adopted by general sessions.

Thirdly, even if the country has ratified the resolutions, by neglecting to exert any control over ships navigating under their own flag to ensure that they comply with the new rules.

B)― Pilots who are practically concerned, can assert that—in diplomatic terms—results are uncertain. Statistics concerning accidents in pilotage waters show clearly that the percentage by flag has no connection with the percentage of tonnage by flag involved in the total traffic.

This brings up the question of flags of convenience. Pilots do not wish to express views on the financial, social or political aspect of this matter. Their primary consideration is, of course safety.

It must be said although that some ships navigating under flags of convenience have a satisfactory standard of safety, the majority of "substandard ships" are to be found under such flags.

This conclusion would be confirmed by the statistics made by underwriters societies.

C)— Considering the practical aspect of a ship entering any port, it must be emphasized that such a ship will be
considered to be safe, provided that she has been granted a safety certificate issued by the government concerned.

If later on an accident occurs and port installations are badly damaged, her liability is limited to such an amount of the money as is stipulated by the Rules of the 1957, Brussels Convention, or local laws irrespective of the cause of the accident.

In some cases the accident may result in great damage to the port installations, and great inconveniences not only to the Port Authority concerned, but also to every one involved in the shipping industry (agents, stevedores, longshoremen, pilots, fishermen, and so on . . . )

Appendix I gives 3 examples of ships accidents which occurred in the port where the writer works as a pilot, and it would be easy to give many more examples from other ports, but this report would then grow into a heavy book.

D)— It is not within the competence of Pilots’ Associations to interfere in such a difficult subject as the limitation of responsibility, which is a legal question to be discussed between shipowners, lawyers and Port Authorities, but they must point out that whatever result the revision of the present Brussels Convention brings about, a clear difference must be established between ships in normal conditions of safety, and standards ships when such poor permanent conditions can be proved.

E)— It should be pointed out that in many cases, ships are substandard. Not only are they ill equipped from a technical or a mechanical point of view, but often also ill or insufficiently manned.

It is well known that for many years and everywhere, shipowners have great difficulties in recruiting crews, and it is out of the question to analyse here the reason why.

But Pilots Associations are unanimously of the opinion that, whereas some shipowners or some countries have succeeded in maintaining a sufficient level of manning efficiency, a general and sharp decrease in the qualification of seamen prevails, which cannot fail to have a direct effect on safety.

Actions undertaken by Pilots’ Associations to improve safety

Past actions have been reported in points 3 and 4 above. (An EMPA complaint form is set out at Appendix II).

But it must be considered that, whatever the pilots status is (civil servant or self employed), he is, according to the law, an adviser of the Captain and has no right to interfere directly in the control of inland waters for which only the Port Authority is responsible.

However, due to the fact that is the only qualified man to board the ship before entering the port, Pilots consider that in the common interest of the shipping community, it is their duty to improve safety and to avoid, or at least reduce any further damage. For this reason, close cooperation should be established with IAPH with a view to reducing actual damage in inland waters.

For example, Appendix III gives a check list used by the Bordeaux Port Authority for tankers entering Le Verdon and handed by the Pilot to the Captain when boarding. In case of deficiency, the Pilot is requested to inform the Port Authority who has the right according local regulations to take any action to ensure safety.

Conclusion

Assuming that IMCO will provide a useful system of safety control in close co-operation with International Associations, interested in maritime safety, it would seem necessary for I.A.P.H. to provide an efficient system of accident prevention in order to reduce the frequency of maritime casualties.

Gérard DEJEAN
Vice President EMPA

ICS Port Code

On the day of June 16, 1975, the Secretary-General circulated a letter to all members of the Board of Directors, in which he requested them to provide this office by the middle of July with a list of the names of ports in their countries, defining the ports as follows.

"Any location approved by Customs at which vessels can load or discharge cargoes mooring in international trade. In this context the word "international" is extremely important and any port sole involved in domestic trade must be excluded."

To get better acquainted with the background of our request, IAPH members are kindly requested to consult the minutes of the Joint Meeting of Board of Directors and the Executive Committee held on March 9, 1975, at Singapore (see page 29, the May-June, 1975, edition).

It was last February that this Association was requested by the International Chamber of Shipping (ICS) through the Japan Ship Owners’ Association (JSA) to cooperate with ICS in respect to the preparation of a draft port code. As we coincidentally adopted at Singapore Resolution No. 7 endorsing the simplification of documentation for cargoes, it seems imperative for all circles concerned to facilitate simplification.

ICS is now earnestly studying to prepare a draft port code for consideration by Economic Commission for Europe, a subsidiary body of the United Nations Economic and Social Council. We, therefore, introduced the ICS’s request to the Board of Directors for its examination and it was unanimously agreed upon by the Board, at its meeting of March 9, to cooperate with ICS in the preparation of a draft port code, bearing in mind that it would also be the interests of IAPH.

Members, who have not sent to this office a list of their ports as yet, are requested to comply with our appeal at an earliest convenience. (June 23rd, 1975, K. Yokoyama)

Mr. Bastard Moves to Paris

Mr. Paul Bastard, Chairman of Special Committee on Large Ships, informed the Secretary-General in his letter of June 6, 1975, that he was appointed Directeur des Ports Maritime et des Voies Navigables, Ministere de l’Equipement, by which he resigned as Directeur General, Port Autonome du Havre.

Mr. Bastard expressed that he would continue to assume the chairmanship of the Special Committee on Large Ships till the 10th Conference in Houston to be held in April, 1977.

New address of Mr. Bastard follows:

Mr. Paul Bastard
Directeur des Ports Maritime et des Voies Navigables
Ministere de l’Equipment, 244, boulevard Saint German
75700 Paris, France
Membership Directory '76 Now on the Go

Under the date of May 26, 1975, the Secretary-General mailed out the "Entry Form" for the IAPH Membership Directory '76 to all Regular and Associate Members as well as the Chairmen of Special Committees.

The members of IAPH are again requested to render their generous cooperation in filling the "Entry Form" in accordance with the specified items, and return it to the Head Office by July 14, 1975.

The 1976 edition of the Membership Directory, said his letter of appeal, welcomes as many advertising orders as obtainable by the broad cooperation of the Association. (TKD)

ICC met at Madrid

As reported in the February issue of this journal: International Chamber of Commerce (ICC) has held its 25th biennial Congress in Madrid, Spain, from 15th to 22nd June. IAPH has been invited to be represented at the Congress by Mr. Carl-Henrik Winqvist, Secretary-General of ICC. Mr. Howe Yoon Chong, our President, has appointed Mr. Sabas A. Marin, Director-General of Ports, Ministry of Public Works of Spain, a Regular Member of IAPH in Spain, as an IAPH representative to observe the Congress.

Also, Dr. Hajime Sato, Secretary-General, has sent the following good-will message to the Congress:

"On behalf of all members of the International Association of Ports and Harbors, I send the greetings to the XXVth Congress of the International Chamber of Commerce to express our good wish that this Congress, like your past ones, will prove to be an outstandingly successful one. It is our hope that more closer relationship should be developed between the two international organizations.”

(RIN)

2 decades of IAPH featured

The Japan Maritime Daily (The Nihon Kaiji Shimbun) has issued a special edition on June 13 featuring the 20th anniversary of this Association as well as the 9th Conference in Singapore. Consuming 6 pages out of 10, it reeled a comprehensive story on the 20 years' wake of IAPH, starting off from the First Conference in Los Angeles in 1955.

Mr. Tsuneo Matsushita, Chief editor of the Japan Maritime Daily, who has participated in the 9th Conference, covered the detailed aspects of the Conference.

Also contributed were messages from several IAPH officials including Mr. Howe Yoon Chong, President, Mr. R.L.M. Vleugels, Immediate Past President, Mr. G.W. Altvater, 1st Vice-President, Mr. John Lunch, Chairman, International Port Development Committee, Mr. Ben E. Nutter, Chairman, Committee on Containerisation and Barge Carriers and Mr. Paul Bastard, Chairman, Large Ships Committee, in addition to report message by Dr. Hajime Sato. (RIN)

Mr. Malinowski of UNCTAD dies

Mr. Wladyslaw R. Malinowski, Adviser to UNCTAD, has passed away in Geneva on May 24th, 1975.

He was the Director of Division for Invisibles, UNCTAD, and had been cooperative with IAPH. In particular, he had played an important role when IAPH was given with a Consultative Status as a Non-Governmental Organization (N.G.O.) with the United Nations Conference on Trade and Development (UNCTAD) in August 1973. The details of this epoch-making event has been reported in the November 1973 issue of this journal.

Under the names of President and Secretary-General, IAPH has sent the condolence message, addressing to Mr. S.G. Sturmey, Deputy Director, Shipping Division of UNCTAD, on June 14. The text of the message is as follows:

It was our great regret to learn of the sudden death of Mr. Wladyslaw R. Malinowski, Adviser to UNCTAD, from Japan Maritime Gazette, dated June 3rd.

On behalf of all members of this Association, we send our sincerest condolences to the bereaved family of Mr. Malinowski as well as to UNCTAD for the loss of the great person.

The outstanding contribution of Mr. Malinowski to our Association enabling IAPH to be approved by UNCTAD of a consultative status as an N.G.O. in August 1973, is still vivid in our memory. We believe no such good relationship as we enjoy today between UNCTAD and IAPH, could have been hoped for, without Mr. Malinowski's leadership and assistance.

Please accept the deepest condolence that we, all IAPH members, miss him.

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

(RIN)
The Seaway—Debt and tolls are the issues

Port of Toronto News
March, 1975

The St. Lawrence Seaway, a major artery designed to carry waterborne cargo into the industrial core of a great continent, faces two formidable hurdles which will influence its course for years to come. Sometime in the next few weeks, Transport Minister Jean Marchand is expected to bring forth proposals to deal with Seaway issues.

The hurdles? The growing debt and the level of tolls.

Total debt of the St. Lawrence Seaway Authority, administering body of the Canadian section of the Seaway, has now risen to almost $800 million. The annual interest alone on the debt is $30 million.

Mr. Marchand said recently that the debt has now grown beyond the point where it can be retired by rate hikes alone.

In the U.S., the $22 million interest owed by the Saint Lawrence Seaway Development Corporation was totally written off in 1970 by legislation approved by President Richard Nixon. The legislation also cancelled all future interest charges.

The Canadian transport minister admitted: “We may have to do the same or find some other formula.”

The Seaway was originally designed to pay for itself, but under the existing financial structure there is not enough revenue generated to even cover the debt interest. Original construction debt in 1959 when the water-way was opened was just $300 million but this has increased steadily because of interest charges and construction improvements.

Jean Marchand’s recent announcement that transport department officials are preparing a possible refinancing plan for the Seaway brings the key issue of tolls into debate once again.

Paul Normandeau, president of the St. Lawrence Seaway Authority, has already announced that tolls must increase 50 per cent if they are to cover operating and maintenance costs of the waterway.

At the February joint conference of the Dominion Marine Association (DMA) and its U.S. counterpart, the Lake Carriers Association, held in Montebello, Quebec, the Canadian Seaway chief said that he had made a proposal to the Ministry of Transport that tolls should be increased in return for relief from the accumulated debt.

Mr. Normandeau added that a 50 per cent hike would provide the additional $11 million needed annually to cover Seaway operating and maintenance costs. However, he said that gradually implemented tolls increases of no more than 10 per cent per year would be sufficient if loan and interest charges were written off.

Tolls have not been raised on the Montreal-Lake Ontario section of the Seaway since it was opened in 1959, although a consultant’s report, commissioned by the Federal Government, recommended a 27.5 per cent hike over five years in 1971.

Reaction from the shipping industry to the Seaway chief’s remarks was cautious.

Rear Admiral Robert Timbrell, newly elected president of the Dominion Marine Association, which represents Canadian inland shipping interests, said that the Seaway is part of a national transportation system and should operate without tolls. In addition, he said, both Canadian and U.S. governments should take over not only the debt but also the operating costs of the waterway.

Outgoing DMA president Louis Desmarais, chairman of Canada Steamship Lines, has also called for the abolition of tolls on the Seaway.

“You don’t pay tolls on the high-ways or the railway roadbeds, ” he said. “Why should water transport pay tolls?”

But Mr. Normandeau feels that Seaway tolls are not unfair.

Western interests hit out against tolls on waterway

Western interests make up one of the most vociferous groups against Seaway tolls.

George E. Franklin, a Western grain grower, has consistently spoken out strongly against tolls during his four years as chairman of the Great Lakes Waterways Development Association. The association was founded in 1959 as a result of western opposition to tolls on the St. Lawrence Seaway.

Mr. Franklin said in a recent speech in Ottawa that “the International Seaway from Montreal to Lake Ontario and all-Canadian Welland Ship Canal from Lake Ontario to Lake Erie, are the only two parts of the 27,000 miles of commercially navigable inland waters in North America now subject to user charges of any kind.”

Despite the vital trade carried on through the Seaway locks, Mr. Franklin says that the Seaway has been treated with “complete indifference” by the government ever since 1959.

Attempts by the Canadian government to raise tolls in 1963 and again in 1966 were frustrated by the United States which refused to join in a toll hike and has in effect frozen tolls since the opening of the Seaway in 1959.

“One effect of tolls on the Seaway and Welland Ship Canal,” points out the association chairman, “is that Lake Ontario is the only one of the five Great Lakes you may neither enter nor leave without paying for the privilege.”

Mr. Franklin further maintains that the St. Lawrence Seaway has been a “brilliant” success although “it is contended by certain Government officials, and by the many other opponents of the Seaway, that it has been a flat failure.”

He adds that those who suggest that the waterway has been a failure “base their contention on the fact that even with tolls it has not been able to amortize the capital debt incurred in its construction.”

Mr. Franklin calls the massive debt a “book-keeping concept” which if it was “treated as all other of our federal investments in transportation facilities have been treated, would emerge as a shining example of a successful operation.”

The western grain grower says that the Canadian (Continued on Page 16)
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.
government would only be adding to serious inflation by raising tolls on both the highly profitable Canadian section of the Seaway and the deficit-ridden Welland Canal.

In an earlier speech made in Winnipeg, Mr. Franklin said that the unfortunate deficit of the Welland Canal, accumulated in the years 1953-1973 "may be used by Ottawa as the rationale for an increase in tolls on both the Canadian section of the International Seaway and on that all-Canadian facility."

However, he pointed out that Great Lakes users have never been able to understand why Ottawa chose to place cargo and vessel tolls on the Welland Ship Canal in the first place.

"The present Welland Ship Canal was built and paid for by Canadians entirely on our own between 1913 and 1932 to further the development of our country."

The Welland Canal, he added, has fulfilled a successful role as a toll-free facility from its opening in 1932 until "ill-advised action by Ottawa in 1959 placed tolls upon it."

• Toll hike would raise food costs

In his February speech, made at the annual meeting of the Great Lakes Waterways Development Association, Mr. Franklin emphasized that all Canadians who purchase manufactured goods produced in the highly industrialized north shore of Lake Ontario have an interest in the cost of using this "vital body of water."

Imposing tolls on the movement of raw materials increases their cost, he added, and eventually the price of products made from those raw materials. Any increase in tolls, he said, will automatically permit other forms of transportation to increase their freight rates.

"Any increase in transportation rates of any kind," Mr. Franklin said, "would increase input cost to primary and secondary industry with consequent multiplier effect. One of the first results would probably be an increase in food costs."

The Great Lakes Waterways Development Association, which represents the shippers of iron ore, paper, steel, grain and coal and also includes lake shipping interests, is not the only group which is fighting for tolls to be removed at the very least to be kept at the current level.

At present, tolls are 45 cents a ton on bulk cargoes and 90 cents a ton on general cargoes moving through the Montreal-Lake Ontario section of the Seaway while ships passing through the Welland Canal pay a lockage fee of $100 for each of the eight locks.

In a letter to the Ontario Chamber of Commerce, replying to its concern for Seaway tolls, John Rhodes, Ontario Minister of Transportation and Communications said: "At the present time, there is clear inequality between the recovery policies applied to the Seaway and those of other modes."

The St. Catharines and District Chamber of Commerce wrote recently to Prime Minister Trudeau saying that it firmly opposes any increase in the existing scale of user charges for the Welland Canal.

In an earlier speech made in Winnipeg sent a wire to Transport Minister Jean Marchand expressing concern at proposed increased tolls and asking for complete consultation of all interests before any action is taken.

The Saskatchewan Wheat Pool has said that an increase in tolls would have an adverse impact on the national economy and international trade and could drive shipping business to the American side of the waterway.

Any tolls increase, the Prairie Wheat Pool added, paid directly by the Canadian Wheat Board and other shippers would result in a decrease in the actual cash income of prairie farmers by that amount.

F.W. Wellers, president of the Spiroll Corporation Ltd., has called the St. Lawrence Seaway "one of the most glaring examples of irrationality."

"We are encouraged to export," he told a Winnipeg transportation conference recently, "but are slapped with an export tax in the form of tolls on both international and interprovincial trade."

The effect of increased tolls on the economy is of vital concern to users of the Seaway.

Last year, Stuart Armour, president and general manager of the Great Lakes Waterways Development Association, told a Niagara Falls group that "what happens to Ontario industry not only has a considerable effect on Ontario commerce, but it also affects the level of business activity throughout Canada."

