

# PORTS *and* HARBORS

February, 1974 Vol. 19, No. 2



**Port Gdynia**  
Poland

## IAPH Conference Singapore March 1975

The Publisher: The International Association of Ports and Harbors

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

# PACECO's new Economy Portainer®



- less than half the cost
- full container capability
- moves general cargo faster.

For ports that thought they couldn't afford specialized container-handling equipment, this new low-cost container crane is specially designed to achieve maximum production with minimum capital investment and lower operating and maintenance costs.

The Portainer's controlled, straight line operation speeds handling of general cargo, palletized cargo, and 20 ft. to 40 ft. containers. It has a 30 Ton capacity and can be self powered or shore powered. You have a choice of 72 ft. or 84 ft.

outreach, standard or rotating trolley, and other options to meet your specific needs.

The Economy Portainer's versatility assures more constant production; greater utilization; and provides a higher return on your investment in manpower and facilities.

And you get the same PACECO quality and experience that has gone into the design and construction of more than 200 container cranes at major ports around the world.



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



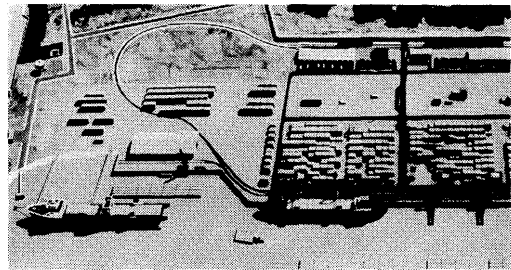
Contact PACECO or your nearest licensee. Dept. 24-B—**Headquarters:** Alameda, California 94501—(415) 522-6100—Telex 335-399. **European Sales Office:** PACECO INTERNATIONAL LIMITED, London. **Australia:** VICKERS HOSKINS PTY. LIMITED, Bassendean. **Brazil:** MECANICA PESADA S.A., Sao Paulo. **Canada:** DOMINION BRIDGE COMPANY LIMITED, Montreal. **France:** ATELIERS ET CHANTIERS DE BRETAGNE, Paris. **India:** BRAITHWAITE & CO., LIMITED, Calcutta. **Italy:** REGGIANE O.M.I. S.p.A., Reggio Emilia. **Japan:** MITSUI SHIPBUILDING & ENGINEERING CO., LTD., Tokyo. **South Africa:** DORMAN LONG VANDERBIJL CORPORATION LIMITED, Johannesburg. **Spain:** FRUEHAUF S.A., Madrid. **United Kingdom:** VICKERS LIMITED SCOTSWOOD WORKS, Newcastle Upon Tyne. **West Germany:** C. H. JUCHO-DORTMUND.





## IT'S TRIPLETS!

We're talking about the three berths at the Port of Houston which are being constructed at Barbours Cut, an entirely new port area close to the open sea. Designed for LASH/ Container Ships, the super modern facilities in this protected anchorage will permit us to serve shippers around the world more efficiently and economically.



## PORT OF HOUSTON

ContainerPort of the Gulf

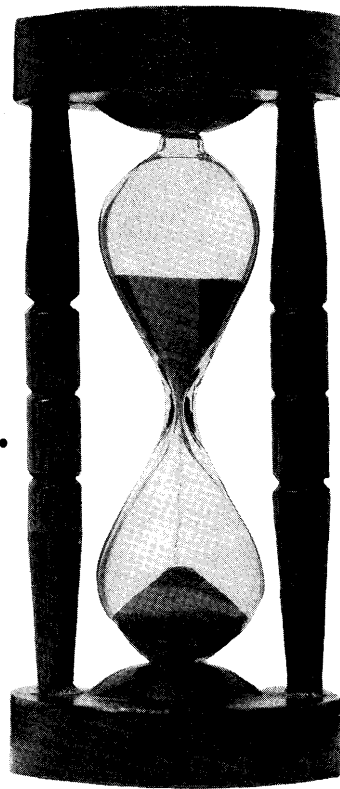
P. O. Box 2562 • Houston, Texas 77001 • Telephone: (713) 225-0671

Field Service Office: Lincoln Bldg.

60 East 42nd Street • New York, N. Y. 10017 • Telephone: (212) 867-2780

# When time is important.....

**Your choice is clear.**



NYK Line's full container-  
erships cover six impor-  
tant routes—any one of  
which can give you fast  
service to and from Japan. What's  
more important is that you'll know  
your goods are in the capable hands of  
experts who'll provide you with ac-

curate, up-to-the-minute  
reports, and smooth out  
all documentation pro-  
cedures. It's a trust-  
worthy, internationally experienced  
service and it uses the world's most  
modern full container-  
ships. NYK makes your choice clear.

## **NYK's six main container routes are:**

US Atlantic East Canadian Coast-Japan  
California-Japan  
Pacific Northwest-Japan  
Australia-Japan  
Europe-Japan  
Southern Europe-Japan



# **NYK LINE**

Tokyo, Japan

## The smooth lift

# Gantry cranes from Mitsubishi

A good example of our latest crane technology is the 37.5-ton container and general cargo handling model above. (A 39-ton model of the same type is under construction now.) It features reactor controls, automatic hoisting, trimming operation, and an all-welded construction that assures reliable performance for decades to come.

On the heavier side, we are now manufacturing 600-ton gantry cranes with two hooks of 300 tons each; and for lighter lifting, a 3-ton gantry deck model with man trolley.

As a variety of different gantry cranes in between.

You've got the cargo, we've got the lift for it.

Fast, economical, and safe.