Some 3.4 million people, or 39 per cent of all those employed in Canada, make up the Ontario work force. Wages and salaries for the province totalled $23 billion, giving it the highest income of Canada's provinces.

Mr. Armour pointed out that because Ontario is the largest contributor to national employment and production, it is by far the largest contributor to tax revenues at all levels of government. He therefore called the existence of Seaway tolls and lockage charges "rank discrimination against this province."

Subsidies given to Canadian National and Canadian Pacific were also cited by Mr. Armour as part of the discrimination although he noted that "both rail and water transportation are largely complementary rather than competitive."

Another Great Lakes shipping spokesman charged that the suggestion that modern rail developments have made the Seaway redundant is entirely untrue.

A 730-foot lake carrier capable of carrying Canadian wheat downbound and Canadian iron ore upbound to domestic and export markets, he said, can carry up to 30,000 net tons of such cargo. An average unit train consisting of 100 hopper cars, each loaded with 100 tons of wheat, carries a little over 10,000 net tons or about one-third as much.

In addition, unit trains cannot provide the backhaul to compare with Canada's inland cargo fleet.

Shipping on the Great Lakes could be further expanded, some members of the shipping industry feel, by enlarging the locks.

Ralph Misener, chairman of the board, Scott Misener Steamships Limited, explained that Canada's marine industry is tied to the confining dimensions of the present locks in the Welland.

The Seaway can accommodate vessels of up to 22.5 m. (730 ft.) in length and 23.0 m. (75 ft. 6 in.) in width. Minimum navigation depth is 8.2 m. (27 ft.) to permit the transit of vessels drawing 7.9 m. (26 ft.).

Mr. Misener added that "on the Upper Lakes, United States shipping lines already have in operation vessels..."
MINA ZAYED (Port of Abu Dhabi)
Emirate of Abu Dhabi, United Arab Emirates

by Fathi As'ad Wafa
Port Engineer
under the supervision of
Mr. Ali Bin Khalfan Al-Dhahiri
Chairman, Ports Department, and
Captain Zakaria Ahmad El-Sadr
Port Director
Port of Abu Dhabi

Historical Introduction

One of the basic requirements of a rapidly developing country is an efficient port to enable the large volume of construction materials and consumer goods to be imported as quickly and economically as possible.

Prior to 1962 cargo was landed on the beach but after construction of a small jetty at the north east end of the island it was possible to improve the handling of cargo from lighters.

In the past all goods imported into Abu Dhabi by ocean going ships had to be off-loaded on the small craft nearly 8 kilometers off-shore due to the shallow water near the coast. Due to this additional cost and delay a number of the Conference lines serving the Gulf did not call and the goods for Abu Dhabi had to be off-loaded at the neighbouring Gulf Ports and transhipped to Abu Dhabi by small craft or brought by road at considerably increased cost. Also because of inadequate facilities the Oil Companies operating in Abu Dhabi waters had to service their off-shore rigs from neighbouring ports.

Now it will be possible for the ocean going ships to enter the harbour and discharge their cargo directly on the quayside.

The original scheme was for an off-shore harbour built in the deep water with a causeway to the shore and a contract 1,000 ft. in length which have twice the carrying capacity of the largest Canadian carrier."

At the February Montebello conference, the U.S. Army Corps of Engineers told delegates that planning for expansion of the Seaway should begin quickly so new locks can be built before the waterway reaches capacity in the mid-1980s.

George Lykowski, a top planner with the Army Corps of Engineers, suggested that both Canada and the U.S. begin to look at building an entirely new Seaway system parallel to the existing one.

He suggested that a new canal could be built at a cost of about $2½ billion parallel to the Welland Canal on Canadian soil to handle much larger vessels than the present system.

Mr. Lykowski said there is every indication that traffic on the Seaway will continue to grow.

(Continued from Page 16)

The Lighterage Wharf

The first stage of the revised harbour scheme consisted of providing a lighterage wharf to facilitate the un-loading was let by the Department of Development and Public Works in 1967 for the first part of this work.

However, the harbour scheme was revised in 1968 to an inshore deep water harbour. The ocean going ships up to 9 meters draught would then enter the protected harbour area via a 6 kilometer dredged navigation channel. This will enable all general cargo ships at present operating in the Gulf to enter the harbour at all stages of the tide. The contract for the original causeway was revised to provide for the construction of a break-water over 1 kilometer in length. Within the protection of the breakwater the present Master Plan for the harbour provides for the construction of 19 berths, 14 of which will be deep water berths.

Capt. Zakaria A. El-Sadr
Director, Mina Zayed

Mr. Fathi As'ad Wafa
Port Engineer
Head of Engineering Affairs
Mina Zayed

H.E. Mr. Ali Bin Khalfan Al-Dhahiri
Chairman, Ports Department
Emirate of Abu-Dhabi
Mina Zayed Port Study
Plan of Arabian Gulf

Figure No. 1

Mina Zayed Port Study
Existing and Authorised Works

Figure No. 2

Ports and Harbors – August 1975
of the lighters from the ocean going ships and other shallow
draught craft playing around the Gulf.

The contract was let in July 1968 to a French Firm
Messrs. Saintrapt et Brice by the Department of Develop­
ment and Public Works for the construction of just over
500 meters of wharf and apron having design depth of 5
meters. Time was an important element and design using
steel piled cells was adopted to enable the wharf to be
completed in 9.5 months. The dredged materials was placed
behind the apron and subsequently surfaced to provide a
storage area of nearly 150,000 sq. meters. The wharf has
been designed so that it can be converted in the future after
further dredging to provide an additional 3 deep water
berths.

The second stage of the harbour development was for
the completion of the breakwater, the dredging and
reclamation, the construction of 3 deep water berths and
other associated works.

Dredging and Reclamation

The contract for the dredging and reclamation of the
harbour area was let in July 1970 to Falcon Dredging
Consortium, a joint venture of 2 international Dutch
Dredging Firms Zanen Verstop and Van Hattum on
Blankenvoert. The Consortium provided 2 dredgers for the
work. A cutter suction dredger which is one of the most
powerful dredgers in the world, dredged the material to
reclaim the harbour area. A total of over 5 million cubic
meters of material has been dredged reclaiming an area of
over 200 hectares.

This dredger was also used to break up the hard material
in the outer channel.

In addition a bund has been formed with the dredged
material extending about 1,100 meters from Sadiyat,
towards the end of the breakwater to give additional
protection to small craft moored in the harbour area when
the wind is from the north east.

The trailer suction hopper dredger dredged the naviga­
tion channel and the material from this was dumped in a
spoil ground at sea. Approximately 2.5 million cubic meters
was removed by this dredger. The dredging of the swinging
basin for a further 3 deep water berths has also been
completed.

Breakwater

The contract for the construction of the main breakwa­
ter and retaining bank was negotiated with a German Firm
Messrs. Held and Franke, based on their rates for the
original causeway contract. All the rocks for the breakwater
and retaining bank was obtained from a quarry set up for
the purpose by Held & Franke at Ras Al-Khaimah. A total
of over 1 million tons of rock was shipped from Ras
Al-Khaimah. Approximately 620,000 tons of graded rock
in sizes varying from 10 kgs. to 3,700 kgs. was used in the
breakwater and 370,000 tons of smaller rock was used in the retaining bank, together with 25,000 tons of large rock armouring. The main armouring to the breakwater was provided by concrete tetrapods and nearly 20,000 were used for the purpose varying from 2.5 tons to 7.5 tons each.

In addition Messrs. Held & Franke dredged a temporary channel to enable the rock carrying ships to enter the harbour area at all stages of the tide. The breakwater contract was completed in April 1971 but due to a delay in letting the main dredging contract a gap had been left in the breakwater which was closed later in June 1974 after the dredging contract was completed using material transported from Ras Al-Khaimah and stock-piled in the harbour previously.

Three deep Water Berths

The next major contract was for the construction of 3 deep water berths and associated civil works. The contract was awarded in January 1971 to a Joint Venture of Consolidated Contractors Company of Lebanon and Santa Fe of California U.S.A.

The Wharf consists of approximately 750 number ½ meter diameter steel piles up to 25 meters long driven into the hard layer so that each pile can withstand a working load of 150 tons capped by precast concrete beams with an in-situ concrete deck. Due to the overlying soft sand in places a sheet pile wall has also been built nearly half the length of the 3 berths.

Present and Future Works:

The facilities forming the stage of the development of Mina Zayed, planned in 1968, included the lighterage Wharf, Deep Wharves Number 4, 5 & 6 together with storage sheds, storage areas, office buildings and roads, the breakwater, the dredging of the ship swinging basin in front of wharves 4, 5 & 6 and the dredging of the navigation channel leading from the swinging basin round the head of the breakwater and out to sea.

At the request of public Works Department its consultants, Sir Alexander Gibb & Partners, studied and reported in 1974 on traffic forecast and shipping requirements for up to 10 Years and on maximum throughput capacity of the port, a development master plan and proposals for phasing additional facilities to meet fore-
casted traffic growth.

Following the submission of the report by the consultants, a contract has been awarded for the third stage of development comprising the construction of a further six deep water wharves with associated works.

In addition to the third stage of construction, the designs and preparation of tender documents for an extension to the port, immediately west of the existing breakwater have been completed and shall be announced in the near future for international tendering. The extension will include a breakwater enclosing a swinging basin and 16 deep water wharves.

The harbour project is being administered by Public Works and the department has retained the services of Sir Alexander Gibb & Partners of London to design the harbour and to prepare and supervise the various contracts necessary for the construction. While the Ports Department is responsible for operating and supervising the harbour.

Note: A large amount of cargo handling equipment have been ordered from different sources, shall be arriving in the near future.

**Mina Zayed**

**EXISTING EQUIPMENT IN THE PORT**

<table>
<thead>
<tr>
<th>Type</th>
<th>Quantity</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Articulated Trailers</td>
<td>9</td>
<td>ERF</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>VOLVO</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>SCHNECIL</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>MERCEDES</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>REDMENT</td>
</tr>
<tr>
<td>Tractors</td>
<td>5</td>
<td>SHOP MULES</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>SHOP MULES V/S</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>WEIDEMANN</td>
</tr>
<tr>
<td>Dockside Portal Cranes</td>
<td>1 @</td>
<td>10 T</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>5 T</td>
</tr>
<tr>
<td>Mobile Cranes</td>
<td>3 JONES</td>
<td>10 T</td>
</tr>
<tr>
<td></td>
<td>4 COLES</td>
<td>5 T</td>
</tr>
<tr>
<td></td>
<td>1 BANTAM</td>
<td>10 T</td>
</tr>
<tr>
<td></td>
<td>1 RB</td>
<td>25 T</td>
</tr>
<tr>
<td></td>
<td>1 BE</td>
<td>40 T</td>
</tr>
<tr>
<td></td>
<td>5 P &amp; H</td>
<td>15 T</td>
</tr>
<tr>
<td></td>
<td>1 P &amp; H</td>
<td>75 T</td>
</tr>
<tr>
<td></td>
<td>5 NELSON</td>
<td>5 T</td>
</tr>
<tr>
<td></td>
<td>6 NELSON</td>
<td>10 T</td>
</tr>
<tr>
<td></td>
<td>1 NELSON</td>
<td>20 T</td>
</tr>
<tr>
<td></td>
<td>1 NELSON</td>
<td>25 T</td>
</tr>
<tr>
<td>Fork Lifts</td>
<td>12 HYSER</td>
<td>3 T</td>
</tr>
<tr>
<td></td>
<td>3 HYSER</td>
<td>5 T</td>
</tr>
<tr>
<td></td>
<td>3 HENLY</td>
<td>5 T</td>
</tr>
<tr>
<td></td>
<td>4 HENLY</td>
<td>3 T</td>
</tr>
<tr>
<td></td>
<td>5 LANCER-BOSS</td>
<td>3 T</td>
</tr>
<tr>
<td>Pallets</td>
<td>500 Metal Stillages</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2000 Wooden Winged Tyre</td>
<td></td>
</tr>
</tbody>
</table>

**Buildings:**

Construction of three office buildings and a gate house is in progress at the port entrance, one building is for the Port Administration, one for Customs, Police and Immigration Authorities and one for Shipping Agents. Within the port area, toilets, electrical sub-stations, pump-houses for fresh water, fire services are also under construction while the port boundary wall is completed.

A contract has been let for the construction of four transit sheds, three roofed but open sided stores and a warehouse with cold store and these also are nearing completion. Included in this contract is the construction of a maintenance workshop, 4,500 square meters in area, for the maintenance of port cranes, forklifts and other equipment.

Port of Mina Zayed
A new contract is under appraisal for the construction of two new transit sheds and two roofed open sheds similar to those under construction.

Construction of the Harbour Master's Building and of Port Workers Canteen is also in progress. The Harbour Master's Building is situated close behind the northwest end of wharf 6 and when complete will consist of a five storey building each floor being approximately 60 square meters in area and the top floor being an observation room. The building will be equipped with radar and VHF radio and will accommodate the Harbour Pilots and supporting staff.

**Harbour Tugs:**

Two tugs "DALMA" and "LIWA" of 1,200 HP each have been constructed for Mina Zayed by Karachi Shipyard and Engineering Company at Karachi, Pakistan. Delivery of the tugs to Abu Dhabi took place early in 1974. Each of the said tugs is 24.25 meters long and its guaranteed speed 10.5 knots. They are capable of exerting a towing pull over 15 tons and are fitted with special rudders which make them exceptionally manoeuvrable.

**Wharf Cranes:**

The manufacturer and erection of six electric portal cranes for Mina Zayed has been completed. Five of these cranes are of 5 ton lifting capacity at 20 meters radius and one of 10 ton lifting capacity at 20 meters radius.

**Mechanical and Electrical Services:**

The supply of materials and equipment for the mechanical and electrical services of the port is in hand and installation of the first stage is virtually complete. The supply and installation of transformers has been carried out by a Contractor under the direction of the Consulting Engineer for Mina Zayed. Also in the electrical contractors work was the supply and installation of lighting equipment for the port area, a diesel engine water pump to supply the fire mains and an electrically operated fresh water pump to supply the port reservoir tanks and overhead tank.

**30 Ware-houses for Mina Zayed**

With the ever increasing trade with foreign countries, and due to shortage of storing facilities in the town of Abu Dhabi, Ports Department awarded a contract for the construction of 30 Ware-houses at a site adjacent the Port Area. These ware-houses when completed (June 1976) shall be rented to the different importers thus encouraging them clearing their goods from the Port and consequently relieving the port areas and transit sheds from any congestion.

The 30 Ware-houses project shall be administered by Ports Department who has attained the services of Consulting Engineering Services (India) private Ltd., known as "Consengers" to design and supervise the construction for the job. The contractors are Messrs. Ernest Ireland (Contractors) Ltd. and M.C.L.—Al-Nahda—Joint Venture.

The total area of these ware-houses is 83,000 square meters. The structure will be in steel skeleton with aluminium roofing, cement block work cladding and concrete foundations and flooring.
Baltimore, Md., April 18 (News From Maryland Port Administration):—The port of Baltimore is the most important economic component of the state of Maryland, having a total impact of $2,537,500,000 each year.

Of this total, Baltimore City receives the greatest benefit, more than $1.2 billion, while the impact on Baltimore County is $949.5 million annually. All other local governments in Maryland receive a yearly port of Baltimore economic impact of $343.7 million.

In addition:
- The port is responsible for over $317 million in tax contributions to the state and local governments of Maryland each year;
- The port is the ultimate source of nearly 170,000 jobs throughout the state;
- The impact of the port seems to be growing in real terms at three per cent annually, corrected for inflation.

In a statement issued today, Maryland Port Administrator Joseph L. Stanton said that these and other measures of the port's economic impact are contained in a new report prepared by the University of Maryland for the Maryland Department of Transportation, of which the MPA is a line agency.

Entitled, "The Economic Impact of the Port of Baltimore on the Maryland Economy, 1973," the report is similar in nature but more extensive than a 1969 survey, also prepared by the University of Maryland for the then Maryland Port Authority. That report assessed the impact of the port, based on 1966 figures, at nearly $1.6 billion annually.

"This new report once again reinforces our long-held belief that the port of Baltimore is the state of Maryland's single most important economic asset," said Mr. Stanton.

Overall Impact

Using 1973 cargo figures, the study stated that for that year, more than 43.5 million tons of import-export cargo was interchanged at Baltimore maritime commerce facilities, with a resultant value to the state of Maryland and its inhabitants of more than $2.5 billion. The cargo figures utilized in preparing the report were obtained from the U.S. Army Corps of Engineers.

Total direct impact registered $740.2 million while total indirect impact reached $1,797.3 million. Direct impact includes such areas as vessel disbursements, crew expenditures, surface transportation, insurance and banking and port services while indirect impact covers the categories of primary metals processing, other port-dependent processing, shipbuilding, repair and dismantling and government expenditures.

The study showed that of direct impacts, the most significant contribution came from the inland surface movement of cargoes, which approached $370 million. Primary metals processing, whose total contribution exceeded $900 million, was the most significant of the indirect impacts.

Gross State Product

The port of Baltimore is a major factor in terms of its relative significance to all other economic activities of the state of Maryland, according to the survey. In 1973, Maryland had a Gross State Product (GSP) of $25.1 billion. Of this total, the port accounted for $2.5 billion, which represents 9.89 per cent of the overall GSP.

Employment

The study noted: "Of every 10 jobs in the state of Maryland, one is ultimately dependent upon the port."

Overall, Baltimore harbor and its port-dependent activities were found responsible for 168,717 jobs, not counting persons who work in the state but reside elsewhere. Total direct employment was listed at 64,649 while secondary or indirect employment was 104,265.

Cargo Impact

The study examined the relative impact values of cargoes, since some are worth more than others to the local economy. Overall, general cargo, including container freight, had a value of over $33 per ton of primary impact while bulk cargo was measured at nearly $6.50 per ton. In the 1969 study, these figures were $30 and $5, respectively.

In addition, in terms of secondary or induced impacts, general cargo was measured at almost $23 per ton while bulk registered nearly $5 for each ton, therefore giving general cargo a total impact of $56 a ton and bulk cargo a total impact of $11.50 per ton.

Automobiles were found to be the most valuable commodity handled by the port on a per-ton basis, with a primary impact of over $55 for each ton and nearly $75 for each automobile. "However," the report said, "because automobiles are not a very densely-packed cargo and because land storage space for automobiles at the port is limited, containers may actually be a more profitable commodity to handle."

Baltimore container traffic, the second largest in terms of volume on the U.S. East and Gulf coasts, was found to have a value of almost $22 per ton and $258 per container.

Geographic Impact

The report concluded that the port's economic impact on Baltimore City of more than $1.2 billion was expected because of geography. The high proportion of total impact—$949.5 million—attributed to Baltimore County was held the result of the location of some port-dependent manufacturing firms in the county and the fact that a large portion of the employees who work in the city reside in Baltimore County.

All other local governments in Maryland received a port of Baltimore economic impact of $343.7 million.

Taxes

The report noted that the port accounted for $317.3 million each year in total primary and induced taxes. Of this total, 36 per cent was attributed to Baltimore City ($115.1 million); 27 per cent to Baltimore County ($86.9 million); 26 per cent to the state of Maryland ($82.5 million); and 10 per cent to all other local subdivisions ($32.9 million).

(Continued on Next Page Bottom)
Cargo Tonnage Strong As Ever in 1974

New York, N.Y., May 19 (News from The Port Authority of NY & NJ)—The Port of New York-New Jersey continues to be in a solid and healthy condition. Its strong vital signs are reflected again in new figures showing that foreign oceanborne general cargo moving through the Port reached its highest level in more than three decades last year, totaling 16,734,773 long tons, an increase of 3.1% over 1973.

The record general cargo showing was announced today by Dr. William J. Ronan, Chairman of The Port Authority of New York and New Jersey, in making public the Port’s 1974 tonnage figures. The advance was attributed to a 17.3% increase in exports—both in container and conventional breakbulk vessels—reflecting strong worldwide demand for competitively priced United States products.

New York’s 1974 total oceanborne tonnage of 63,945,328 long tons—general cargo and bulk—was the second highest in its history, exceeded only by 1973’s performance, which, in an abnormal situation, was due to bulk oil imports influenced by the energy crisis.

Airborne foreign trade set a new record for the fourth straight year with 6.5% more cargo—497,994 long tons—shipped through Port District airports. Both imports and exports contributed to the advance.

Dollar value of the Port’s foreign trade also climbed by 33.9% over 1973 to a record value of $39.3 billion.

Not unexpectedly, bulk oceanborne cargoes, predominantly petroleum imports, declined 20.3% from 1973’s record volume to 47,210,555 long tons in 1974. The decline resulted from the oil embargo during the early months of last year, high petroleum prices, conservation efforts, and an exceptionally mild winter.

The Port’s 1974 tonnage figures are based on data obtained from the Bureau of the Census, United States Department of Commerce, and analyzed by the Port Authority.

Dr. Ronan said, “The Port’s impressive general cargo showing is a tribute to our preeminent position in container shipping and our pioneer involvement in this most modern shipping mode. Nevertheless, we realize that we face sharp competition with other ports and air gateways for foreign cargoes. We are determined to maintain our top position and are actively investigating ways of encouraging industrial development in the region, particularly making use of unused land along our waterfront.”

The Port Authority Chairman commented further upon the bi-state agency’s commitment to expand trade volumes and maintain the economic vitality of the Port District. “During 1974,” he said, “the Port Authority’s renovations and expansion of its marine and air cargo terminals ensured adequate and efficient facilities for the handling of foreign cargo. The near completion of the Elizabeth-Port Authority Marine Terminal—America’s container capital—and the addition of seven new air facilities to the John F. Kennedy Air Cargo Center underscores the dynamic nature of foreign trade at the Port of New York-New Jersey.”

The crucial role which The World Trade Center plays in the Port Authority’s mandate to promote the international commerce of the Port District was noted by Dr. Ronan as he said, “By providing a central and widely recognized location for the transaction of foreign trade, The World Trade Center promotes efficiency, cooperation and marketing opportunities within the foreign trade community.”

Oceanborne General Cargo Trade

The Port’s oceanborne general cargo volume rose in 1974 to 16,734,773 long tons, up 3.1% from 1973. This was the highest level of general cargo traffic at the bi-state Port since 1941, when wartime conditions resulted in an extraordinary level of traffic being shipped to Western European nations.

The 1974 increase was due to general cargo exports, which reached 6,845,733 long tons, up 17.3% over 1973. The surge of exports in 1974 can be attributed to the dollar devaluation and the sharp rise in worldwide prices, which made U.S. exports attractive to overseas buyers.

Gains among the principal export commodities were led by paper products, such as shipments of waste paper, up 367.7%; and paper and paperboard, up 73.6%. Other commodity groups which exhibited strength were hydrocarbons, up 36.9%; general machinery, up 33.1%; and road motor vehicles, up 31.6%. In contrast, steel plates and sheets declined to 10.3% and textile wastes 3.7%.

In 1974, inbound oceanborne general cargo imports declined moderately to 9,889,040 long tons, down 4.9% from 1973 levels.

The Port’s basic food imports showed a mixed pattern. Bananas rose 2.7% and alcoholic beverages were up 3.7%. In

(Continued on Next Page Bottom)
Costliest Re-Construction
Project Completed

Melbourne Harbor Trust
Port Gazette
May, 1975

Cost—$8 million—Construction Time—2½ years—Location Nos. 5-7 Victoria Dock—Notabilia—Most costly re-construction project undertaken by the Melbourne Harbor Trust.

Prior to the above project, the Trust, especially from the late 1950's was involved in capital works programmes devoted principally to creating new specialised areas in the Port of Melbourne to handle container/ cellular and ro-ro ships. The most notable being the Swanson Dock four-berth container complex, and the ro-ro complex at Webb Dock.

The opportunity to re-construct this old section of conventional berths, into a productive revenue earner for the Trust, was brought about by the Victorian Government's decision to build a low-level bridge (Johnson Street Bridge) across the River Yarra in the upper reaches of the Port, as part of a ring road system for the City of Melbourne.

The Johnson Street Bridge project made redundant productive berths up to 6 and 7 North Wharf and berths 10 and 4 South Wharf. Included on the North Wharf section of the Port were berths Nos. 1 and 2 which were roll-on, roll-off berths for the Union Steam Ship Company of New Zealand vessels operating services to Tasmanian and New Zealand ports.

Preliminary work on the re-construction and development of Nos. 5 and 7 Victoria Dock for the U.S. Company roll-on, roll-off services, began soon after the Victorian Government decided that the Johnson Street Bridge had to be built to ease congestion of vehicular traffic in the city proper and also allow a faster and uninterrupted flow of traffic between industrial areas— including the port and commercial establishment on both sides of the River Yarra. The new roll-on, roll-off terminal which became operational on May 1 is a triumph for the Trust Engineers, Planners and Administrators.

The original wooden wharves and timber framed cargo sheds were demolished.

The construction section of the Trust Engineering Division then got down to the serious end of replacing the old with the new.

In the construction of the new roll-on, roll-off complex, Trust Engineers used the following basic materials:

- 51,580 metres (169,228 ft.) of wooden piles. Average length 30.18 metres (99 ft.).
- 14,311 metres (46,951 ft.) of steel tube piles. Average length 28.8 metres (94.5 ft.).
- 8,600 cubic metres of ready mixed concrete.
- 1,723 tonnes of steel reinforcement.

The completed project today is equipped with the following:

- Two roll-on, roll-off berths (1,307.6 metres in length).
- Two stern loading ramps.
- New terminal approximately 4.45 hectares (11 acres).
- Three sheds. Steel framed.
- Sub-station to cater for crane, ramp and other lighting

(Continued on Next Page Bottom)

contrast, coffee fell 18.7% and sugar 1%.

Among other major commodities, road motor vehicles rose 12.8%, vegetable oils 3.9%, and copper 47.9%. Lumber fell 52.6% and cement and lime 10.6%.

Airborne Foreign Trade

Foreign air cargo moving through the bi-state Port's international airports rose during 1974, reflecting favorable trade conditions plus effective marketing and pricing by the air industry. Airborne exports posted strong growth, up 11.5% over 1973 to 287,093 long tons. Exports of high technology and machinery products evidenced particular strength with scientific instruments, up 30.3%; miscellaneous machinery, up 26.7%; aircraft and parts, up 24.6%; electric motors and generators, up 20.8%; and office machinery, 16.7%. Also contributing to the overall increase, plastic materials were up sharply, 25.6%; machinery for special industry was up 9.0%; and miscellaneous machinery grew by 5.8%.

Principal export commodities registering declines were limited to sound recorders, off 9.6%.

The Port's airborne imports edged forward in 1974. Inbound shipments rose to 210,900 long tons, an increase of 0.5% over 1973.

Many of the Port's principal air import commodities increased. Internal combustion engines grew 149.8%; printed matter was up 14.2% and clothing, 9.7%. Other commodities posting gains were office machinery, up 1.5%; and miscellaneous electrical machinery, up 1%. In contrast, inbound shipments of textile and leather machinery were down 29.6%; telecommunications apparatus, down 27%; footwear, down 8.7%; and miscellaneous machinery, down 4.3%.

The New York-New Jersey airports continued to be the nation's leading air cargo gateways in 1974, handling nearly as much airborne shipments as all other U.S. gateways combined. In addition, air cargo volumes at New York were over three times greater than the Port's closest rival.

Value of Foreign Trade

The value of foreign trade—ocean and air—at the Port of New York-New Jersey rose sharply in 1974, maintaining the Port's dominance in handling the nation's high-valued foreign trade. Tonnage was valued at $39.3 billion, up 33.9% over 1973. This rise reflects increased export volumes as well as inflationary factors. This 1974 value is far and away the largest for any port in the United States.

Increases in the value of both oceanborne and airborne shipments contributed to produce 1974's record level. Oceanborne value rose to $27.7 billion, up 34.0% over 1973. Airborne value also rose sharply, from $8.7 billion to $11.6 billion, up 34%.
Heroic rescue efforts by tug’s crew are commended

Whangarei, N.Z. (Points North, March 1975):—The crew of the Northland Harbour Board tug Raumanga added an epic chapter to the maritime history of New Zealand in February. The tug’s dash through raging seas in the whiplash of a tropical cyclone to the aid of the stricken Taiwanese freighter Union East; the rescue of the sinking ship’s crew in impossible conditions; the valiant attempt to salvage the ship; the extraordinary contest which almost developed among would-be salvage claimants; the last sad plunge of the Union East—day after day these made headlines in New Zealand and abroad. But the seamanship and valour of the tug’s crew was backed solidly with the teamwork of all the NHB staff. This is how it all happened:

DIARY OF DRAMA

THURSDAY, FEBRUARY 6

At 6.55 a.m. an SOS call is received from the Union East. The Captain reports that the cargo has shifted and the vessel has developed a 40-degree list. Auckland Search and Rescue asks the Northland Harbour Board if a tug would be power needs.

- A rail siding into the terminal.
- Crane rails built on the wharf apron, for a future container crane if required.

Of a completely new design for the Port of Melbourne, the ramps are 8.84 meters (29 ft.) wide steel deck supported at both sides by a heavy steel girder 20.73 metres (68 ft.) long, each pivoted at its inner end on a bushed bearing and steel housing mounted on the concrete wharf deck.

The steel deck is made up on transverse cross beams bolted at their ends to the web of the main girders and supporting a series of closely grouped longitudinal beams over which is welded a mat of steel girder mesh. Pivoted at the outer end of the main ramp are six steel link spans 1.45 meters (4 ft. 9 inches) wide and 5.18 metres (17 ft.) long, each of which is equipped with a 0.91 metre (3 ft.) long, hinged and tapered flap.

The link spans are capable of being lifted up from below the level of the end of the main ramp to a park position well above this by means of a lifting beam located transversely beneath the link spans. The lifting beam is supported at each side of the main ramp by a cranked lever which is pivoted at the end of the main ramp girders. A ram from a 228.6 mm (9 inch) diameter hydraulic cylinder, which is mounted at the top and near the outer end of each main ramp girder, operates the cranked lever.

It is possible to select any number of link spans so that a range of operating widths is available to suit a variety of ships’ stern openings. Those link spans not required are held in the park position by means of wire rope slings fixed to special attachments let into the main ramp and link spans.

The main ramp is raised and lowered by means of two steel wire ropes one on each side of the main ramp. Each rope is attached to a winch drum and passes over a series of six sheaves mounted immediately below on a lifting beam fixed transversely on the underside of the main ramp and finally anchoring at the top of the supporting tower. There are twelve parts of rope supporting each side of the main ramp.

Winches consist of a 0.92 metre (3 ft.) diameter grooved drum supported and driven at each end of a Hagglund hydraulic motor. Power for the winches and rams is supplied by a hydraulic power pack located near the main ramp pivot on the waterside and hydraulic oil is fed to the winches by steel piping and to the rams by steel piping and flexible hoses.

The power pack consists of a 111.8 kilowatts (150 h.p.) electric motor direct coupled in series to a 204.6 litres per minute (45 g.p.m.) hydraulic pump and 77.3 litres per minute (17 g.p.m.) hydraulic pump operating at 10,343 Kpa (1,500 p.s.i.) and 20,685 Kpa (3,000 p.s.i.) respectively.

Movement of the ramp and link span is a push-button operation from a control box near the end of the ramp on the waterside. A levelling device is incorporated in the design to ensure that the ramp is raised and lowered by the same amount on both sides. The maximum amount of level across the ramp is limited to an angle of one degree.

 Provision has been made in the power packs for the link spans to be moved by means of hydraulic power from a hand operated hydraulic pump and the ramps to be raised or lowered with hydraulic power supplied from a 41 litres per minute (9 g.p.m.) hydraulic gear pump driven by a portable power unit in the event of an electrical power failure. Naturally these operations are at a greatly reduced speed but will enable ships to berth or sail under these circumstances.

The ramp approaches, steel ramp, link spans and supporting towers were designed in the Trust’s Design Office, while the ramp operating winches, link span operating cylinders and hydraulic power packs were designed by the suppliers of these units.

Johns and Waygoods Ltd. of Sandringham was the main contractor for fabrication and installation of the steel ramps, supporting towers, fitting of the steel wire ropes and also responsible for the successful completion of the ramps. Production Equipment Ltd. of Clayton was the nominated sub-contractor to Johns and Waygoods Ltd. for the design, supply, delivery and erection of the hydraulic power packs, the hydraulically operated winches for lifting and lowering the main ramp, the hydraulic ramps for lifting and lowering the link spans and the installation of the hydraulic piping.

A loading test was carried out on the ramps using a test load of 190 tonnes which was positioned on the ramp to simulate the maximum design load in the supporting ropes and hoisting machinery. The test load was made up using steel rail from the Trust’s storeyard placed in the bolsters loaned by B.H.P. and these were placed in position by the floating crane, “V.G. Swanson”.

26 PORTS and HARBORS — AUGUST 1975
By knots despite a bad weather, a German container ship Columbus Caribic is steaming fullspeed towards the freighter, guided by an RNZAF Orion maritime patrol aircraft from Whenuapai.

The crew of the Orion, watching the helpless vessel, beam on to big seas and rolling heavily, are not optimistic about her chances of reaching the New Zealand coast.

At about 5 p.m. Captain Dunsford requests assistance as soon as possible. Captain P.N. McKellar, harbour superintendent and deputy general manager for the Board, pulls the stops for a quick departure of the 376-ton MT Raumanga.

The crew will number 15—Captain McKellar as Master; Captains G.W. Williams and F.A. Brown as mates; Messrs A. Blumhardt, J.A. MacNamara, T.J. Rochester as engineers; Mr. W.M. Haines, radio operator; and AB’s Messrs K.M. Baker, J.R. Eley, M.G. Emery, B.W. Larke, C.M. Lewis, J.S.G. Nebbs, D.E.C. Rosemary, and tug-hand W.A. Ross. Stores for 14 days, lifesaving and towing gear are stowed aboard. The tug leaves Marsden Point at 9.45 p.m. She proceeds at full speed travelling at something over 12 knots in a heavy sea.

For Captain McKellar it is the first time he has been involved personally in a sea rescue since the collier Kaitawa sank off Northland. "We were short of tugmasters," he said. "I happened to be home, on the spot, and I thought it was just about time I went again."

"We were frightened but did not panic. We had no sleep for the whole four days—we were too busy keeping the water out of the boat. It was only when the tug arrived that we felt we had a good chance of survival."