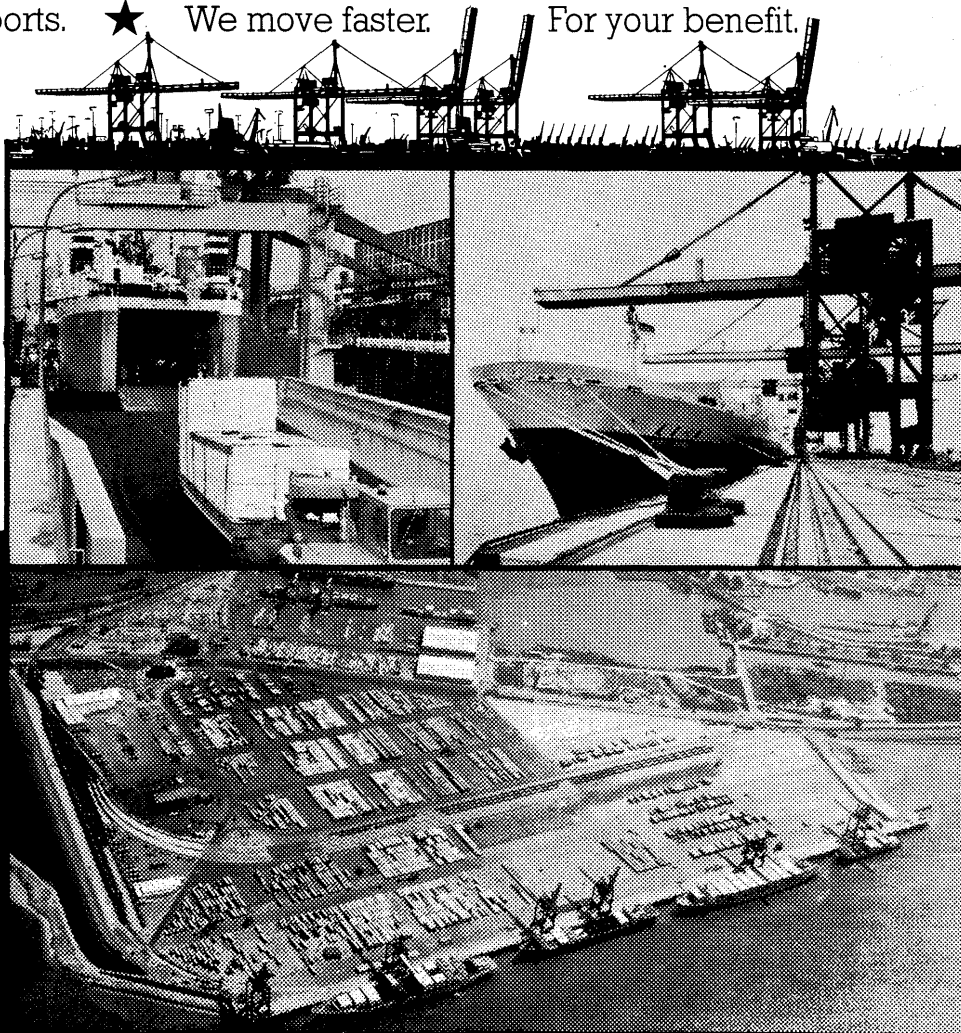


**MITSUBISHI**  
HEAVY INDUSTRIES, LTD.

Crane Section, Steel Structure Dept.  
Head Office: 5-1, Marunouchi 2-chome, Chiyoda-ku, Tokyo

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

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



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

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

# PORTS *and* HARBORS

Editor: Yoshio Hayashi

Published monthly by

**The International Association of Ports and Harbors**

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

**President:**

Robert L. M. Vleugels  
General Manager, Port of Antwerp  
City Hall, B-2000, Antwerp, Belgium

**Executive Committee**

**Chairman:**

Robert L. M. Vleugels  
President, IAPH  
General Manager, Port of Antwerp

**Members:**

Howe Yoon Chong  
1st Vice President, IAPH  
Chairman/General Manager  
The Port of Singapore Authority

George W. Altwater  
2nd Vice President, IAPH  
Executive Director  
Port of Houston

Y. M. Raja Azam  
Chairman  
Kelang Port Authority

Robert Boeuf  
General Manager  
Port of Dunkirk Authority

W. E. Brotherson  
President  
The Maritime Services Board  
of New South Wales

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

Dr. Chujiro Haraguchi  
President  
Japan Port and Harbor Association

Stanley Johnson  
Managing Director  
British Transport Docks Board

P. K. Kinyanjui  
Chairman  
East African Harbours Corporation

Fumio Kohmura  
Vice President  
Nagoya Port Authority

J. McConnell  
Chairman  
Fremantle Port Authority

Dr. Fernando Moreira  
President, Administração  
dos Portos do Douro e Leixões

Ben E. Nutter  
Executive Director  
Port of Oakland

Bruce Procope  
Chairman, Port Authority  
of Trinidad and Tobago

Thomas T. Soules  
Port Director  
Massachusetts Port Authority

D. E. Taylor  
Chairman, National Harbours  
Board, Canada

Ralph K. Trimmer  
Chairman  
Northland Harbour Board, N.Z.

Gengo Tsuboi  
Vice Chairman  
The Japan Shipowners' Association

**Secretary General:**  
Dr. Hajime Sato

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

**February, 1974 Vol. 19, No. 2**

## CONTENTS

	<b>Page</b>
<b>IAPH Head Office Announcements:</b> .....	7~9
Mr. John Lunch Appointed as Liaison Officer with UNCTAD—Message from Mr. John Lunch—More Condolences on Mr. King's Death—IMCO Pollution Damage Records on Sale—New Distribution Centers for IAPH Publication—The First Meeting of the PIANC/IAPH/IALA Joint Committee on Port Signals	
<b>Topics:</b>	
Ports of Tomorrow .....Robert L. M. Vleugels.....	10
Mr. A. Lyle King, IAPH Past President, Passes Away Unexpectedly ... Port Authority of N.Y. & N.J. ....	11
Port Management—A Personal View Point ..... John Lunch .....	12
Drilling and Dredging in North Wales for Oil Pipelines .....Bos Kalis Westminster Group .....	20
Move Cargo by Ship During Energy Crisis ..... Toronto Harbour Commissioners .....	23
Singapore Beckons You.....	24
NPC Book: NPC Forecast of 1980 Trade Levels.....	28
<b>Ports:</b>	
Expanded Port Newark/Elizabeth Serves New York-New Jersey Metropolitan Area and The World.....	16
Rouen Port News.....	22
Port of Barcelona Today .....	39
Press Reports Clarified .....Karachi Port Trust .....	43
<b>Orbiter Probe (International News):</b> .....	27~44
<b>The Cover:</b>	
Port Gdynia, Poland. M/s MANIFEST LIPCOWY, 55.000 DWT, approaching grain elevator's quay.	

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

# NAGOYA PORT

**You'll get there faster through Nagoya.**

Nagoya, with a population of more than two million, is the largest city in Central Japan. Nagoya Port is the largest port. And we're both growing together. Fast. In fact, the economic development of the whole central region can be largely attributed to the activity of the Nagoya Port.

And we'll continue to grow.

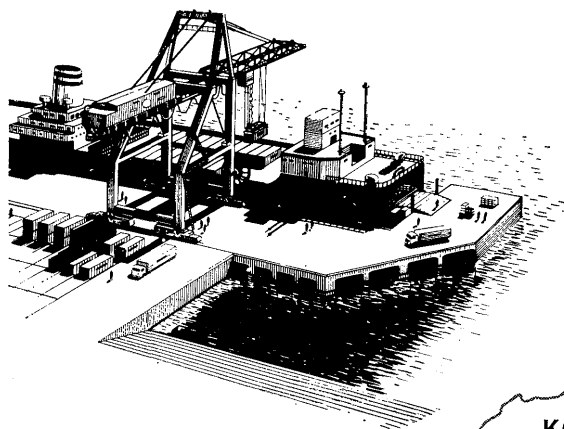
Because we're ideally located in the very center of the Japan Industrial Belt.