—Chief Officer Yang Yai Chin

FRIDAY, FEBRUARY 7

Raumanga maintains a speed of 12½ knots despite a bad swell. By 2 p.m. she is 337 km out of Whangarei. The Union East, about 650 km due east of East Cape, was reported to have one hold flooded and her engines operating only intermittently.

The Columbus Caribic is standing by the freighter as she wallows in heavy seas. South-westerly winds of 30-40 knots, rough seas, showers and a moderately heavy south-westerly swell are reported in the area. Marine experts describe a 600 km voyage to New Zealand under such conditions as "utterly frightening".

Later this night the Union East is reported making a 600 km voyage to New Zealand under such conditions as "utterly frightening". The Raumanga crew watch helplessly as one man is struck by the stern of the ship as he is dropping into the water. His body is retrieved sometime later.

The Raumanga’s master tells him the tug will keep station as close as possible. The men must get into the water and will be picked up from there. Scrambling nets and rope ladders are put over the side of the tug but prove to be more of a hindrance than a help as the waves tend to wash them back over the tug.

Raumanga tries to instruct the Union East crew to come two at a time but suddenly there are 16 people in the water. (Captain McKellar thinks this happened for several reasons—language problems, conditions at the time.) These people quickly become widely separated over a large area because of the rapid drift. Raumanga picks the last of them from the water almost one and a half miles away from the Union East. A howling gale is blowing and a big swell with waves consistently in excess of 30 ft and occasionally 40 ft is running. The water is completely windblown with spume on both the tops and the gullies of the huge waves, and the cries of the survivors are barely audible. There is a heavy oil slick, which compounds the ordeal of the survivors, and as the first group abandon the Union East, the possibility of tragedy is realised. The Raumanga crew watch helplessly as one man is struck by the stern of the ship as he is dropping into the water. His body is retrieved sometime later.

With the 27 survivors safely aboard, the Raumanga sets course for Gisborne at about 6 p.m. The Raumanga crew vacate cabins for the cold and shocked Taiwanese. Heaters are put on and the survivors urged into hot showers and wrapped in blankets. Even door curtains are removed to act as extra coverings.

Heavy seas restrict the Raumanga’s speed to four knots and conditions are extremely unpleasant for all aboard the tug till midnight when the weather improves slightly. By 8 a.m. the worst is over and the Raumanga is heading for Gisborne at full speed.

SUNDAY, FEBRUARY 9

11 p.m.—a barrage of people greet the Raumanga as she arrives at Gisborne. For the master there are many formalities to be completed; customs, health, ships agents, ships insurers, etc.

Captain McKellar turns in at 4.30 p.m. and is back aboard by 7 a.m. Meanwhile, Gisborne opens its heart to the Taiwanese, providing new clothes and shoes, food, warm beds and medical care.

MONDAY, FEBRUARY 10

Captain McKellar and the crew wait while an RNZAF Orion searches again for the Union East. Having seen her deteriorate so rapidly, and in such adverse conditions, two days previously, they hold out little hope that she is still afloat.

In the early afternoon news comes that the Orion has located the battered Union East, 250 miles east-north-east of Auckland.
"I know people won’t believe this, but some of those waves were 50 ft high when we made the rescue... To my mind, it could only be called a miracle that only one man perished."

-Captain Fred Brown

of East Cape. She lies motionless, listing badly, in a calm sea.

The Raumanga leaves within the hour, reprovisioned and refuelled, with two additional crew members, Mr. P.J. Winton, chief marine engineer, and Mr. S. Morrison, boatswain/AB, who have flown from Whangarei. A moderate sea, a low swell, and a 15-20 knot wind from the NNW gives them a vastly different passage this time.

A Cessna aircraft also leaves Gisborne, with the intention of dropping a parachutist into the water alongside the Union East. It is hoped he will board the ship and claim salvage rights. Captain Dunsford announces that legal title still lies with the owners no matter who claims it first, and the Civil Aviation Division of the Ministry of Transport issues a directive at about 3 p.m. that the parachutist is not to jump. By this time the plane is already returning to Gisborne, mission unaccomplished.

TUESDAY, FEBRUARY 11

The Raumanga reaches the Union East at about 1.30 p.m. On a smooth sea ruffled by a mere 10-knot wind, they confirm the continued existence of the Union East by radar at 14 miles, and by eyesight at 10-11 miles distant.

Immediately preparations are made for four men to go aboard to see if it is possible to pump, and if not to attach a tow line. The men drift alongside the Union East in an inflatable liferaft and leap aboard on to the partly submerged well-deck.

After an exploration in the eerie quiet of the abandoned freighter, they report that pumping is not possible, and attach a towing hawser from the tug. By 5.30 p.m. the men are back on Raumanga and the tow begins.

WEDNESDAY, FEBRUARY 12

The condition of the Union East has deteriorated overnight. By 8 a.m. the heavy starboard list has increased to about 55 degrees and by 10 a.m. she is obviously sinking, by the stern, and capsizing as well. At 0.30 a.m. Captain McKellar decides the end is close and orders the two rope to be slipped. Within 30 minutes she has sunk by the stern, silently and quickly, into 13,200 feet of water.

"All we could do was stand and watch," said Captain McKellar. "With a sense of deep regret and sadness. No mariner likes to see a ship go down and she was a beautiful one."

The sinking of the Union East was also watched by the crew of the minesweeper HMNZS Inverell which offered the Raumanga assistance while out on a routine midshipman training voyage.

"It was eerie going aboard the Union East. You could squint down through the gangways and see long shafts of light coming up through the water from submerged parts. It was incredibly difficult to move about the ship and we had to be very wary about shifting hatch covers and doors. It could have let trapped air out and sunk the ship within minutes."

-Captain George Williams

After the freighter sank the Inverell sent all her boats to examine seven containers left floating. None were salvageable. Five sank within an hour of the ship foundering and the remaining two were sunk by Bofors gunfire. By 1.30 p.m. only small flotsam remained.

Sadly the Raumanga made course for Whangarei.

THE UNION EAST: Built 1972 owned by the China Union Line; NZ Agents, William Scollay & Co., 14 officers, 12,600 tonnes deadweight, 523 ft ½ ins long, gross tonnage 10,480, net 5,743.

The ability to make instant decisions was an essential factor in the successful operation of the Northland Harbour Board.

This point was made strongly by Captain W. Dunsford, Auckland Marine Surveyor and agent for the China Union Lines Ltd, when he accompanied Captain T.C. Hua, master of the Union East, to Whangarei to express thanks for the work done by the NHB tug Raumanga.

"It is very gratifying that a mere phone call at a moment’s notice can bring an immediate decision to assist in such an emergency," he said.

"If the new regional government body does not give the Northland Harbour Board the ability to make autonomous decisions there will be problems.

"We wanted to thank Peter (Captain McKellar) for the splendid job he did," Captain Dunsford said. "It was far beyond the normal requirements of a tug master. If the Raumanga had not been there the loss of life would have been much greater.

"Captain McKellar’s decision to return to Gisborne with the rescued crew members from the Union East was the proper thing to do."

Captain Dunsford said nothing else could have been done to save the Union East.

Captain Hua said the Union East was the first China Union Lines ship lost on the high seas. There were no plans as yet made to replace it. The Union East was under charter to the Brazilian Government. He placed the value of the ship, without cargo, at between $5 million and $6 million.
Technology of the future.
Dedication of the past.
Seiko, the quality watch of today.

First Seiko created an entire, unique micro-electronic-technology.
Then merged it with a venerable tradition of handcraftsmanship.
Then went even further: Seiko insisted on making all parts of all Seiko watches to insure impeccable quality.
The summation is Seiko, the quality watch of today.

Someday all watches will be made this way.
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.
ICHCA Biennial Report 1973—75

London (ICHCA Press Information):—The Report for the period 1973—1975 was presented to the General Assembly of ICHCA (International Cargo Handling Co-ordination Association) held in Florence on 12th May.

It recorded the success of “Condensation in Containers”, the first report published by TASC (Technical Advisory Sub-Committee). TASC is made up of experts from 12 countries and the collection of this international expertise into one committee is proving to be of considerable value in assessing information collected from a very wide geographical area.

Two further reports by TASC on Pilferage and Cargo Security are nearing completion and will be available later this year.

Six technical publications have been prepared and issued by the Publications Sub-Committee during the period under review. They include papers on port economics in developing countries, appraisal of port warehouse extensions, marine carriage of LNG, American transport law and a major bibliography.

The creation of an Air Cargo Section has completed the ICHCA coverage of all forms of goods transport.

Both IATA and FIATA have welcomed the new section and the necessary co-operation to avoid duplication of effort has been achieved.

The section is arranging a major two-day symposium on Air Freight Handling to be held in Paris in the Autumn.

The international study group on the “Transportation and Handling of Meat” has reached the report stage and their report is expected later this year.

The National and Regional Sections have shown increased activity during the past two years. Nineteen conferences, fourteen luncheons, and sixteen meetings in 20 countries have all been addressed by eminent transport spokesmen.

Association officials have visited members in eleven countries during the two-year period.

Membership is increasing and a new National Section is to be formed in South Africa. This brings the total of National/Regional Sections to 24.

ICHCA programme for 1975—1977


The Air Cargo Section is to be enlarged and is to work in close collaboration with IATA and FIATA. There is to be a major two-day symposium on Air Freight Handling in Paris during the Autumn.

Training, particularly for developing nations, is to be investigated with a view to setting up training programmes in conjunction with UNCTAD, IMCO, ILO and established colleges, institutes and private companies engaged in cargo handling.

Inter-library exchange facilities are to be negotiated with organisations that are transport orientated.

The scope of the Members’ Information service is to be widened.

TASC (Technical Advisory Sub-Committee of ICHCA) are to issue two reports on Pilferage and Cargo Security. The Committee is to initiate studies into other problem areas of transportation. ICHCA will also investigate and promote moves to hasten the establishment of a single transport document for multi-modal operations.

The Publications Sub-Committee are to issue more technical publications. These will be issued without charge to members. The proceedings of the Florence Conference are being published and will be available in book form later this year.

ICHCA officials will visit more countries where efforts are being made to establish National or Regional Sections and where National/Regional activities are promoted.

The Council of ICHCA is to be re-organised on a Regional basis to improve communications with members and to promote local ICHCA activities in various parts of the world.

The General Assembly authorised the setting up of a new National Section in South Africa. This brings the total of National/Regional Sections to 24.

As a means of accelerating ICHCA membership growth a new Membership Promotion Sub-Committee is to be formed. The object is to make the Association’s aims and objectives more widely known and to attract new members from all sectors of the international transport chain.

ICHCA initiative in the co-ordination of training

London (ICHCA Press Information):—As a speedy follow-up to the Florence Conference a meeting was held on 30th May in the ICHCA (International Cargo Handling Co-ordination Association) Central Office in London. It was attended by Captain Jack Bathurst O.B.E. (Inter-regional Adviser, Ports and Shipping, UNCTAD), Mr. E. Argyroffo (Maritime Branch, ILO), Captain G. S. Singh (Deputy Director, Technical Co-operation Division, IMCO), Mr. L. Goll, Head of Cargoes Section, IMCO), Mr. D. T. Edwards (Cargoes Section, IMCO), Mr. Stanley Turner (President of ICHCA), Mr. Ray Holubowicz (Chairman, Council of ICHCA) and Jhr. H. L. van Suchtelen (Secretary-General of ICHCA).

The object of the meeting was to co-ordinate the efforts of the various U.N. Organisations with regard to training opportunities for developing countries.
ICHCA are preparing a detailed questionnaire for circulation to the members to ascertain the types of extent of training required.

ILO (International Labour Organisation) are mainly concerned with the welfare and training of dock-workers. UNCTAD (United Nations Conference for Trade and Development) are involved in courses for all levels of managerial and operational personnel in ports. They are assisting the port of Singapore to establish an Institute of Port Studies. IMCO (Inter-Governmental Maritime Consultative Organisation) operate on two levels; by arranging meetings and Conferences and the execution of projects on behalf of the UNDP (United Nations Development Programme). They have, jointly with UNCTAD and ILO assisted in the setting-up of a Maritime Academy in Alexandria, which caters for sea-going personnel and for shoreside managerial staff, and in Rio de Janeiro for all levels of seagoing personnel training.

The meeting agreed that collectively there was considerable scope for future action. With ICHCA playing its part in identifying the requirements of the developing countries the co-ordination of the programmes of the various organisations would avoid duplication of effort. Training and educational opportunities could be provided covering the areas of need.

**Containerization in the Arab World**

Paris (Information, February 1975, the ICC members' bulletin, International Chamber of Commerce):—Rapid economic growth needs at least equally rapid development of modern transport facilities, and nowadays this means containerization in particular. Recognizing this, the Lebanese National Committee decided to initiate a Round Table discussion on container development in Arab countries, now the fastest growing group of nations in the world.

Some 60 participants attended the discussions held in Beirut on 21 and 22 January, representing 10 Arab countries and a number of international bodies concerned with this sector.

The meeting adopted a seven point set of recommendations on future container developments, stressing the necessity of progressive, coordinated steps that could however be amply financed by using the region’s resources effectively.

Recommendations notably suggest using experience gained in other regions and by international organizations: the ICC’s Uniform Rules for a Combined Transport Document were the object of close attention. These Rules are now incidentally undergoing revision to facilitate their more wide-spread adoption. National Committees have received an enquiry on this and it is hoped that a revised version will receive approval in June.

The Beirut meeting was organized jointly by the Beirut Chamber of Commerce, the General Union of Arab Chambers and the Lebanese NC.

**New structure for ports**

Nanaimo, B.C., Canada (Nanaimo Harbour News, June 1975):—Increased autonomy for local ports and a new national port authority to oversee federal interests in Canadian harbours are among proposals for new ports legislation expected in the near future.

The legislation, called the Canada Ports Act, would meet the need for “a new structure that eliminates present fragmentation of port policy, planning and operations in Canada” according to the Scott report. The report, prepared by the Transport department’s senior assistance deputy minister, George Scott, makes the following basic recommendations:

- The establishment of “Local Port Entities” as a semi-autonomous public corporate bodies.
- The delegation to those local entities of powers to make by-laws concerning expenditures of funds, rate setting, property administration, security, vessels and goods seizure and executive appointments.
- The establishment, within the transport department, of a National Port Authority responsible for all federal interests in Canadian ports.
- The orderly transition from the present administration of harbours by a variety of agencies, to the one envisaged under the new legislation.
- Giving the transport minister the authority concerning administration of the local port entities and other ports now under federal jurisdiction.
- Financial responsibility by the transport minister for port improvement and maintenance.
- The recognition of regional port advisory boards as agents of regional socio-economic co-ordination and development.

Currently there are 2,200 ports in Canada, with 1,700 mainly used for recreation and fishing and administered by the environment department.

About 500 ports have commercial significance and are administered by the transport department, divided into 475 public harbours, 11 National Harbour Board ports and 11 Harbour Commission ports.

Provincial governments were consulted during the preparation of the report and while agreeing that responsibility for Canadian ports should remain a federal one, suggested that regional port authorities would facilitate co-operation between ports and program review and funding by the central authority.

The Scott report also recommended a National Marine Transportation Council in charge of overseeing regional and provincial objectives related to harbours and facilities, as well as the total marine planning and development.

**Canada will host IALA Conference**

Ottawa, May 12 (Transport Canada News, Directorate of Public Affairs):—The Ministry of Transport will host the IXth International Conference on Lighthouses and Other Aids to Navigation in Ottawa, from August 3–15, Transport Minister Jean Marchand announced today.

More than 300 delegates from approximately fifty countries will meet at the Government Conference Centre in Ottawa during the two-week period to discuss and exchange information concerning the world-wide development of marine aids to navigation. The Paris-based International Association of Lighthouses Authorities (IALA) groups organizations and services responsible for the maintenance of lighthouses and other aids to marine navigation. The Association meets every five years and this will be the organization’s first conference in Canada.
More than 100 technical papers will be presented, covering various aspects of the operation and maintenance of lighthouses and the research and development of new navigational aids. Topics to be discussed will include among others the design of fixed structures and floating work, automation and remote control, electronics and radio navigation, and principles and new systems for aids to navigation.

During past conferences, Canadian delegates have contributed valuable expertise in this field and Canada has been a leader in the development of new navigational aids. The Conference will feature an industrial exhibition at which major suppliers from various countries will display their latest equipment.

**Student wins logo design award**

Toronto, Ontario, Canada, June 1975 (Canadian Port and Harbour Association):—A 21-year-old Montreal student has been named winner of the logo design competition sponsored by the Canadian Port and Harbour Association.

Top prize of $1,000 was won by Philip Unger, a fine arts student at Concordia University. His design, which will symbolize the ports group, topped 153 entries submitted by students attending art schools across Canada.

The winning design has as its centre a stylized bollard, a post used for the mooring of ships. The first runner-up design also uses a bollard for its central theme with one other element—waves to give the logo a feeling of land and water.

“While I was happy to win,” said Mr. Unger, “I must admit that when I submitted my design I was hoping that I would be fortunate enough to at least take one of the runner-up awards.”

The Concordia University student said he would use the prize money to complete the final year for his Bachelor of Fine Arts Degree in Graphic Design.

“It is an eye-catching design,” said association president William B. Rest, Toronto Harbour Commission solicitor. “I am sure it will give our association the identity its members want.”

First official use of the new logo will take place at the association’s annual meeting to be held in Thunder Bay (the Lakehead) September 7–10, 1975.

**Safe Boarding Week**

Balboa Heights, C.Z., June 18 (Panama Canal Press Release):—It’s a rare ship that transits the Panama Canal with properly rigged boarding ladders.

That is one of the conclusions reached during Safe Boarding Week, a program designed to give increased emphasis to the Canal’s year-round effort to promote safe boarding and debarking standards for all transiting vessels. Injuries sustained by Canal pilots and others whose jobs require them to board ships prompted the Marine Bureau to undertake the ambitious educational program. The cooperation of the Panama Canal Pilots Association, representatives of Isthmus-based steamship agencies and others helped insure its success.

Safe Boarding Week was the idea of Captain Robert D. Valentine, President of the pilot’s association and a board member of the International Maritime Pilots’ Association. During a week of planning, Captain Valentine conducted seminars on both sides of the Isthmus for the men who would make up the inspection teams.

Eight hours a day for five days, Board-With-Safety teams composed of a Panama Canal pilot, Assistant Port Captain, Admeasurer, Safety Officer, Training and Safety Bosun for Canal Deckhands and a Shipping Agency Representative, manned a Panama Canal launch at both the Atlantic and Pacific terminals of the Canal.

The teams inspected the boarding facilities of 114 ship—47 in Balboa and 67 at Cristobal—against a check list made up from international and Panama Canal standards.

The check list was broken down into four main categories: general condition of boarding facilities; pilot’s ladder; pilot hoist; and accommodation ladder.

Only four vessels complied with all of the safe boarding requirements set up for ships transiting the Panama Canal. Deficiencies on the remaining 110 ships reached staggering proportions. As many as 89 percent did not have boat spars properly rigged on accommodation ladders and 85 percent did not carry a life ring with line and water light attached.

The teams concluded that lack of supervision was the chief cause of deficiencies since the majority of ships had proper equipment aboard which was either improperly
San Francisco, Calif., 5/20/75 (San Francisco Customs Brokers and Freight Forwarders Association):—SAN FRANCISCO = “Let there be light” was the theme of a recent discussion by Pacific Coast Customs Brokers and Freight Forwarders Association officials, at the World Trade Club. The gathering of leaders from Washington, Oregon and San Francisco associations, and from the Northern Border Association, was prompted by need for closer cooperation and common action. Considered was possible federation of the several groups. Hosting association was San Francisco, headed by President John Sundfelt (center, providing the illumination), Frank P. Dow Co., Inc. Other participants included (seated, from left) Bill Bosque, J.E. Lowden & Co.; Ted W. Kennard, B.A. McKenzie & Co., Tacoma; Al Murray, George S. Bush & Co., Inc., Seattle; Ted Rausch, San Francisco, and David Buffam, Portland, of Ted L. Rausch Co. (Standing): R. Vander Yacht, Border Brokerage Co., Inc., Blaine; Marshall Brownfield, BBC International; James Burns, Thornely & Pitt, Inc.; Frank Dauz, George S. Bush & Co., Portland; John Molsberry, Robert E. Landweer & Co., Inc., Seattle; Kevin Maloney, Enterprise Shipping Corp., Los Angeles, and Ben Ellis, George S. Bush & Co., Portland.

Cooperative crewmen played an important role in the educational program by correcting deficiencies as they were pointed out by the inspection teams.

A study of the teams’ findings is expected to lead to the following recommendations:

... That the operators of unusually high-sided ships such as car carriers and container ships be encouraged to fit their ships with lower-deck, side-port boarding facilities in lieu of excessively long accommodation ladders;

... That all vessels which have ladders more than 30 feet long and on which it would be unpractical to provide lower-deck side ports, utilize a pilot ladder/accommodation ladder combination because pilot hoists are neither safe nor fast enough to accommodate handling of the numerous Canal seamen necessary for transits of the Panama Canal;

... That accommodation ladders for all new ships be designed and constructed for placement on the flat hull side of the ship, leading aft.

The enthusiastic response and cooperation of those involved in this year’s Safe Boarding Week has encouraged the Panama Canal Marine Bureau to begin plans for an annual program to maintain an awareness of the need for safe boarding facilities.

All - American Seaway proposed

Duluth, Minnesota, June 18 (Seaway Port Authority of Duluth):—Kaleidoscopic thoughts of colonial flags bearing “Don’t Tread on Me!” of pioneer bargemen traversing the Erie Canal, and of a soft-speaking American carrying a big stick, came to mind as one listened to a speech being delivered to the Chicago Transportation Research Forum at a noon luncheon at the Midland Hotel by Duluth Port Director, C. Thomas Burke.

Burke, who is President of the International Association of Great Lakes Ports, voiced his strong opposition to proposals being presently considered by the Canadian government to unilaterally increase Seaway Tolls by some 25 per cent, suggested possible retaliatory raises on Canadian movements through American locks, and advocated renewed efforts to establish an all-American, deep-draft ship canal linking Albany, New York, with Buffalo, and Lake Superior with the Mississippi River.

“These recent threats by the Canadian government, coupled with the second straight year of labor instability on the Canadian side which threatens to harm the image of the entire Seaway System, should make Americans look with renewed interest at a couple of projects that have been considered on and off for a number of years,” Burke said.

Burke outlined the history of the Seaway System from the construction of the first Welland Canal in 1829, to the opening of the present-day Seaway in 1959. He pointed out that like all other North American inland waterways, the System was toll free for most of its existence.

It wasn’t until the 1880’s, according to Burke, that any tolls were imposed at all. During that period, in an effort to compel United States grain exporters into making greater use of the Port of Montreal; Canada imposed a 20 cent a ton toll on all U.S. cargoes transiting the Welland Canal, rebating 18 cents a ton to those exporters who transshipped their cargo overseas through Montreal.

In retaliation, the United States enacted the “St. Mary’s Falls Canal Statute” of 1892, which imposed a $2 a ton tax on cargoes of vessels in transit to the ports of any government discriminating against the United States. In response to considerable objections voiced by Canada over this U.S. action, both countries jointly agreed to drop their tolls in 1901, and the System remained toll free until the opening of the present System in 1959.

However, the St. Mary’s Falls Statute still remains on the books, and Burke feels that any increase of Seaway tolls by Canada would warrant renewal of its usage. “If Canada acts unilaterally, perhaps it would be appropriate for history to repeat itself,” the Duluth Port Director said.

Burke feels that the long-range, well-being of the United States Great Lakes maritime community would best be served by the creation of an all-American Seaway System. This could best be accomplished through the modernization of the old Erie Barge Canal and by linking the Great Lakes with the Mississippi through the Twin Ports of Duluth-Superior.

Among the benefits of such a move, according to Burke, would be complete American jurisdiction over the entire “new” System, freedom from the “unpredictability of Canadian labor,” and the ability for larger, more modern ocean vessels to traverse deep into the American Midwest.
Environmental considerations would be minimal since the new System would basically consist of updating an existing man-made waterway, he said.

With a new two-year grainmiller's pact, a three-year longshoreman's contract, pilotage matters on the U.S. side in a settled condition, the return of American flag-vessel service after years of absence, the creation of a Great Lakes's regional office of the U.S. Maritime Administration, and an optimistic outlook for cargo, this year's shipping season has all the ingredients of success for Great Lakes Ports. But these recent pronouncements by some Canadian authorities have become a matter of major concern for Great Lakes maritime interests on both sides of the border.

"Thousands of American workers and millions of American investment dollars are pledged to the success of the St. Lawrence Seaway System," Burke said. "If another nation, through its unilateral action jeopardizes that fragile existence, then we must be prepared to retaliate, or go it on our own."

Port Everglades

Hollywood-Fort Lauderdale, Florida (Port Chairman's Report, 1974 Annual Report, Port Everglades Authority):

- "The Port Everglades Authority faced one of the most challenging periods in its 48 year history in 1974. Despite the world energy crisis, and the devastation of the construction industry economy, the Port continued to develop new business and improve its harbor facilities.

In December the Port entered into a contract with the U.S. Government whereby we will receive $12.3 million for the purpose of deepening and widening the entrance channel and turning basin. Our application, which was first submitted ten years ago to the U.S. Corps of Engineers for these funds, was approved by both Houses of the U.S. Congress. This Harbor improvement project will make our Port even more safe for vessel traffic thus further reducing the possibility of a ship running aground and polluting the beaches of South Florida.

Containerized cargo once again appeared on our docks as Sea-Land Service, Inc. moved into a five acre facility at Port Everglades. Over 50,000 tons of wastepaper exported for reconstitution crossed our wharves. Contracts were consummated which will have 50% of all citrus exports from Florida pass through the Port.

The Construction Fund Reserve Account now exceeds $5 million which is ten times the amount in reserve six years ago.

Cruise passenger business increased and visitors were impressed with the $750,000 worth of improvements made in consolidating Passenger Terminal Buildings 22 and 24.

The Port Charter, which is the law under which the Port Authority operates, was further strengthened by improving the Conflict-of-interest sections and the addition of a Campaign Contributions Limitation section.

The Port's cooperative venture with other government authorities concerning the creation of a State Park was upheld in local courts and Broward County received $15 million in State funds to give its citizens a recreational area on the beach boarding the Atlantic Ocean."

W. Phil McConaghey
Chairman
January 6, 1975

Lykes SEABEES win European patents

New Orleans, La. (New Orleans Port Record, February, 1975):—Lykes Bros. Steamship Co., Inc., owners and operators of the world’s only SEABEE Class intermodal barge and container transports, has been granted patents in the United States and seven countries abroad covering special features of either the SEABEE ocean carrier or the SEABEE barges.

The countries of England, Holland, West Germany, Japan and Italy have granted patents to Lykes for both the SEABEE transports and the SEABEE barges, while Belgium and France have issued patents for the barges only.

Three of Lykes’ SEABEES operate regularly between terminals on the U.S. Gulf and terminals in North Europe and the United Kingdom. The SEABEE barges penetrate the inland waterways of the United States and Europe in regularly established international trade.

The 875-foot long SEABEE carriers are unique, utilizing a 2,000-ton submersible, hydraulic, stern elevator to load and discharge two loaded barges simultaneously. All other barge carriers now in service use deck cranes to load and discharge their barges.

Lykes SEABEES employ an hydraulic system to lift the barges and an electrically controlled transporter system to remove the barges from the elevator and for stowing the barges in their proper places along the three decks that run the full length of the ships.

When operating as a full barge carrier, each SEABEE can
transport 38 loaded barges providing nearly 1.8 million cubic feet of cargo space and a total of 24,000 long tons of deadweight cargo capacity.

Each SEABEE barge is 97½ feet long and 35 feet wide. Their cargo capacity is 834 long tons and their bale capacity is 39,140 cubic feet. They are double-hulled throughout, with four separate watertight compartments and watertight hatch covers. The interior of the cargo hold is rectangular in shape, and with hatch covers removed, nearly the entire cargo compartment is available for unobstructed loading. Fork lift trucks can be used in the barges to facilitate cargo handling.

Because of the demand for container space, however, the SEABEE transports operate primarily as combination barge and container ships. Containers can be stowed inside the barges, on fitted beams atop the barges on the top deck or on adapters on the top deck.

When loaded into the barges, 30-foot containers rest on releasable pedestals, making possible the additional stowage of bulk, break-bulk or unitized cargoes in the lower section of the barge. Lykes' unique 30-foot containers are designed primarily for in-barge loading and each barge can carry 10 of them in addition to other cargo.

In normal operations, a total of 283 forty foot containers can be carried on the top deck of each SEABEE transport in addition to those containers stowed inside barges on the two lower decks of each ship.

International cargo movement in 1974

New York, N.Y., June, 1975 (News from The Port Authority of New York and New Jersey)—In maintaining its position as the United States' top general cargo gateway, the Port of New York-New Jersey set these records for the movement of international cargo last year:

... Foreign oceanborne general cargo totaled almost 16,735,000 long tons, the highest level in three decades.

... Airborne international cargo set a new record for the fourth straight year with 498,000 long tons shipped through Port District airports.

... Dollar value of the Port's foreign trade also showed a substantial increase, climbing to a record value of $39.3 billion.

The Port's 1974 tonnage figures are based on data obtained from the United States Department of Commerce and analyzed by The Port Authority of New York and New Jersey. Dr. William J. Ronan, Chairman of the Port Authority, in making public the analysis of the figures said, "The Port's impressive general cargo showing is a tribute to our preeminent position in container shipping and our pioneer involvement in this most modern shipping mode. During 1974 the Port Authority's renovations and expansion of its marine and air cargo terminals ensured adequate and efficient facilities for the handling of foreign cargo. The near completion of the Elizabeth-Port Authority Marine Terminal—America's container capital—and the addition of seven new air facilities to the Air Cargo Center at John F. Kennedy International Airport underscores the dynamic nature of foreign trade at the Port of New York-New Jersey."

Oceanborne General Cargo

The Port's oceanborne general cargo volume rose in 1974 to 16,734,773 long tons, up 3.1% from 1973. This was the highest level of general cargo traffic at the bi-state Port since 1941, when wartime conditions resulted in an extraordinary level of traffic being shipped to Western European nations.

The 1974 increase was due to general cargo exports, which reached nearly 6,846,000 long tons, up 17.3% over 1973. The surge of exports in 1974 can be attributed to the dollar devaluation and the sharp rise in worldwide prices, which made U.S. exports attractive to overseas buyers.

Gains among the principal export commodities were led by paper products such as waste paper and paper board. Other commodity groups with increased volumes were
hydrocarbons, general machinery and road motor vehicles. In contrast there was some reduction in exports of steel plates and sheets.

**Airborne International Cargo**

With substantial increases in both volumes and values of foreign cargo handled, the New York-New Jersey international airports—John F. Kennedy and Newark International—continued to be America’s leading air cargo gateways in 1974 when they handled nearly as much airborne trade as all other United States gateways combined. Airborne exports posted strong growth, up 11.5% over 1973 to over 287,000 long tons; while import shipments edged forward to some 211,000 long tons.

The increase in air cargo movements through the bi-state port during 1974 is a result of favorable trade conditions, plus effective marketing and pricing by the air industry. Most of the increase was due to expanded exports of such commodities as scientific instruments, aircraft and parts, electric motors and generators, office machinery, plastic materials and miscellaneous machinery.

**Value of Foreign Trade**

The value of foreign trade—ocean and air—at the Port of New York-New Jersey rose sharply in 1974, maintaining the Port’s dominance in handling America’s high-value foreign trade. Tonnage was valued at $39.3 billion, an increase of almost 34% over 1973. This rise reflects increased export volumes as well as inflationary factors. The 1974 value is far and away the largest for any port in the United States.

**Oakland—Nakhodka, sister cities and ports**

Oakland, California (Port Progress, May 75 Port of Oakland)—The twin seaports of Nakhodka and Vostochny, located on the Far East coast of the Soviet Union, are building facilities and services which will make it the largest port area in the Soviet Union by the end of the next decade.

That was revealed in Oakland, California, by N. A. Kuksov, Mayor of the city of Nakhodka, Alexei K. Lukoshkin, Chief of the Port of Nakhodka, and Victor A. Vasyanovich, Chief of the Port of Vostochny, who were invited to Oakland by Mayor John H. Reading to formally sign documents joining Nakhodka and Oakland as Sister Cities and Ports.

The Sister City and Port relationship between Oakland and Nakhodka was proposed during a visit to Nakhodka 18 months ago by Mayor Reading, Port Commissioners Tom Berkley, Ted Conolly and Robert E. Mortensen, and Executive Director Ben E. Nutter. That visit was arranged by the Far East Steamship Company (Fesco Pacific Line), the Soviet-flag container line that regularly calls at the Port of Oakland and that operates the port and transportation services.

Following official approval by the U.S. and U.S.S.R. governments, the Sister City affiliation was formalized at ceremonies held at the Oakland City Hall with the signing of documents and an exchange of keys to the city and other gifts by Mayors Reading and Kuksov. A Port Commission resolution joining the Ports of Oakland, Nakhodka and Vostochny was presented to the Nakhodka mayor and two port directors.

Trade between the two port cities was the key to the affiliation program. Nakhodka is the main Far Eastern port of the Soviet Union, second largest in the nation, and at the eastern terminus of the trans-Siberian railroad. The Soviet plan calls for massive development of the twin ports of Nakhodka and Vostochny and the movement of much of the goods for the eastern section and interior of the Soviet Union and eastern Europe, through Nakhodka and via the trans-Siberian railroad.

Nakhodka has 20 berths, including two berths at a container terminal, and Vostochny opened its first two berths during the past year for the shipment of wood chips. Located at separate areas of the Bay are berths for oil tankers. Refineries are nearby, and there are three shipyards in the Nakhodka area. Often the berths are occupied and ships are waiting at anchor.

Another 60 berths will be built at the Port of Vostochny! In a two stage program, berths and facilities will be constructed at the Vostochny area to make the combined ports of Nakhodka and Vostochny the largest in the Soviet Union. All types of cargo will be handled.

"By 1990, Nakhodka and Vostochny combined will have 82 berths and handle 30 million tons of cargo a year, excluding petroleum products," Kuksov said. "It will be the largest port in the Soviet Union, surpassing Odessa, the present leader located on the Black Sea," he added.