Because we have the most modern facilities, and a harbor capable of handling the largest ships.

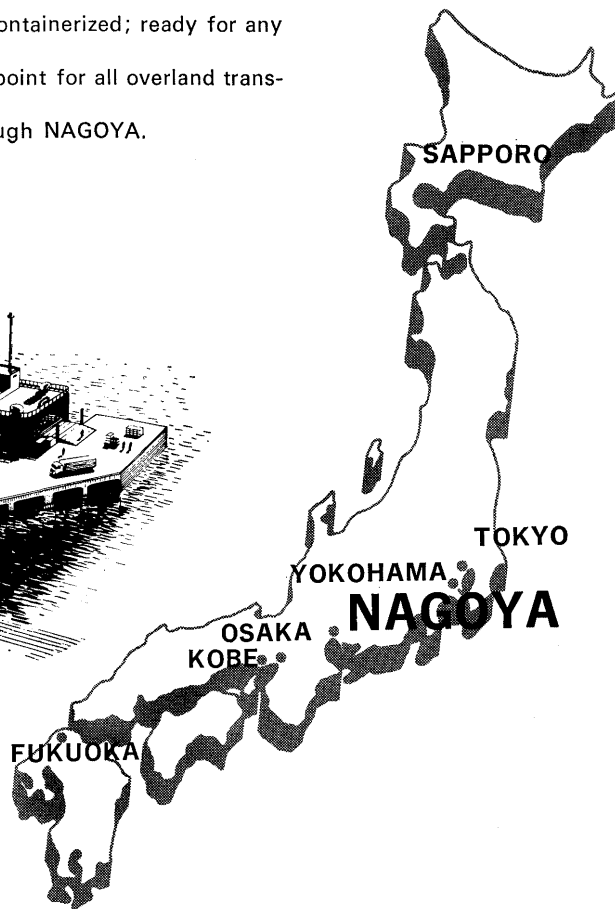
Because we're completely containerized; ready for any cargo, any carrier.

Because we're the starting point for all overland transport to Central Japan.

Get there faster. Ship through NAGOYA.



Fully equipped  
Container and  
Roll-on/Roll-off  
facility in Nagoya



---

## NAGOYA PORT AUTHORITY

---

8-21, 1-chome, Irifune, Minato-ku, Nagoya, Japan



# PORTS *and* HARBORS

**IAPH Head Office Announcements: Pages 7~9**

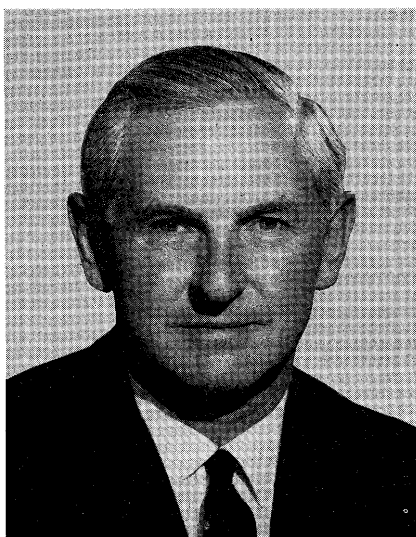
## Mr. John Lunch Appointed as Liaison Officer with UNCTAD

### President Announces

Referring to the IAPH Head Office Announcement in the November issue 1973 of PORTS AND HARBORS "IAPH approved by UNCTAD as Consultative Status NGO" I have the pleasure to announce that Mr. John Lunch, Director General of the Port of London Authority is appointed as Liaison Officer with UNCTAD.

Robert L. M. Vleugels

President I.A.P.H.



Mr. John Lunch

## Message from Mr. John Lunch

### Director-General, Port of London Authority on his appointment as Liaison Officer between IAPH and UNCTAD

I am delighted that IAPH have been accorded the privilege of consultative status with UNCTAD and my own appointment as Liaison Officer between the two organizations gives me particular pleasure.

As Chairman of the Special Committee on International Port Development, I am very much concerned to help ports in developing countries by the provision of training facilities and managers as advisers. My Committee are working closely with UNCTAD in this very worthwhile field so I feel my appointment

as Liaison Officer is most appropriate and timely.

IAPH and UNCTAD have major roles to play in international maritime affairs and thus closer co-operation will, I am sure, be beneficial to both organizations and to ports throughout the world.



John Lunch

## More Condolences On Mr. King's Death

(Refer to "Ports and Harbors", January 1974 issue, page 7.)

### 1. Tribute to A. Lyle King

(By Mr. Austin J. Tobin, former Executive Director of the Port Authority of New York and IAPH Honorary Member; telex of December 13, 1973 received by Secretary General.)

*The death of my colleague and my close friend of over 25 years, the Director of Marine Terminals of The Port Authority of New York and New Jersey and the Past President of IAPH, was a shock and a tragic loss to his associates at the Authority and his many friends in IAPH. Through his vision, creativity and ingenuity, Lyle King led the way in the development of some of the world's greatest marine terminals. It was he who envisioned and was among the first in the world to advocate the revolutionary changes in port facilities that would come with the changeover of the world's cargos to containers. He pioneered, with the marine industry, the development of the Newark-Elizabeth complex into one of the world's first and perhaps one of the world's greatest container ship terminals. His expertise and sound judgment were sought by members of the maritime community throughout the world and, when asked, he gave that judgment and shared that experience unselfishly with his colleagues at the world's ports.*

*As a lifetime colleague of Lyle King, I feel a great and terrible loss, which I am sure is shared by his colleagues and his many friends at the ports of the world.*

## 2. Letter to Mrs. King

(By Mr. Toru Akiyama, Secretary General Emeritus, dated December 11, 1973)

*No one had dreamt our last reunion in Amsterdam was to become the very last opportunity of our ever seeing Lyle in this world. Those happy moments of lively and frank exchange of views with him on wide range of subjects of the past and of the future now seem too pathetically cordial to reflect upon.*

*As I said in my today's cable, his irrevocable departure has made me realize how much I depended on him both personally and in international port matters, and I am down with incurable sense of loss. So great is the vacuum he has left behind that it even seems to mark in effect a virtual closing of an era in the international ports and harbors world, where Lyle and I struggled toward an objective which we had groped for together in the interest of the members at large. Now that the new constitution and by-laws are about to be established, Lyle's unexcelled leadership is more than ever needed in their preparation in order to see it through completion with best result.*

*I shall now cherish for the rest of my life the book you and Lyle have recently given me, "Robert's Rules of Order", which unfortunately has now become his last gift to me and which gives me great enlightenment just as Lyle in his life used to do.*

*Assure me please that you would not hesitate to call on me if I may be of any help to you at all at any time or place.*

*My wife and Kazuko join me in expressing our deep condolence and warmest sympathy.*

## 3. Letter to Mrs. King

(By Mr. J. Eldon Opheim, General Manager, Port of Seattle, dated December 18, 1973.)