San Francisco, Calif., 6/20/75 (Marine Exchange of the San Francisco Bay Region)—The maiden voyage arrival of the PROMETHEUS was recently feted in special ceremonies aboard ship at San Francisco’s pier 48B facility. Welcoming vessel master Captain W.A. Fitzgerald (seated) was (left to right) Frank Ewers (Marcona Corp.), Marine Exchange of the San Francisco Bay Region; Bernard Powell, San Francisco Chamber of Commerce; Steve Wilks, Marine Committee of the San Francisco Junior Chamber of Commerce; and Ron Popham, Line Manager for Overseas Shipping Co., agents for the Barber Blue Line service. The Marine Exchange, which lead the assembled welcoming committee, regularly honors vessels on their first voyage to the San Francisco Bay Region and helps coordinate welcoming ceremonies for the various agents and companies in the area.
The Americas

San Francisco, Calif., 6/24/75 (Marine Exchange of the San Francisco Bay Region):—NEW TUGBOAT FOR SAN FRANCISCO BAY AREA FIRM: Western Tug and Barge Corporation of Richmond, California, recently announced the acquisition of the tugboat SIEGFRIED WARRIOR for its Bay Area and coastal service. To commemorate the event, christening ceremonies took place in San Francisco. Pictured (left to right) are Marlene Latham, assistant manager for Western Tug and Barge; Rees B. Williams, Jr. vice president; and Arthur Riedor, president of Willamette Western Corporation.

The 1000 horsepower, 70 foot tug was rebuilt and repowered in 1965 in Portland, Oregon. In addition to regular ship assisting and general towing duties in the San Francisco Bay Region, Western Tug will utilize the vessel for coastal towing to Monterey, Santa Cruz, Moss Landing, and other points south. This service to the shipping industry is part of the company's plans to meet the ever growing demands of increased vessel activity in the bay region and surrounding waters.

Further information may be obtained by contacting Rees Williams, Jr., Western Tug and Barge Corp., Ft. of 3rd. and Cutting, Richmond, Ca. 94802. Telephone number—(415) 234-8362 (24 hrs.)

Most of the general cargo will move in containers through Nakhodka and Vostochny and over the trans-Siberian railroad to inland destinations. The railroad has been extended to serve both port areas, and the plan calls for tripling the railroad service by adding two new trans-Siberian lines. Moscow is a seven-day trip from Nakhodka by railroad.

Oakland buying 2 more cranes

Oakland, California (Port Progress, May 75, Port of Oakland):—The Oakland Board of Port Commissioners has approved purchase of two giant Paceco container cranes for use in the Port's Outer Harbor Container Terminal, now under construction.

The new cranes will be the 15th and 16th container cranes erected at the Port of Oakland, which is exceeded only by the Port of New York in facilities for container shipping. Each crane will cost about $2.4 million.

The new cranes will be used primarily by a consortium of four Japanese steamship lines—Japan Line, “K” Line, Mitsui-O.S.K. Lines, and Yamashita-Shinnihon Steamship Company. The new terminal for the Japanese will be in operation by early 1977, which is also the target date for completion of the first crane.

The two 40-ton Paceco cranes are described as being the finest and most sophisticated container cranes ever built. They will be constructed at the firm's Alameda plant under close inspection by the Port's engineering department.

The Ports of Philadelphia

General Cargo in Boxes Climbs

Container Traffic Up 14 PC to 1.2 Million Tons

(from The Journal of Commerce, New York, Monday, May 19, 1975)

Journal of Commerce Special

PHILADELPHIA—International waterborne commerce handled through the Ports of Philadelphia is expected to reach a total of 83.2 million short tons in 1974. This is an estimated total for the year just completed, as the final actual figures are not yet available from the United States Bureau of Census.

If these estimated figures are confirmed, it would be the largest tonnage handled in the Port's history, and would be about 5 per cent over 1973's total international tonnage of 79.3 million short tons.

The Ports of Philadelphia, predicated upon actual data for the nine months of 1974, is in first place among the four North Atlantic Ports in total international waterborne commerce handled.

As shown in table below, Philadelphia had 32.2 per cent of the foreign waterborne commerce handled, followed by New York's 29.0 per cent, Hampton Road's 22.6 per cent, and Baltimore's 16.2 per cent.

Containerized traffic through the Ports of Philadelphia increased by more than 14 per cent during the year 1974. Total general cargo tonnage handled in containers reached 1,200,000 tons during the year. The tonnage volume handled during 1973 was 1,050,000 tons.

The Delaware River Port Authority recently completed a forecast of tonnages by type of cargo for 1980 and 1985. Total international commerce for Philadelphia is expected to grow to 92,833,000 short tons in 1985, an increase of 17 per cent over the tonnage for 1973.

General cargo is expected to grow much faster than bulk cargo on a percentage basis. In 1973, general cargo exports and imports totaled 6,436,441 short tons. This is expected to grow to 12,833,000 short tons by 1985, an increase of
The Americas

3rd Terminal Planned

To meet this explosive container growth, the Philadelphia Port Corporation is actively planning construction of a third container terminal to supplement its modern facilities at Tioga and Packer Avenue Marine Terminals.

Several sites are being evaluated and preliminary concepts of layout are being reviewed.

There are responsible prospective operators for the third terminal who are most enthusiastic about Philadelphia's future in this highly competitive transport age.

Int'l Waterborne Trade

4-Port Comparison—Tons Handled

<table>
<thead>
<tr>
<th></th>
<th>Philadelphia</th>
<th>Baltimore</th>
<th>New York</th>
<th>Hampton Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>54,057,635</td>
<td>31,392,918</td>
<td>63,380,110</td>
<td>57,649,702</td>
</tr>
<tr>
<td></td>
<td>26.18%</td>
<td>15.20%</td>
<td>30.70%</td>
<td>27.92%</td>
</tr>
<tr>
<td>1971</td>
<td>54,680,537</td>
<td>27,173,767</td>
<td>59,191,672</td>
<td>46,383,788</td>
</tr>
<tr>
<td></td>
<td>29.17%</td>
<td>14.50%</td>
<td>31.58%</td>
<td>24.75%</td>
</tr>
<tr>
<td>1972</td>
<td>63,970,228</td>
<td>29,162,068</td>
<td>68,063,400</td>
<td>47,536,033</td>
</tr>
<tr>
<td></td>
<td>30.65%</td>
<td>13.97%</td>
<td>32.61%</td>
<td>22.77%</td>
</tr>
<tr>
<td>1973</td>
<td>79,436,905</td>
<td>34,601,224</td>
<td>85,007,547</td>
<td>49,157,004</td>
</tr>
<tr>
<td></td>
<td>31.98%</td>
<td>13.95%</td>
<td>34.26%</td>
<td>19.81%</td>
</tr>
<tr>
<td>9 Months 1974</td>
<td>60,811,000</td>
<td>30,540,044</td>
<td>54,687,931</td>
<td>42,571,471</td>
</tr>
<tr>
<td></td>
<td>32.24%</td>
<td>16.19%</td>
<td>29.00%</td>
<td>22.57%</td>
</tr>
</tbody>
</table>

Gate shipping firms but U.S. arrivals down

San Francisco, Calif., 5/16/75 (Marine Exchange of the San Francisco Bay Region):—Despite a continuing national economic slowdown in international trade and shipping, Golden Gate ship traffic last month showed only a slight decline in actual vessel arrivals. The Marine Exchange of the San Francisco Bay Region—in citing April's traffic report— noted that the actual transit volume was probably more representative of the long-term trend to larger and more productive specialized ships than of an actual decrease in cargo volume.

The maritime service agency said that April's 306 total vessel arrivals was 6% less than a year ago. However, the biggest drop was by American flag ships with 25% fewer arrivals—163 a year ago, and 130 last month. Every category of traffic except by passenger vessels was included in the decrease in U.S. ship traffic.

Offsetting this major decline was an upsurge of almost 10% in foreign flag shipping activity, from 176 arrivals last month compared to 159 a year ago. But both American and foreign flag activity showed modest but significant reductions in tanker arrivals.

Overall, despite decline in actual vessel traffic, the "Gateway to the Pacific" maintained its international reputation by being the host to ships representative of 29 different nations, compared to 22 a year ago.

$63 million appropriation

Savannah, Georgia ("The Executive's Corner" Georgia Anchorage, March-April 1975, Georgia Ports Authority, Executive Director Mr. J.D. Holt):—Internationally conscious Governor George Busbee, and the Georgia General Assembly, have appropriated sixty-three (63) million dollars to the Georgia Ports Authority to acquire land for expansion and to build additional facilities in both Savannah and Brunswick.

This action is consistent with the legislative mandate that created the Authority in 1945, for the purpose of promoting international trade.

In the words of Robert H. Tharpe, Chairman of the Authority, this appropriation is of vital importance to Georgia's economic growth. Industries throughout the State involved in foreign commerce through the Ports of Savannah and Brunswick realize more than one billion dollars in revenues and create millions of dollars in state and local taxes.

The exposure of Georgia to investment by foreign nations, and the building of plants within the State, have been the outgrowth and creation of international trade and shipping through the ports of Georgia. The environment...
PORT OF ANTWERP

Artist impression of new Scheldt-Rhine canal which will be opened to navigation in September 1975.

which is mandatory to establish the interest of foreign capital and actual plant location can be realized only when trading by traditional shipping methods has become a pattern.

Therefore, the approbation that now allows the ports of Georgia to expand, build and modernize its facilities, will be of benefit to the entire State of Georgia and to many customers throughout the nation and the world.

Cargo through Port of Tampa in 1974

Tampa, Florida, 6/19/75 (News from The Port of Tampa):—More than 18.6 million tons of cargo valued at $958 million moved through the Port of Tampa in foreign commerce during 1974, Guy N. Verger, Port Director, announced.

Value of exports exceeded imports by $200 million, due primarily to the increase in prices of phosphate and fertilizers. Exports of fresh citrus jumped to a record high of 3 million boxes, an increase over 1973 of 32 per cent.

The Port of Tampa once again handled over 50% of the total foreign waterborne commerce which moved through Florida's fourteen deep water ports, and retained its rank of ninth in the nation in foreign tonnage handled and fourth in export tonnage.

Tampa's chief trading partner, Japan, accounted for more than $152 million and 2.6 million tons of goods during the year followed by The Netherlands with 1.9 million tons valued at $72 million.

Bacat in Antwerp

Antwerp (Bimonthly review of the port of Antwerp, February/March 1975):—For the first time a catamaran-vessel called at the port on the river Scheldt. It concerns the «Bacat 1», flying the Danish flag. As it is the case with a catamaran, this new type of vessel has double twin hulls. The name «Bacat 1» as a matter of fact goes back to B (arge) A (board) Cat (amaran). «Bacat 1» has a carrying capacity of 10 Bacat-barges and 3 Lash-lighters. A tug boat brings the barges in via the open stern.

An elevator takes the Bacat-barges on deck where they are fastened. The Lash-barges, however, are floated in and locked between the catamaran hulls, where they are transported in floating position. This technique, by which barges are conveyed afloat, distinguishes the Bacat-system from the Lash and Seabee-techniques.

«Bacat 1» has a length of 104 m, a breadth of 21 m and a deadweight of 1,840 t.

The first call of a Bacat-vessel at Antwerp was a complete success. In less than two hours 10 Bacat-barges and 3 Lash-lighters were taken on board, carrying a load of iron and steel bound for Hull. In the future Antwerp will regularly be called at by this type of vessel. Agents in Antwerp are Herfurth & Boutmy.

5 - year plan

Ghent, Belgium (Port of Ghent Information Periodical, 2-75):—A few interesting data concerning the port of Ghent appear from the document regarding the Belgian senate's budget of the ministry of public works for the budgetary year 1975.

150 million francs figure in it to subsidize the sub- and superstructural works the city executes in the port of Ghent. In comparison with 1974, 30 millions have been cut down. As a matter of fact the credits which have not been invested during the previous years have to be added to said amount.

New transit shed for Cardiff Docks

London, 7 May (British Transport Docks Board):—A £300,000 project to provide a new transit shed at Cardiff's Queen Alexandra Dock has been put in hand by the British Transport Docks Board.

Contracts worth more than £200,000 have been awarded by the Docks Board to Geo. Wimpey & Co. Ltd., the main contractors, Ward Brothers, for steelwork and cladding, and West's Piling and Construction Co., Ltd., for the piling contract.

The single-storey shed, measuring 300 ft. x 200 ft., will provide additional quayside storage space for Cardiff's expanding general cargo traffic. Regular imports of zinc, lead and general cargo from Australia, Finland, South Africa and Malaysia will utilise the new facilities, and there are good prospects of attracting a significant increase in the port's export trade.

The new accommodation will also release existing shed space for Cardiff's busy citrus fruit trade. More than 117,000 tonnes of fruit was handled in 1974 and it is expected that this figure could rise to 150,000 tonnes in the current year.

Work has already started on site and it is anticipated that the shed will be operational by September.

Sir Humphrey speaks in Fleetwood

London, 3 June (British Transport Docks Board):—The crisis currently being faced by the fishing industry could not be solved by providing dock services for the trawler fleets at less than their true cost, Sir Humphrey Browne, chairman of the British Transport Docks Board, said today.

Sir Humphrey, who last week announced a record £12.1 million surplus for the Docks Board in 1974, was speaking at a luncheon in Fleetwood during a visit by Docks Board members to the Lancashire port.
Edinburgh: More than six hundred and thirty feet long, this giant tower, towed this week into Leith Docks after a voyage from Dunkirk, is bound for installation on the Shell Esso Brent oilfield platform, off Shetland. (Forth Ports Authority)

"The fish industry as a whole cannot expect us to regard it as some sort of privilege to serve them at a loss," Sir Humphrey said. "Unless they pay their whack, other port users are obliged to subsidise them, and this is just not on."

Sir Humphrey explained that the Docks Board was undertaking a £5 million programme of modernisation of fish dock facilities on behalf of the industry at the Board’s four main fishing ports of Fleetwood, Hull, Grimsby and Lowestoft, and that agreements had been reached for a new basis of charges which he hoped would rectify a hitherto unsatisfactory situation.

"I appreciate that the financial position of the fishing industry has come under increasing pressure in recent months but the solution is not to be found at the expense of the port industry, where for many years the level of revenues has been much too low relative to costs. We have now succeeded in getting the Docks Board’s finances on to a sound footing: let us hope that the fish industry will be able to do likewise."

Sir Humphrey recalled that the first stage of the new fish docks scheme at Fleetwood was completed at the end of March at a cost of just over £400,000. The contract for the second stage had now been placed at a cost of about £300,000, and was expected to be completed by early next year.

Sir Humphrey also referred to the recently introduced Pandoro freight ferry service from Fleetwood to Ireland for which the Docks Board had provided a new terminal costing £800,000, and which was of great importance to Fleetwood.

"The losses at Fleetwood," he said "have unfortunately been heavy in recent years—£140,718 in 1974—but with the ro/ro service, the rationalisation of the fishing services, and the new grain silo the position should greatly improve. There are opportunities for further expansion of the port if traffics can be assured."

Turning to the position of the Docks Board as a whole, Sir Humphrey referred to the results for 1974 announced last week. In spite of a severe fall in oil traffics—other traffics increased slightly in spite of a general fall in the country—the Board had produced a surplus of £12 m. before interest which was £71 m. up on 1973.

It was perhaps more significant, he said, that the Board had been self-financing for two and a half years providing all capital expenditure and additional working capital for the needs of growth and inflation without any borrowings. In 1974, a difficult year because of the oil crisis, the coal strike, the three day week, and recession generally, it had been possible to increase reserves by £3.6 m.

The docks industry was having a difficult time at present but the Docks Board’s determination was to remain profitable to achieve 9% return on capital—the target set by Government for 1975—and to continue to increase its share of UK traffics.

London, 12 June, 1975:—The physical model of the berth, with the computer equipment in the background, used in the National Ports Council Container Berths Simulation Analysis. The work is being undertaken by Livesey & Henderson in association with Coopers & Lybrand Associates together with National Ports Council staff and the British Ports Association. The model, operated by container berth managers, uses a computer to simulate container equipment working efficiency, time scales for handling containers on and off ships, through the berth and to and from inland transport, was tested this week by representatives from four British port authorities. Data for the computer inputs have been obtained from common user facilities in Britain, continental Europe and overseas ports.

The general impression from the tests, run this week, is that the data inputs have been accurate and the final phase of the study, the results of which will give comparable throughputs and costings of the various systems at common user lift-on terminals will go ahead after the results of this week’s tests have been carefully studied.

The final results should be available by the end of 1975.

(Photograph Copyright National Ports Council)

Docks Board’s report on research 1974

London, 20 June (British Transport Docks Board):—Substantial savings in costs at British Transport Docks Board ports have been achieved as a result of investigations into dredging and silitation problems by the Docks Board’s Research Station. It is stated in the Docks Board’s Report on Research, 1974.
Mr. Don Jones, the Docks Board's chief engineer, said: “we have carried out dredging and siltation studies at Garston and in the Humber estuary where considerable savings in dredging costs have resulted, and studies have led to a better understanding of the mechanics of siltation and dredging. We are now looking at further lines of dredging research which can also be applied to other ports”.

Ways of achieving deeper water at Immingham have been investigated during a series of tests carried out on the Humber Tidal Model. The investigations were necessary because of the increasing size of vessels coming up the Humber to Immingham. Preliminary results showed that by means of dredging along the south side of the estuary and the construction of a training wall navigation depths could be improved along the Immingham waterfront without a corresponding increase in siltation. Detailed chart studies and field measurements have also been made.

A combined field and model study into the development of further roll-on/roll-off berths in Fleetwood Harbour is in hand with special emphasis on the effect of any scheme on tidal currents and on dredging problems. A tidal model of part of the Wyre estuary has been specially constructed for these tests.

A pilot study into the difficulties involved in taking large ships into locks was also carried out during 1974. As a result of the study it has been recommended that further research into this problem is undertaken.

(Copies of the Report are available on request.)
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.

\[ c^2 = b^2 + a^2 \]
Rouen, France:—"Mariaeck" (Port Authority of Rouen)

**Heavy lift at Rouen**

Rouen, France, June 27 (Rouen Port News, Port Autonome de Rouen):—The port of Rouen is one of the French leading ports both for heavy loads exports and for trade with Algeria(1). A good illustration of these two specialities can be given by the operations carried out recently on board the German special vessel MARIAECK.

About 500 tons of industrial equipment—in fact, a liquid air production unit—comprising 158 cases and heavy loads (especially three 67-ton and one 32-ton tanks, and one 68-ton and one 16-ton cold boxes) were loaded on board the ship, the destination being a plant of the Société Nationale de Siderurgie near Algiers.

The MARIAECK is owned by the well-known D.D.G. "Hansa" of Bremen, a regular caller in Rouen where the company maintains since several years a line for Madagascar, Reunion and Mauritius in connection with Malagasy and French owners.

The picture shows the MARIAECK before sailing from Rouen to Algiers on June 24 at 16.20 p.m.

(1) In 1974, the tonnage of heavy loads (in excess of 15 tons) imported and exported via Rouen was 19,753 t.; trade with Algeria amounted to 260,600 t. against 181,900 t. in 1973 (+43%).

---

**LASH becoming more effective**

Bremen (Bremen International 3/4-1975):—The lash-trade of the Bremen ports, which is operated between Bremerhaven and the USA-Gulf, with the shipping companies; Central Gulf Contramar Line, Combi Line (Hapag-Lloyd/Holland America Line) and Lykes Lines—has been expanding continually ever since the start, in 1970. The ideal geographical location of Bremerhaven and the important cargo quantities available from the Bremen ports have contributed to this success:

1970 ... 7 Lash-ships with 280 barges and 80,984 tons
1971 ... 19 Lash-ships with 835 barges and 214,529 tons
1972 ... 43 Lash-ships with 1486 barges and 314,990 tons
1973 ... 65 Lash-ships with 2066 barges and 437,289 tons
1974 ... 58 Lash-ships with 1801 barges and 447,591 tons

Cargo for Bremerhaven handling.

**Hansaport planned for 15 million tons p.a.**

Hamburg (Hafen Hamburg Report 1/1975):—Planned in 1972—construction under way in summer last year: Hansaport, Hamburg's future transshipment centre for bulk cargo in the Sandauhafen area. Original thinking was that transshipment of bulk cargoes at this centre would amount initially to 7 to 8 million tons per annum, but expectations are now already higher. This at least is clearly evident from the steadily growing interest on the part of bulk cargo importers. This unexpectedly positive development encouraged the Senate of the Free and Hanseatic City of Hamburg to revise its previous plans without at the same time affecting measures which have already begun to take shape. A statement to the City parliament on these lines was approved by the Senate on 11th March.

On the basis of the demand which has meanwhile become apparent, a transshipment volume of about 10 to 11 million tons is calculated for the years 1978/79—with annual rises up to 1984 to total about 15 million tons of bulk cargo. The companies interested would conclude long-term contracts with the Hamburg authorities. However, a final capacity of this order (previously 10 to 12 million tons) cannot be effected according to current planning at the Sandauhafen area since, due to the surface area required by the largescale general cargo plant, the storage capacity of the bulk cargo terminal cannot be further extended.

**Demand is Heavy**

The Senate therefore suggested that the Hansaport bulk cargo terminal should now be planned in such a manner that a final capacity of 15 million tons per annum can be accommodated and that the second extension phase should now be carried out. The two berths for large vessels, already envisaged, will be required for the transshipment volume already expected to make itself felt in the initial years. A third berth for 50,000 tdw bulk carriers could subsequently be built as required.

**8th Berth Being Extended**

The consequence of this decision, however, is that all the surfaces in the Sandauhafen area are reserved for the bulk
cargo terminal, leaving no space for the large-scale general cargo terminal. As regards the latter facility, the 8th berth will now be extended ahead of schedule at the HHLA Container Terminal in Wistershof, since this is the only place where large surface reserves are available. In this way it will be possible to provide transitional capacity of from 1.2 to 1.5 million tons of large-scale general cargo. What is particularly envisaged here are large items such as pipes, lorries, automobiles, factory plant and mass consignments requiring large surfaces and which cannot be handled at other points in the port.

Where the surfaces at the Burchardkai are subsequently required for container transshipment, a new location will have to be found for transshipment of large-scale general cargo. This will in all probability not be necessary until the beginning of the 1980's. In this way time will be gained in which to observe further development of large-scale general cargo as regards quantities, types and transshipment methods and to take fresh decisions on a favourable location.

Ready for Use in 1977

The Senate regards the measures referred to as economically essential. The increased traffic volume will give rise to diverse additional economic impulses. The two terminals will create 500 new workplaces. In addition there will be fresh tasks for the port economy (port and inland shipping, ships' fitters, supply companies, shipyards etc.). The spin-off effects resulting from the reciprocal relationship between deepening of the Lower Elbe, the Elbe Lateral Canal and the Hansaport will also be strengthened.

Furthermore the decision to revise the plans was eased by the fact that the total cost of the project remains unchanged at 71.8 million DM.

The construction programme is being carried out as planned and both terminals are due to go into operation in 1977. This date had also applied to previous planning.

Atomic container ship temporarily shelved

Hamburg (Hafen Hamburg Report 1/1975):—Plans for a 60,000-ton nuclear-propelled container ship (60,000 SHP) have been shelved for the time being. During a visit to the Society for Nuclear Utilisation in Marine Propulsion (GKSS) in Geesthacht near Hamburg, Federal Research Minister Mattheiwer said the order for the vessel, originally planned for 1976, could no longer be reckoned with since there was too little readiness on the part of the shipowners to commit themselves in this sector. Moreover the number of potential ports of call was still too small, and similarly the freight market offered too few attractions. For these reasons alternative solutions were currently under study.

Amsterdam 700 in the port

Amsterdam (Haven Amsterdam, April, 1975):—The port's celebrations of Amsterdam's year-long 700th anniversary will be concentrated on two events to be held in mid-August and which will attract world-wide attraction.

These events, SAIL AMSTERDAM 700 and HAVEN 700, will be held from August 15th through 19th and together, will be a combined port festival and exhibition.

SAIL AMSTERDAM 700 will attract hundreds of sailing vessels of all types headed by at least seven and possibly more square-rigged 'windjammers'.

These proud vessels are mostly used as training vessels these days and range from 500 to 6,000 tons. Among these vessels are the Soviet Union's KRUZENSHTERN, which is 114 metres long, 5,725 tons and has a complement of 265; Poland's DAR POMORZA, which is 91 metres long, 1,784 tons and has 132 cadets aboard and Italy's AMERIGO VESPUCCI, which is 101 metres long, 4,100 tons and has 450 cadets.

Also: Western Germany's GORCH FOCK, which is 81 metres long, 1,760 tons with 269 cadets; Roumania's MRCEA, which is 81 metres long, 1,630 tons with 200 cadets; Denmark's GEORGE STAGE, which is 38 metres long with 72 cadets and Portugal's SAGRES which is 90 metres long, 1,869 tons and has 219 cadets.

In addition, some 40 ships smaller than 500 tons are arriving from England, Poland, France, Norway, Sweden, Belgium and the Netherlands Antilles, among others. Ten Dutch sailing ships are included in this class including the newly-built EENDRACHT which is 36 metres long, weighs 165 tons and has places for 35 cadets.

This historical event would not be complete without a fair sprinkling of typical Dutch sailing vessels called 'ronde' and 'platbodemschepen'. Several hundred fishing vessels from the former Zuider Zee—now, of course, the sweet water IJsselmeer—rebuilt to original specifications by boat lovers as yachts as well as a number of former inland waterway vessels also lovingly restored by yachtsmen, will also be involved.

On Saturday, August 16th, there will be a 'parade' of these historical vessels on the IJ. Later that same day, the Amsterdam Rowing Association will join in the festivities by passing through the canals of the old city to a protected part of the port.

Sunday afternoon, events will include 'Admiraalzeilen', an old Dutch tradition which is a sort of military manoeuvre on water and has to be seen to be appreciated. The Amsterdam Philharmonic Orchestra will play Handel's 'Water Music' from a floating pontoon during this ceremony. Visitors can see these events from the quay adjoining Passenger Terminal Amsterdam.

HAVEN 700 is to be an exhibition located in and around Passenger Terminal Amsterdam for displays of port materials and items used in shipbuilding, present, past and future. The idea of this exhibition is to explain how a port operates and display the most modern port-handling equipment and explain methods used now and in the past.

On Saturday evening, HAVEN 700 will sponsor a party for workers in the port and their families, but visitors, too, can see a few of the events including a mock sea battle among a number of the restored Dutch sailing vessels in...
front of Passenger Terminal Amsterdam. The evening will end up with a display of fireworks.

The hundreds of sailing vessels attracted to this unique festival will remain in the port for the entire weekend and attract boat lovers from all over the world.

**Increase in container traffic**

Lisbon (Boletim do Porto de Lisboa, September/October 1974, General Administration of the Port of Lisbon):—The container traffic in the port of Lisbon has been revealing a growth of about 24% in relation to the last year, both in the number of containers and in the tonnage of goods.

The registered amounts, up to the end of October 1974, are the following:

<table>
<thead>
<tr>
<th>Unloaded</th>
<th>Loaded</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>31,576</td>
<td>29,538</td>
<td>61,114</td>
</tr>
</tbody>
</table>

Goods (t) .............. 261,105 209,106 470,211

As to containers in transit (the most part of which proceeding from or consigned to Spain), it was noticed an increase of nearly 30% respecting 1973.

The maritime works to enlarge the Santa Apolónia container terminal proceed at a good rhythm and they comprehend the construction of a quay long of 500 m with a close minimum water deepness of 12 m.

Recently, the Port of Lisbon Authority (AGPL) has ordered, for container handling, three Paceco transtainers, and it is preparing the tender for one more gantry-crane to equip the new container terminal.

The total expenses on the purchase of the three transtainers and the new gantry-crane is estimated in 90 million escudos (3.6 million US dollars).

"We have much in common"

Dar es Salaam, Tanzania (Bandari Zetu, Organ of the East African Harbours Corporation, January/February, 1975):—African Maritime ports have a lot in common and therefore we can learn much from each other in the form of practical ideals, exchange of information and experiences without looking elsewhere outside the continent, the Director General of the Somali Ports Authority, Abdullah Mohamud Hirad said recently in Dar es Salaam.

Speaking at a farewell party at the New Africa Hotel Dar es Salaam, in honour of the visiting four—men delegation from the Somali Ports Authority, Mr. Hirad said that despite the fact that most of our ports are yet to be developed, we have much to learn from each other. "In view of this it was not necessary for us to go overseas just to see facilities which are also available in the neighbouring East Africa." The S.P.A. Director General emphasised.

Practical co-operation in the field of maritime transportation will help the acceleration of continental unity as advocated by the Organisation of African Unit—a thing that would bring practical reality to the politicians that Africa can be brought closer in many ways, the Somali Director General declared.

He expressed his delegations’ deep sense of gratitude for the reception, Corporation and guidance extended to them by the Officials of the East African Harbours Corporation and hailed the Organisational structure, operational development and managerial performances of the Corporation.

On behalf of the E.A. Harbours Director General, the Chief of Management Services, Mr. J.J. Ijumba, said that East African Ports could play a very useful role in contribution to OAU’s Ideals of promoting unity through personal contact amongst various port authorities, exchange of experience and even through Sports activities.

Mr. Ijumba recalled the far-reaching resolutions made at the recent meeting of the Port Management Association of Eastern Africa held at Mogadishu, Somalia, which included ports co-operation through inter-ports visits, exchange of information and ideas and assistance among members of the Association. “Assisting one another in the field of transportation through maritime ports is a welcome precedent to be established in Africa,” he stressed.

During the four-day stay in Dar es Salaam, the delegation made an exhaustive on-shore and offshore tours of the ports’ installations and conferred with the Director General, Mr. E.N. Bisamunyu and other Chief Officers, before proceeding to Mombasa where they held more discussions with senior officials of the E.A. Harbours and Cargo Handling Services.

The purpose of the Somali delegates’ mission to the East African Harbours Corporation was to make a study of Port management and operations, training programmes and facilities and to discuss with the Corporation officials on the practical ways in which the two port Authorities could co-operate for mutual benefit of each other.

The Somali Director General described the discussions with the Corporation as “very successful indeed” and expressed hope that the two organisations would “keep the ball rolling.”

Other members of the Somali delegation included, Mr. Gunnar Steneroth, an I.L.O. Expert on General Management seconded to the S.P.A.; Mr. Abdillah Abokor, Training Officer with the Somali Institute for Development, Administration and Management; and Mr. Saeed Hassan Raghe, Director of Planning of the Somali Ports Authority.

**Management Course for Port Executives 20–30 May 1975**

Melbourne (Press Release of the Association of Australian Port and Marine Authorities):—Mr. A. J. Peel (President, The Association of Australian Port and Marine Authorities) announced today the successful completion of the second management course for senior port executives to be conducted by the Associations. The first course was held in July 1974. The aim of the course is to provide an opportunity for senior port executives to broaden their appreciation of problems which port executives are likely to encounter. Although similar courses held in other countries have been attended by Australian port executives, and there are many management courses of a general nature in Australia, the Association of Australian Port and Marine Authorities feels that there is a requirement for specialised advance courses to be held in Australia oriented directly to the needs of Australian port management.

The second course of nine days duration was fully residential at the Halls of Residence, Monash University, Melbourne; the twenty-three participants were from port authorities of all States and from the Australian Department of Transport. In addition, the course was fortunate in having participants from New Zealand harbour boards. The (Continued on Page 48)
Time is the key regulator of port activities.

Use solari clock whenever needed. Direct reading clear, unmistakable.

Most efficient and popular numerical and alphabetical tele-indicator for all sort of information is also available.

Manufacturer: Solari & C. Udine, Italy

Solari / sole agent in Far East

International Trade Inc.

Yamato Building, 2-6, 2-chome
Oto-machi, Chiyoda-ku, Tokyo
Japan    Tel. (03) 270-8841
directing staff of four was provided by member authorities.

The course was organised by a special co-ordinating committee of the Council of the A.A.P.M.A., consisting of Mr. A. J. Peel (Association President and Director, Department of Harbours and Marine, Queensland), Mr. A. S. Mayne (Vice-President of the Association and Chairman, Melbourne Harbor Trust Commissioners) and Captain B. L. Noble (General Manager, Fremantle Port Authority). In an opening address, Mr. Mayne referred to the important role of "communication" to a port authority: it being essential with port users, such as importers, exporters, shipping companies and unions, etc.

Experienced speakers for the course were obtained from a representative cross-section of commerce and government, closely associated in a practical way with the transport industry and in particular port and shipping activities. A considerable part of the course was devoted to discussion and syndicate work on port planning.

Mr. Peel, in summing up at the closing session of the course referred to the controversy over what has been construed as the Australian Government's desire to interfere with port management and planning, which has hitherto been regarded as the sole responsibility of the State in which those ports are situated. Mr. Peel said that the A.A.P.M.A. view was that the responsibility for ports should remain as it is now; that is, a State responsibility. However, there was no denying that in these days there is the necessity of considering the total transport system in which the port is, but a link, and regional interests must be balanced with national considerations.

It was management courses such as those conducted by the A.A.P.M.A. which would broaden the view of the current and future senior port executives, impress upon them all the vital importance to port management of continual planning in this everchanging world, and help justify the approach that ports do not become part of one large centrally controlled organisation, with resultant inflexibility.

The course attempted to show that a well designed management information system can assist greatly in the decision making process of management. It can predict trends in the main items of concern; it can indicate where changes are occurring and can prompt necessary investigations into those changes; it can show future projection of changing trends. Naturally no-one can be certain about the future but management is obliged to make the most intelligent assessment of it possible.

Mr. Peel said that he hoped course participants on return to their own authorities would arrange for checks on their planning systems, management information systems, costing systems, assessment of objectives, standards and performance and involvement in the total transport concept, particularly in their own region.

In conclusion, Mr. Peel said that whether further A.A.P.M.A. Management Courses were held (their type, content and level of participant) would depend upon the demand from Port Authorities; he hoped that the valuable liaison with New Zealand harbour authorities would continue; and he invited comment from Port Authorities, so that the individual and collective needs of ports might be met as far as practicable in any future specialised management courses.
for the erection of two bulk tanks, each with a capacity of 550 tonnes of tallow, together with associated heating equipment, pumps and a pipeline leading from the tank depot to No. 6 Berth.

From the Commissioner's point of view, construction of this new facility will be of mutual benefit to both the Trust and the company. It is envisaged that this new trade could attract up to six additional vessels each year to load some 6000 tonnes of bulk tallow. Site works for tank foundations were well in hand at the end of the year.