*It was with a considerable degree*

*of shock and sadness that we were informed of the passing of Lyle King who was known over all the world for his dedicated activities to the port industry through service to such organizations as the American Association of Port Authorities, Inc. and the International Association of Ports and Harbors.*

*Many of us here at the Port of Seattle knew Lyle personally and respected his ability and selfless dedication to the good of the port industry both national and international.*

*I am sure you will be interested in knowing that he had no better friends than we here at the Port of Seattle with whom he was associated in these endeavors over many years.*

## Membership Notes

### New Members

#### Regular member

\* **Direcção-Geral de Portos,**  
Ministerio das Comunicações  
Rna da Prata, 8-4º.  
Lisboa-2, Portugal  
(Engenheiro Manuel Fernandes  
Matias, General Director of Ports)

#### Associate Member (Class E)

\* Mr. Rafael Armas  
Apartado 26, Motril, Granada,  
Spain

## IMCO Pollution Damage Records on Sale

A publication entitled "Official Records Of The International Legal Conference On Marine Pollution Damage, 1960" is now available in English at IMCO.

Sales No. IMCO 1973-7 (E)  
Price £2.85 including packing and postage

As many copies required may be ordered to the following address:

To: IMCO Secretariat  
Publications Section,

104, Piccadilly,  
London W1V OAE.

All orders must be accompanied by a remittance, in sterling to cover the cost.

French version, Sales No. IMCO 1973-7 (F), Price £2.85 will be available later.

This announcement is made for the benefit of IAPH members from IMCO Document A3/C/1.03 reached Head Office on December 20th. (K. Yokoyama, DSG)

## New Distribution Centers for IAPH Publication

(By Miss Kimiko Takeda) Following New York and London, the distribution centers are being organized in Le Havre, France, and Oakland, U.S.A. for the book "Port Problems in Developing Countries" by Mr. Bohdan Nagorski.

Mr. John Lunch, Chairman of Committee on International Port Development, has been active in an attempt to open distribution centers for the book in major cities of the world since its publication by seeking for cooperation of member ports and he was recently rewarded with the willing consent of Mr. Paul Bastard, Port of Le Havre, and Mr. Ben E. Nutter, Port of Oakland, U.S.A.

The distribution centers for the book now count up 5 now including the Tokyo Head Office.

Copies of the book after February, 1974, will be available at these newly set 5 distribution centers.

# The First Meeting of the PIANC/IAPH/IALA Joint Committee on Port Signals

(held in Paris, 26 November 1973)

Report of Mr. Robert Boeuf

General Manager of Port of Dunkirk, France

This report was originally written in French by Mr. Boeuf who attended the meeting above on behalf of IAPH and translated into English by the good offices of Mr. Robert L. M. Vleugels, President of IAPH. (K. Yokoyama, Deputy Secretary General)

## Committee for the Unification of New Buoyage Regulations

### Terms of Reference

approved by the Executive Committee at their 35th session—June 1973

- 1.—To investigate the philosophy of buoyage systems at present in use throughout the world.
- 2.—To try and identify the common ground existing in the philosophies of the present systems.
- 3.—To attempt to harmonize existing rules into one unified set of rules (including inland waterways), commencing with the European situation.
- 4.—To propose a unified set of rules, at least in European waters, utilizing existing equipment as far as possible.
- 5.—To investigate port and harbour lighting in conjunction with the PIANC and IAPH.
- 6.—Generally to review the various problems arising in connection with the provision and operation of visual aids to navigation.

DRAFT

6 December, 1973

## Minutes

of the Joint PIANC/IAPH/IALA  
Committee meeting  
on PORT SIGNALS

held in Paris on the 26th November, 1973

### ANNEX: 1

The meeting was held on the 26th November, 1973 in Paris, M. J. PRUNIERAS, Secretary General of IALA being in the chair.

It was attended by:

Mr. VANDERVELDEN, Secretary General of PIANC,

M. BOEUF, Directeur du Port de Dunkerque,

M. MONADIER, Directeur adjoint du Port de Dunkerque, on behalf of IAPH,

Captain BURY, Elder Brother of Trinity House,

Mr. N. F. MATTHEWS, from Trinity House,

M. J. G. BAUDELAIRE, Secretary on behalf of IALA.

It was agreed that the task of this new Committee was to examine the working of the 1930 Lisbon Agreement as it affects certain Maritime Signals. It was also agreed that it might be appropriate to examine whether there was a need for harmonization between the movement signals used in coastal waters, in ports and in inland waterways.

The members were successful in drawing up mutually agreed terms of reference for the Committee covering the points mentioned above. A copy of these terms of reference is attached to these Minutes. It was resolved that each organization would circulate each of its members to ascertain whether they would be willing to take part in this work.

It is expected that the first meeting will take place at PIANC Headquarters in Brussels about May 1974 and that subsequent meetings

could be held in Paris and perhaps in London. The Secretariats of PIANC and IALA will assist as much as possible by taking minutes of the meetings, etc.

The question was raised of finding a Chairman and a Permanent Secretary for this Joint Committee. The representatives of the three organizations felt that the Chairman should be a man with practical experience of the problems, and it was unanimously agreed that Captain Bury would be the ideal man for the task if Trinity House would agree.

They felt also that the Permanent Secretary should be someone with experience of organizing Committee of this kind. Again the unanimous choice was Mr. N. F. Matthews if Trinity House would agree.

It was agreed that the Secretary General of IALA would approach Captain Tibbits, Deputy Master of Trinity House concerning the duties of Captain Bury and Mr. Matthews and would inform PIANC and IAPH of the result.

26 November 1973

## Port Signals

### Terms of Reference for the Joint PIANC/IAPH/IALA Committee

1. Determine how Part 1 (Agreement concerning Maritime Signals) of the "Conference for the Unification of Buoyage and the Lighting of Coasts, Lisbon, October 1930" is currently employed.