Another significant announcement during the year was that under a State-wide plan to combat pollution of the sea by oil, the Portland Harbor Trust had been nominated as one of six coastal centres within Victoria. This is part of a National plan instituted by the Commonwealth and State Governments, together with the assistance of the oil industry, to help provide a solution to any threat posed to the coastal environment by oil spillage from ships.

The basic concept of the plan is to provide dispersant materials and spraying equipment at selected points around the Australian coastline. In the event of a major spillage entire stockpiles may be transported interstate to replenish those which have become depleted.

In association with the national plan, the Portland Harbor Master (Capt. T.J. Lloyd) is one of a co-ordinating committee of six State members nominated to provide liaison between various authorities responsible for dealing with oil pollution. On the local scene the Trust is responsible for dealing with any oil pollution that may occur on the waters of the harbor or the shoreline of the area under its jurisdiction.

During the first three months of the year under review the Trust maintained a work force of men employed on special projects financed by Government Rural Employment Relief funds. Included amongst the work undertaken were stone beaching along the lee breakwater access road embankment and the realignment of Barton Place security fencing.

The previously announced programme of dredging undertaken to deepen No. 1 berth and its approaches to a minimum of 12.2 metres was speeded up during the year through the replacement of the old dredging unit with a new Lima 1200 dredging crane mounted on a new steel barge having a displacement of 99 tons. The new barge was built and fitted out by the Trust's workshop personnel.

Consistent with the Commissioners' policy of maintaining a well equipped, modern and efficient port, a heavy investment in new equipment was made during the year. A new crane having a lifting capacity of 125 tons was purchased to handle bulk cargoes such as veterinarian feed for the livestock industry. The new crane was a sister port to a similar unit purchased for the Port of Sydney a few years earlier. A new heavy derrick crane, having a lifting capacity of 250 tons, was also purchased. This was a sister port to a similar unit purchased for the Port of Sydney. The new crane was used for the handling of heavy lifts for the construction industry. A new derrick crane having a lifting capacity of 50 tons was also purchased. This was a sister port to a similar unit purchased for the Port of Sydney. The new crane was used for the handling of heavy lifts for the construction industry.

In some instances these prospects are aligned to State Government decentralisation policies which, at long last, would appear to be achieving positive results.

Some of the inquiries received by the Commissioners during the year concern major and very valid developments for the area. Their validity will remain constant whatever economic conditions prevail.

On the personnel side it is pleasing to record the re-appointment by the Governor-in-Council of Mr. R.B. Anderson as a Commissioner and Deputy Chairman for a further term of three years ending 31st March, 1977.

I take this opportunity of paying a tribute to my colleagues, the staff and employees of the Trust for the aid, support and loyalty once again demonstrated so freely, not only in the cause of the development of the Port but in the cause of good relationships and good government.

Record trade figures

Sydney, 13th June (The Maritime Services Board of N.S.W.):—Trade figures for the 10 months ended 30th April, 1975, compared with those for the first 10 months of previous years, indicate that the Ports of the State are due for a record cargo handling performance for the year ending 30th June, 1975, when figures become available.

The Sydney Ports with 26 million tonnes of cargo handled and Newcastle and Port Kembla with 16 million tonnes and 12.7 million tonnes respectively have each exceeded the all-time record tonnages for the 10 month period.

The four smaller trading ports of Richmond River, Clarence River, Trial Bay and Twofold Bay (Eden) handled a total of 900,000 tonnes during the 10 month period.

In commenting on the 55 million tonnes of cargo handled in the State during the 10 month period, the President of the Maritime Services Board, Mr. W.H. Brotherson, said "a little more than 2 years ago, this figure would have constituted a record for a 12 monthly period and it is obvious that the Ports of the State are handling bumper cargoes this year".

He said "the import of machinery, motor vehicles and other general cargo into Port Jackson and the exports of coal and grain from Port Jackson and Port Hunter (Newcastle) have increased significantly".

Mr. Brotherson added "the increased activity of the steel making complex based on Port Kembla has resulted in increased imports and exports at that port".

"There is no doubt the figures for the full year will show tonnages of record proportions" he said.

Penang and Adelaide twinned as sister ports

Penang, Malaysia (Berita Pelabuhan, publication of the Penang Port Commission, April 1975):—A closer link between the Ports of Penang and Adelaide was established with the twinning of the two ports as sister ports at a brief ceremony on 27th February, in Adelaide during the 'Penang Week' Festival. To commemorate the occasion, the Minister of Marine and Harbour of South Australia, Mr. J. D. Cocoran presented a plaque to Datuk Mohamed bin Yeop Abdul Raof, a board member of the Commission's. The Commission's Ag. Director of Operations, Mr. Lim Teik Chuan, who accompanied the delegation to the festival.
was present at the ceremony.

Later at a dinner, hosted by the Commission on 21st March, at the Rasa Sayang Hotel for the I.A.P.H. delegates, the Chairman of the Commission, Tan Sri Abdul Jamil bin Abdul Rais presented to Mr. Sainsbury, the Director of Marine & Harbour of the Port of Adelaide, a plaque of the Commission.

As sister ports, closer relationship will be established through the exchange of information and technical knowledge. For a start, Port Adelaide has offered to train officers of the Penang Port Commission in whatever aspects of port operations required by the Port of Penang.

**Regular container service inaugurated**

Penang, Malaysia (Berita Pelabuhan, Publication of the Penang Port Commission, April 1975):--The 5,200 tons Container Vessel 'Henrich Jessen' owned by Oyama Line of the Oyama Enterprise Group inaugurated a regular scheduled container service to the Port of Penang on 6th March, 1975.

The Henrich Jessen with self sustaining loading and discharging capability has capacity for 210 containers. On its maiden voyage, it discharged 3 loaded containers of general cargo and loaded 34 FCL containers of rubber, textile, chemical products and tin. The vessel will be calling fortnightly at the port and will soon be joined by her sister ship Emma Jepsen.

Oyama Lines at present operates 56 vessels on the Japan-South East Asia--Japan route with 18 sailings a month for container ships and 20 sailings a month for conventional ships. It is Oyama Line’s intention to replace conventional ships with container vessels before 1976.

At present Oyama Lines container service already caters for Singapore and Port Klang. Its call at Penang is part of the expansion of its services in the region.

**Port tonnage maintained**

Penang, Malaysia (Berita Pelabuhan, Publication of the Penang Port Commission, April 1975):--The Port of Penang handled 3,885,300 tons of cargo in 1974 compared to 3,797,300 tons in 1973, a slight increase of 88,000 tons. There was a marked decrease in exports during 1974 in contrast to the boom year of 1973 when exports through the port increased by 17% over the previous year. In 1974, export tonnage fell by 2.5% below the 1973 figure. Imports continued to increase throughout 1974 although the increase over 1973 was only 6.4% compared to 13% in 1973.

Total export for the year was 1.37 million tons (1.42 million tons in 1973). Rubber and timber were the major export commodities that declined significantly following the weakening of overseas demand for primary raw material. Palm oil is the only major primary commodity which showed a significant export growth in 1974. The total palm oil export through the port in 1974 was 76,627 tons, 41% more than the 1973 tonnage.

Total import for the year was 2.51 million tons (2.37 million tons in 1973). The greater part of the increase in import tonnage was in bulk cargo, especially fuel oil.

The total general cargo handled in the Port in 1974 was 2.56 million tons compared to 2.65 million tons in 1973.

The Port Commission handled 1.77 million tons of general cargo in 1974, a drop of 7,000 tons over the figure of 1973.

**Lash service introduced**

Penang, Malaysia (Berita Pelabuhan, Publication of the Penang Port Commission, April 1975):--The Lash (lighter aboard ship) service was introduced by Central Gulf Lines to the Port of Penang on January 26th 1975 with the arrival of the ‘float on float off’ barge feeder vessel “Flash I” with 8 empty barges to load cargo for the Gulf Ports.

Central Gulf Lines had been operating the lash service between the United States and Europe and has expanded its services to this region with 3 Lash vessels, Green Valley, Green Harbour and Green Island. Each Lash vessel carries 89 lash barges but with a draft of 49 feet when fully loaded, is not able to call at Penang Port.

To help its lash ocean carriers serve the smaller Ports in South-East Asia, Central Gulf developed the barge feeder vessel called Flash. The flash is a shallow draft vessel that carries 8 lash barges at a time to and from Ports that cannot accommodate large ocean going cargo vessels. The Flash vessels are towed by sea going tugs between the ocean carrier that calls at major Ports and the smaller Ports that Central Gulf serves providing carriage of cargo from origin to destination by one carrier under one insured Bill of Lading.

The lash barges offer shippers maximum flexibility, being able to carry many types of cargo including palletized, containerized, break bulk cargo and heavy lifts. The interior of the lash barges are clear with no stanchions or guides to obstruct cargo handling and stacking.

After discharging in Penang, the ‘Flash I’ left for other ports in the region. The first 8 empty barges loaded with 2,000 tons of bales and pallet rubber and crate plywood for the gulf Ports of New Orleans, Norfolk, Camden, Pascagoula and Galveston were taken by the Flash vessel to Port Klang to be loaded on to the Lash vessel. The Flash will call at the Port of Penang every 23 days. The local shipping agents for the service are M/s Orient Lloyd (M) Sdn. Bhd.

There was a marked decrease in exports during 1974 in South-East Asia, Central Gulf developed the barge feeder vessel called Flash. The flash is a shallow draft vessel that carries 8 lash barges at a time to and from Ports that cannot accommodate large ocean going cargo vessels. The Flash vessels are towed by sea going tugs between the ocean carrier that calls at major Ports and the smaller Ports that Central Gulf serves providing carriage of cargo from origin to destination by one carrier under one insured Bill of Lading.

**Port officials attend 9th I.A.P.H. Conference**

Penang, Malaysia (Berita Pelabuhan, Publication of the Penang Port Commission, April 1975):--The Penang Port Commission Chairman Tan Sri Abdul Jamil bin Abdul Rais, the General Director General Tuan Haji Mohd Azuddin bin Haji Zainal Abidin, Ag. Traffic Manager Mr. C. Natkunasingam and the Commercial & Public Relations Officer Mr. Yeap Chong Beow were among the delegates representing 334 ports from 61 countries who attended the Ninth Conference of the International Association of Ports and Harbours in Singapore.

The Conference was held at Shangrila Hotel from 8th March, to 15th March. The theme for the Conference was “Towards Greater International Port Co-operation.”

The Conference discussed methods for the prevention of water pollution and crime in ports, co-operation between ports towards revenue evaluation, promotion of international trade, transport and shipping, and greater efficiency...
in port management and the development of port facilities. As a post conference tour, thirty four delegates including their wives visited Penang as guests of the Penang Port Commission. The delegates were briefed on the Commission's facilities and development projects and were taken on a tour of the port premises. The delegates also paid a courtesy call on the Hon'ble, the Chief Minister of Penang and attended a briefing by the Director of the State Planning Unit.

Organised tours were arranged to enable the party to see places of interest in Penang. A lunch was hosted by the Malaysian International Chamber of Commerce for the delegates and their wives while the Port Commission entertained them to a dinner at the Rasa Sayang Hotel. The delegates and their wives were each presented a piece of pewter ware by the Port Commission as a souvenir of their visit to Penang.

Heavy fines imposed under new Marine Pollution Act

Whangarei, N.Z. (Points North, March 1975):—The natural beauty of Whangarei Harbour will not be marred and ecologists need have no worries—these are constant aims of the Northland Harbour Board. Reflecting this, the first prosecutions in Whangarei under the provisions of the Marine Pollution Act of 1974 were heard in January, resulting in the imposition of fines of $5,000 and $1,000 on Dalgety NZ Ltd.

The company pleaded guilty to charges that two ships for which it was acting as agent, the Limpfield and the Hector Heron, had each spilled small quantities of oil.

It was alleged that the Limpfield spilled oil in the vicinity of the main No 1 wharf at Port Whangarei on October 30 last, and the Hector Heron at the refinery jetty, Marsden Point, on July 23 last.

Prosecuting for the Northland Harbour Board, Mr. J.D. Golightly, said that the new act made an offender liable for a fine of up to $50,000 in addition to the payment of cleaning up expenses. He said that nations were agreed that a heavy deterrent was necessary.

"In 1965 the New Zealand refinery came ‘on stream’ and the usage of the Port of Whangarei dramatically increased," he said. "Since that time 42 oil spill prosecutions have been brought in the court involving shipping."

Mr. Golightly added that despite prosecutions wherever possible, the incidence of spillages had not decreased. He said it was obvious there was a pattern of oil spillages occurring regularly in Whangarei Harbour that in his submission required deterrent penalties to be imposed by the court. "It should be noted that many overseas ships—especially tankers—using Whangarei will call only once and may be tempted to take liberties ifWhangarei was to become known as a cheap port for oil spills."

Imposing the penalties, Mr. J.A. Bretherton, SW, said it was plain a substantial penalty was required under the new act.

Polish shipping delegation visits port


The Delegation was received by the Chairman, Karachi Port Trust, and other senior K.P.T. Officers at the K.P.T. Head Office. After talks with the K.P.T. Chairman at his office, the Delegation drove to the East and West Wharves of the Port. They saw the export and import cargo being handled and the container operations in progress at the wharves.

The Delegation spent over an hour going round the port area.

Singapore Maritime Centre

The Singapore Maritime Centre, an ultra modern 12-storey building comprising 140,000 sq m of office space, will be one of the largest building projects in Singapore when completed by 1977.

In addition to the Singapore World Trade Centre, a large ocean cum ferry terminal will complement the Singapore Maritime Centre.

The Singapore Maritime Centre will also accommodate firms & government agencies engaged in international trade. Included within its walls will be the most prestigious representative firms from many different international trade fields—manufacturing, trading and commercial firms, transportation services, airline, forwarding agents, banking and insurance firms, stock brokers, import/export enterprises as well as important governmental bodies closely affiliated with world trade.

Picture shows anti-clockwise (a) PSA Towers (b) PSA Engineering Services Building and (c) Singapore Maritime Centre. (Port of Singapore Authority)

Singapore, 20 May (PSA Press Release):–The Port of Singapore Authority today awarded a $60 million contract to a local firm for the construction of the super-structure of an ultra-modern building—the Singapore Maritime Centre—at Jardine Steps. Incorporated in this building would be the Singapore World Trade Centre which will become a single contribution to international trade in this region.

This contract is part of the total cost of $83 million for the building which is expected to be completed in about 37 months. Piling and marine foundation works were com-
completed toward the end of 1974.

The T-shaped building (230 m x 130 m) will have 12 storeys, covering a site area of 3.3 ha (8.2 acres) of which about 0.8 ha (2 acres) will be over the sea. With a total floor area of 144,000 sq.m (1.55 million sq.ft), it will become one of the largest buildings in Singapore in terms of floor area. Plans for this Centre were drawn up by a team of architects from the Urban Re-development Authority and Engineers from the Port of Singapore Authority to ensure that the building is aesthetically in keeping with the surrounding areas and in conformity with the general urban renewal and planning concepts of the area.

The Singapore Maritime Centre will house an efficiently co-ordinated congregation of import and export enterprises, banks, transportation services, insurance companies and other trade organisations in addition to relevant government, quasi-government and other public offices. There will furthermore be a shopping complex of departmental stores, restaurants and cocktail lounges, reception halls, showrooms, conference rooms, exhibition halls, rentable boardrooms, multi-lingual secretarial services, 5 floors of carparks which can accommodate 1070 cars etc to serve as ancillary facilities.

The building which will be fully air-conditioned except for the carpark floors will also have facilities for a World Trade Centre Clubhouse on the roof with a swimming pool, roof garden and 64 day rooms for day visitors from overseas.

At the seaward end of the building, there will be a mooring structure for berthing Ocean Liners. Passenger traffic will be linked to the first floor of the terminal where facilities for Health, Immigration and Customs clearance will be provided. On the east wing, a 2-storey structure with a covered ferry terminal and a milling area for passengers will also be available. A Taxi terminal is also expected to be located here.

With this project, the Port of Singapore Authority envisages a global trade service for the manufacturer or trader incorporating the most up-to-date facilities designed to expedite the development and operation of an effective international trade system. It will make available, the facilities provided in other World Trade Centres around the world which are members of the World Trade Centres Association since the Singapore World Trade Centre will have access to such facilities—a privilege which is exclusively enjoyed by regular members.

International communications links through Interfile will be provided to all local business and commercial communities as part of the comprehensive information system essential for efficient international business transactions. With these features, the Singapore World Trade Centre can be expected to become the focal point for all facets of international trade and business activity in this region.
Leaders in International Banking
Since 1880

The Bank of Tokyo,
with more than 170 offices, representatives,
affiliates and associated institutions throughout the world,
can offer you thorough knowledge of foreign and domestic
banking matters. Our far-reaching experience uniquely
qualifies us to deal most effectively with any financial
or banking problems, particularly international
capital transactions.

Safety plus Convenience
U.S. Dollar Travellers Cheques and Yen Travellers Cheques — both from the Bank of Tokyo.
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

---

MITSUI COMPUTER CONTROL SYSTEM FOR CONTAINER TERMINALS

MITSUI SHIPBUILDING & ENGINEERING CO., LTD.
Head Office: 6-4, Tsukiji 5-chome, Chuo-ku, Tokyo, 104 Japan
Cable: "MITUZOSEN 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