2. Review this Agreement where necessary since it may be inadequate in the light of new technology. Noting in particular:

- a) That in many cases lights are preferred for day signals rather than the signals detailed in the Lisbon Agreement.
- b) That the Lisbon Agreement did not provide for the marking of multiple port entrances or multiple dock entrances.
- c) That the gale warning signals provided under the Lisbon Agreement may be inadequate to meet present day requirements.

3. To examine the need for harmonization between the movement signals used in coastal waters.  
(Continued on Next Page Bottom)

# Ports of Tomorrow

Robert L. M. Vleugels

IAPH President

(General Manager, Port of Antwerp)

This article was originally written by President Vleugels for the monthly magazine of Japan Ports and Harbours Association with myself as the translator into Japanese. However, with the permission of President Vleugels, we are happy to publish it in this issue of our magazine simultaneously. (K. YOKOYAMA Deputy Secretary General)

Antwerp, 26 11 1973:—The seaports of the world have principally two partners: overseas trade and maritime transport. By serving them well they also can bring considerable benefit to the local community and to the regions they serve.

Ports ought not be merely unavoidable links between land and sea. They can play a very important role by promoting the easy flow of cargo between coasts and continents. Furthermore, they can be bases for new economic development enabling various functions to develop in the port area itself and in regions which are within easy reach. In this sense there are many examples of ports which have been at the basis of the remarkable progress of prosperity.

Every port of some significance is a meeting place of people of many nations. Can they also play a part in promoting international understanding?

ters, in ports and in inland waterways (1).

4. To submit proposals to deal with the above matters.

(1) There is a European system of inland waterways port movement signals (Resolution n° 1 of the Working Party on Inland Water Transport, Inland Transport Committee of the Economic Commission for Europe of the United Nations).

I am convinced of the fact that it is precisely the communities active in the ports, working for them and making a living in them who are in the frontline of international co-operation.

Looking into the future I guess that—as in the past — these port communities will play an important role in promoting not only worldwide communications but also international understanding and peace.

From an operational point of view, what are the ports of tomorrow going to be? Much depends on the requirements of their customers viz. trade and transport, but also to a considerable extent on themselves.

Their customers are ever more demanding. Overall seaborne trade is expanding. In the course of the last decennium it has increased two and a half times, as expressed in tonnage of cargo. That means that more port and transport capacity have had to be made available somewhere on the globe.

On the other hand the carriers by sea have introduced a series of specialized vessels with the aim of reducing the expense of transport. This specialization in their operations has created a lot of problems for the ports.

Most have been able to solve them by investing in new equipment, by deepening access channels, by adapting working conditions and by reorganizing their business administration.

One of the challenges for the world's port economy in general is to equalize this development and technology in all ports. What is the advantage of the application of advanced formulas in transport and port business if this is not done at both ends of a sea route?

Equalization does not mean reducing the quality of services to a minimum! It means harmonizing



Mr. Robert L. M. Vleugels

the services which ports are able to offer. I am referring e.g. to the endeavours of UNCTAD to promote "concerted national and international efforts" with the aim of the "development and improvement of ports."

The ports of tomorrow ought to be able to reach a stage of development which is almost equal everywhere. Do the air carriers not dispose of airports all over the world with facilities which are essentially comparable? Why are shipowners not in the same position?

There are many reasons, of course.

Ports are complex entities, they have several functions to fulfil. They are not only technological concepts but conglomerates of many activities.

Do the shipowners or traffic operators, when calculating the "best" type of vessel for a given route, sufficiently take into account the services which ports can guarantee? Are they not sometimes moving too fast?

These are only a few remarks. But what in fact should the port of tomorrow be?

Of course it should be composed of a.— a series of well equipped berths for a number of vessels with in-built specialization

b.— a complex of services, based upon a rational and efficient labour organization and business administration

c.— a nucleus of transport links, in-

(Continued on Next Page Bottom)



# *Mr. A. Lyle King*

## *IAPH Past President*

### *Passes Away Unexpectedly*

New York, N.Y., December 10 (News from The Port Authority of NY & NJ):—A. Lyle King, Director of Marine Terminals for The Port Authority of New York and New Jersey since 1952, died this morning of a heart attack in United Hospital, Port Chester, New York. He was 67 years old and resided at 1064 Bay Head Drive, Mamaroneck, New York.

Mr. King, who joined the Port

---

land as well as overseas

d.—a source of seaborne traffics, incoming and outgoing.

These statements might sound somewhat idealistic. In fact the real characteristics of all ports should be like that. Many ports—including some very important ones—have still to develop towards that goal. Is that not the outlook for tomorrow?

Also the customers of the ports—I mean trade and carriers—have to keep in mind that the three of them have to cooperate closely because they are interdependent.

Therefore, to conclude these few remarks I should like to say that understanding between the ports and their customers, especially the carriers, should be promoted and further that cooperation between port authorities and the exchange of information is of the utmost importance.

The ports of tomorrow, the ever developing nucleuses of transportation, will remain essential links in the exchange of world trade.

They need good brains, as much as good relations with their customers, and moreover constantly improving understanding amongst each other.

Authority in 1947, was the driving force in the development of modern marine facilities in the bi-state Port. He directed a staff of over 260 people in the planning, construction and operation of all Port Authority marine terminals. He was among the first in the world to envision the use of large containers to handle cargo on ships. This new method has revolutionized the maritime industry.

On Mr. King's recommendation, the Port Authority developed the world's greatest containership terminal at Elizabeth, New Jersey. Built under his leadership, the Elizabeth docks together with adjacent Port Newark now provide an unmatched 2,000-acre marine complex known as America's Container Capital. His instruction and influence have helped maritime representatives from around the world to go forward with the development of modern facilities in their own ports.

Starting with the redevelopment of tumbledown piers in Newark and Hoboken in the late forties, Mr. King brought to the port a new concept of modern efficient cargo-handling terminals built to exacting specifications and capable of meeting the changing cargo needs of steamship lines. He supervised the \$100 million reconstruction of two miles of Civil War era piers on the Brooklyn waterfront into a modern general cargo pier complex.

On November 1, 1971, when Mayor John V. Lindsay, Chairman Helen Bentley of the Federal Maritime Commission, Chairman James C. Kellogg, 3rd, of the Port Authority and others of the maritime industry joined together to mark the

start of construction on the new Consolidated Passenger Ship Terminal on the Hudson River in mid-Manhattan, they also paid tribute to Mr. King's energy, ingenuity and foresight. To him, the ceremony marked the successful culmination of five years of imaginative planning and arduous negotiation.

Mr. King was born in Berkeley, California and attended the University of California. He joined the U.S. Army in 1946 and served in the Pacific Theater. He attained the rank of Colonel in the Transportation Corps.

Mr. King is a Past President of the American Association of Port Authorities and immediate Past President of the International Association of Ports and Harbors. He was awarded the Legion of Merit for war service. In 1971, the Commissioners of the Port Authority awarded him the Howard S. Cullman Distinguished Service Medal for his "integrity, tenacity and drive" and his "priceless and distinguished service to the port and to the Port Authority."

Mr. King is survived by his wife, Helen, and by three brothers, Norman of Oakland, California; Carroll and Vernon of Santa Cruz, California. He will be reposing at home at 1064 Bay Head Drive, Mamaroneck, New York where friends will be received on Wednesday from 7 to 9 P.M.; Thursday from 2 to 5 P.M., and 7 to 9 P.M. A Mass will be celebrated on Friday at 10 A.M. at Our Lady of Mercy Church, 260 Westchester Avenue, Port Chester, New York. Mrs. King has requested that flowers be omitted and any contributions be made to the Heart Association.

# ***Port Management— A Personal View Point***

**by John Lunch  
Director-General  
Port of London Authority**

**Address Delivered on November 27, 1973  
At the British Transport Staff College  
At Working, Surrey, England**

## **Responsibilities**

I will open with a brief description of what I see as my major responsibility as a port chief—in short, it is that the PLA should be operated and administered efficiently—effectively—and thereby profitably. In other words, my ultimate responsibilities are in no way different from those of any other business head. They are equally applicable to any other port undertaking, be it private enterprise, public trust, nationalized or local authority controlled.

The Government policy for British ports is that they should bear the full cost of constructing, and keeping up all their facilities—including the full cost of creating and maintaining dredged channels—without subsidy of any kind. At one time Government grants of 20% were available for new port developments but these have now been withdrawn. Put simply, ports in Britain are treated just like any other business in the country. This as many of you will appreciate is very different from the situation on the Continent where many of our competitors enjoy the benefits of considerable subsidies.

Thus PLA is an independent undertaking operating as a commercial business in a highly competitive industry. We stand on our own feet and raise our capital in a similar manner to the rest of the industry by Harbours Act loans from the Government. We also have the power to raise fixed interest loans in the City, through the Stock Exchange and otherwise, as well as normal channels of day-to-day finance.

## **Management Philosophy**

When I was appointed Director-General in 1971, I stated a four point personal philosophy, which was:—

- (1) Increased profitability;
- (2) Improved service to port users;
- (3) The involvement of every employee in the affairs of the port;
- (4) The attainment of the full business potential of the PLA.

We can already claim successes on all four. In 1971 and for the first time since 1966, we made a profit. We improved upon this in 1972 and we expect to achieve a profit again in 1973. We must keep up our efforts, determinedly, on all four points.

I remain faithful to these four points and it is my firm conviction that public businesses should be run with the same efficiency and the same management methods as private business.

I am a great believer in devolved responsibility. As Chief Executive, whilst being the leader of the management team, I seek to keep free from the more routine day-to-day management decisions. This allows me to concentrate on corporate direction and future policy, which I see as the major function of a Director-General.

I would like to give you a brief run-down on my present management machine, how it functions and its relationship to the Board.

As Chief Executive I am currently the only full time executive on the Board. However, we have formulated proposals for re-shaping our Board, and this would enable a

larger number of top management to be Board Members. This is, of course, a proper and logical step and offers career prospects that will help attract and retain that first class management that is essential for success.

Operating immediately below the Board is the Board of Management which I chair and which consists of the 10 Chief Officers, better called Directors. Four of the 10 are designated Assistant Directors-General, to whom variously the other managers report. Thus we have a situation of grouped responsibility which limits the number of people reporting directly to me.

The areas of responsibility of the four Assistant Directors-General are very broadly—finance, operations, planning and marketing. The six other members are the Directors of Real Estate, Docks, Planning, Manpower, Marine Services and Maplin. The Director of Manpower reports direct to me, for obvious reasons in this industry.

Apart from special meetings, the Board of Management meet fortnightly with the object of.

- (1) Keeping me informed of significant matters in the running of the Port;
- (2) Formulating policy recommendations for the Board;
- (3) Providing an opportunity for individuals to comment on matters outside of their own direct responsibilities.

This system works and works well. The relationship between directors and their varying responsibilities is good and communication between them ensures that management direction is in the best interests of the Port and all who use it. Nevertheless, we are never satisfied—we are always striving to improve in all our affairs.

## **The Changing Industrial Pattern**

As a trading nation it is imperative that our ports keep pace with the commercial and technological changes that have such vital bearing on their business. Nobody owes us, the Ports Industry, a living. Whilst as I have said we must be shrewd enough to agree the best possible terms for the services that we provide, equally we must ensure that

we are capable of meeting the needs of customers, who are themselves pacesetters and vital to our national prosperity.

You are all familiar with the container revolution in general cargo. As predicted in the mid-1960's it has had a profound effect on the whole process of marketing, distribution, manufacturing, location and assembly. 85% of the containers now passing through Tilbury container port are full-load door-to-door containers, a prediction PLA market researchers made seven years ago but one that was not widely believed at that time. The pace of technological change is really brought home to us when we realize that the enormous container changes that have now become familiar to us commenced only in 1966. We handle more trade in the docks than five years ago, with half the berths and two-thirds the manpower.

Meanwhile, the impact of technological change on people is testing to the utmost our ability to adapt. In advanced countries there is a great expansion in service industries to meet the need of increased leisure activities. Holidays lengthen, weekly working hours shorten. Financial and other help in resettlement is needed as people must switch from capital intensive industries to the new labour intensive leisure industries. These new trends have placed demands on port management that were almost unknown until a few years ago.

10 years ago I would have said that a good port director must be a widely based transport man. Today, he needs also to be an international businessman of the highest standards.

### **Facing up to rapid change**

I believe that the challenges associated with rapid change particularly with regard to human problems make the greatest demands upon the skills of modern management.

Nearly every major change in British industry has affected the ports industry in one way or another. The Port of London could be a textbook case-study of the effects of a change industry from labour intensive to capital intensive. In fact, only recently we co-operated

in the making of an education film for schools on this very subject.

In our port, like the other great ports of the world, industry has been the foundation of our past and present. Our future depends on our ability to serve it well and to adapt to its changing needs.

In the last decade we successfully anticipated the new demands that would be made of us as a port authority. We dealt with the situation by making a massive investment in container and unit load facilities at Tilbury. Our foresight was rewarded by the fact that Tilbury continues to be the country's leading container and packaged timber port.

You will know that ports can provide splendid facilities but still not achieve their aims if their standard of service is not good enough. Our recent trading successes are closely bound up with our greatly improved service to importers and exporters.

The technological revolution in cargo handling and all that goes with it has had wide repercussions on the port's manpower.

PLA is not the only employer of dock labour in the Port of London but it is by far the largest. For this reason and also because as the Port Authority we have the over-riding responsibility for the port's continuing prosperity, and the main capital investment at stake, it was imperative that we took the lead in dealing with industrial relations—white and blue collar—to ensure the smoothest possible transition through a difficult period.

To go ahead with the re-shaping of our port was fraught with danger of a major clash with the trade unions because the change required by the technological revolution in terms of reduction in total manpower and a restructuring of the pay and conditions of work of the remainder, was on a scale that few industries have had to face in such a short time.

I believe that the fact that we have achieved so much, in an industry that does not have an easy history of industrial relations, reflects great credit on both management and men.

### **Effect of the Freeze**

Currently and in common with

the rest of British industry, it is essential that our industrial relations work within Government legislation even though it places heavy demands upon individuals.

In the Port of London great progress has been made in recent years in improving our service to port users with two and three shift working; and by eliminating those stoppages and disputes over piece-work payments by the introduction of a regular steady wage. These improvements in service have contributed so much to our recent commercial successes.

I am sure that farseeing men at all levels in the Port of London will want to keep and build upon the gains we have made and do nothing to put the clock back.

It is only by providing the first class service that the customers want that real job security can be maintained for all who work in the port.

### **Communication**

Communication has become the subject matter for numerous management courses and perhaps too much emphasis has been placed upon it as a panacea for all management ills. I would suggest the improved communication by an inept management merely increases the numbers of those who are aware of their shortcomings.

Conversely, a competent management capable of making sound decisions must be equally aware of the importance of speedy and effective communication to those affected by such decisions. Those so affected must be involved in, and understand the decisions as far as possible, before they are finally made and implemented. This cannot be over-stated.

Recent events in the ports industry have, of course, demanded high quality communications, particularly in view of the rather sectional nature of the employment structure in this country, with its tradition of craft unions. We are very vulnerable to the effects of rumour, misinformation and of course, the specialized activities of those whose objective is not the success of the port, but major political changes in national affairs.

For these reasons, I have been most anxious to improve the stand-

ard of communication in our docks both by the use of communications media and by encouraging the exchange of information and ideas between "workers"—by which I mean management, staff and labour, that is all who work in and for the port.

It was for these reasons that PLA co-operated in establishing the editorially independent newspaper—"The Port"—an experiment, which was at the time almost without parallel in industry.

I am prepared to listen to any constructive and workable idea on how communication in our industry can be improved. I am a great believer in experiment and, in fact, I have already used closed circuit television to enable me to reach simultaneously widely dispersed groups of employees when it is important that a significant message needs to be communicated quickly and intact.

#### **Initiative in Port Authority Management**

In this time of rapid industrial change I cannot over-emphasise the importance of the lead that must be taken by port authorities in developments within their port area. Only by the port authority properly grasping the initiative when necessary and by leading or pushing other port interests will the ultimate prosperity and potential of a port be realized.

By this initiative I do not necessarily mean that the port authority should drive in any doctrinaire fashion to a one employer concept. What I mean is that whatever situation prevails there should be no doubt that the port authority remains in the lead in order that it may use its influence for the total well-being of the port and all those who work in it. At the same time I believe that a port Authority should seek to acquire, and create the opportunity to acquire, stevedoring businesses through the normal commercial processes. There is much to be said for the port authority being the main employer.

As I said, I am convinced that public businesses should be run with the same management methods as private businesses. When I became Director-General in 1971, my im-

mediate target was increased profitability and linked with this was the need to free ourselves of financing worries and to provide free funds for expansion and development of the business.

Along with a devolution of management which greatly reduced the size of headquarters our first action, therefore, was to realize many millions of pounds by disposal of surplus head office facilities and this has been followed by business-like handling of our extensive real estate which continues to provide funds for the strengthening and development of our business. Despite our real estate sales we have also made some judicious purchases of land down river and in fact our real estate holding is currently greater than at any time in our history. Certainly it is good to be free of worries about debt maturities but even better has been the ability to expand the PLA business this year to form what we now call the PLA Group.

This consists of the PLA itself and five subsidiary companies. Two of them are stevedoring companies, one is a real estate development company, one is a professional port consultancy company, and the fifth one is a freight forwarding company which also incorporates export packaging and has offices and agencies right across the world. Naturally like any other freight forwarding business it handles air freight as well as surface freight.

In this we have widened the scope of the PLA to give a more broadly based service to our customers and I believe that the development of these subsidiaries will prove to be good business for the PLA.

Of course, good business for the PLA means more funds for developing the port and this must be our prime objective. We do not have any equity shareholders. All our profits are ploughed back into the development of the port.

#### **Selling the Port**

I have already said that my ultimate responsibilities are in no way different from those of any other business head and one of those responsibilities is to ensure a sound and effective marketing drive aimed at attracting business to the

Port of London.

10 years ago, before the 1966 container revolution hit us, the great bulk of cargo handling in the country was divided among the major ports and the movement of customers between ports was very limited. True, there were the casual users but the bread and butter of a port's business came from liner services who had been with them for many years and showed every sign of staying with them for many more years.

Marketing was rather low-key and consisted almost entirely of keeping existing merchant and ship-owning customers reasonably happy and perhaps negotiating a few special deals with major users. The proverbial boat might have swayed occasionally but it was never seriously rocked.

Then it changed. The new words became the "container" and the "unit load". I am sure I need not go into the logistics of unitisation so far as ports are concerned except to say that the well-known factor of 10 remains as good a rule of thumb as ever—the ultimate of containerization is the cargo being handled through a tenth of the berths required when it was loose cargo.

The big ports of the country found themselves with a large number of under-utilized conventional berths and a labour force which was far too large. As the amount of conventional cargo reduced we had to face up to a national over-provision of conventional facilities.

PLA initiative on the container facilities paid off and London through Tilbury was well ahead of the rest of the country in being able to meet the new demands. Tilbury soon established itself as Britain's largest container port, and second in Europe. In the total situation, however, we had to take a hard look at ourselves and identify the whole potential traffic situation. The old laissez faire attitudes to marketing had to go and go fast. We had to re-educate ourselves on our whole marketing approach. It was no longer enough to simply restrict ourselves to keeping existing users happy. We had to acquire a new mobility and sense of purpose identifying the decision-makers and the major influences and hammering home our own ideas in terms of commercial



flexibility and a willingness to talk composite deals.

Our positive—indeed commercially aggressive—approach to marketing is being maintained and expanded. We retain our lead in the container, grain and forest product traders but we are far from complacent about it. There are currently 46 ports in this country offering unit load facilities and competition is fierce. Add to this the subsidised Continental ports seeking to serve Britain by transshipment and continuing competition for profitable conventional cargo and you have today's highly competitive port scene.

I mentioned mobility in marketing effort. Certainly we must no longer expect business to present itself at our door, we must go out and get it. I have sent senior management, and I have gone myself, right across the world to talk business and reach those people who have the last word in traffic routing. Even where we have not demonstrated a tangible increase in trade through such visits we have made considerable gains in correcting wrong ideas and outdated opinions of how we in the PLA think and the Port of London works.

I have been round the world three times in recent years and I have just returned from a visit to the People's Republic of China where I was privileged to be the first head of a western port to be invited to China in recent years. This visit was pretty successful and I brought back with me a deal which will not only produce an immediate increase in PLA trade with China—London has always been China's main UK port—but also lays the groundwork for the continuing growth of trade between our two countries that we expect.

What then in a nutshell are the particular constraints that affect our marketing strategy. As I have said competition continues to be fierce not only for the declining conventional cargo but also for existing and new unit load traffic. It follows therefore that from a charges point of view we are in a sensitive situation. We must follow a policy of gaining and retaining — and in fact carefully selecting — our customers concentrating on those who

will be likely to stay with us for some time and are not likely to make an inefficient use of our human and physical resources.

At the same time, we need to improve our profit situation. The return on our assets, as in most ports, continues to be low by normal business standards. We have with our Thames Estuary and other projects a large capital investment programme ahead of us and we must prove ourselves an acceptable proposition should we need to turn to the City for finance for our future investment.

In addition it is a dangerous policy to sail too close to the wind by restricting profit margins through an over cautious attitude as to what the market will bear. Such a policy can leave one vulnerable to the hazards of the unexpected without the resources to ride out a rough passage.

I believe therefore that the answer lies in:—

- (i) a judicious selection of customers—increasingly customer "loyalty" or "desirability" must be a feature of port marketing.
- (ii) a level of charges that is acceptable to both sides
- (iii) a standard of service by which the port recognizes its commitments and obligations so in turn allowing the shipping company to give its customers a similar standard of service. The objective is the successful identification of a shipping company with the Port of London which in itself becomes a valuable asset which both sides become reluctant to lose.

What I consider to be a major marketing sin is the chasing of the ephemeral customers ending up by overstretching the Port's resources so that we satisfy no one—and have cut our rates uneconomically too!

### **Extending London's Docks into the Thames Estuary**

The airport seaport complex at Maplin has been much discussed and many people have strong opinions on the subject. Unfortunately the controversy that has surrounded this development has tended to overshadow the commercial

attractiveness and fundamental good sense of extending London's docks down river in the Thames estuary—and there is no site like the Maplin Sands.

We have been working on this project in the PLA as a natural extension of our dock system for over 10 years. That is why we extended our port limits in 1964 to embrace the outer estuary and have spent £1m. of our own money on careful research.

No other body has anything like the certain knowledge of this development that we have.

Our initial need is simply a £17m. development on the southern end of the Maplin Sands to provide about two deepsea berths and three short-sea berths to meet customer demands in the Port of London. I emphasise that this is a long planned and normal down river development of the Port of London to meet its customers' needs. Like all other major seaports we move closer to the sea: as ships become deeper draughted and faster.

The Maplin Sands site that I have described has a fine natural channel leading to it now and this £17m. development—modest by today's scale of expenditure on port facilities—would provide five fine berths with appropriate back-up served by a safe straightforward channel. This new dock system would be able to take 40 ft. draught ships at all states of the tide, 24 hours a day.

This is better than any other port on the south east coast of England. It offers a naturally better alternative to Southampton for container shipowners, and avoids the danger—so well recognized by transport operators—of putting the eggs in one basket.

However, its main function is to keep the Port of London at the forefront of competition with our Continental competitors and ensure that we are equipped to serve our own trade.

British ports must be able to handle Britain's trade direct. Dependence on Continental ports can be a folly, as has been demonstrated clearly in the current fuel crisis. It is also surely an economic mistake since British importers and exporters end up at a disadvantage com-

pared with their Continental competitors who will always have cheaper transport costs than Britain.

£17m. is not a large investment by port standards. We have spent much more than that at Tilbury.

Like for like we can produce dock berths on the Maplin Sands as cheaply as anywhere else. Moreover we can produce better facilities because of the advantages I have stated.

## Oil

Beyond this extension of the London Docks down river into the deeper estuary on the Maplin Sands lies the possibility of much greater developments because we know that the channel can be deepened to take the largest ships that can navigate the English Channel and in all these operations, of course, the dredging of the channel will provide spoil for easy and cheap reclamation on the Maplin Sands.

From my visits abroad I know that this opportunity in the Thames estuary is envied by other countries. But at this moment we must bear it in mind its potential for clearly the oil industry will take a little while to stabilize its ideas on its precise requirements for the future.

Meanwhile, two more refineries are building on the Thames and in the long term there seems little doubt that increased imports of oil have got to be handled in the Thames estuary and the right facilities provided for this in line with the ever rising standards of safety that we all expect and which are needed to protect the environment.

I am glad that we have this potential in the Thames estuary.

## The Channel Tunnel

Since I joined the PLA in 1961 we have been studying the effect on the Port of London's trade of a Channel Tunnel. Now that the decision has been made to have it in operation by 1980 we have been firming up these estimates.

It may surprise people to realize how small the effect of the tunnel is likely to be on the Port of London though obviously south coast ports will be very much affected.

Our latest estimate is that the effect of the Channel Tunnel on London's general cargo trade will be

## After 25 years :

# *Expanded Port Newark/Elizabeth Serves New York-New Jersey Metropolitan Area and The World*

New York, N.Y., 11/12/73 (The Port Authority of NY & NJ): — The transformation of marshy meadowland into a major port complex is the story of Port Authority development of Port Newark and the Elizabeth-Port Authority Marine Terminal. Today almost every conceivable product finds its way to and from Port Newark/Elizabeth, and the "Container Capital of the World" as the seaport complex is known, also handles many tons of bulk and specialized cargo.

A quarter of a century has passed since the Port Authority assumed responsibility for the operation and development of Port Newark, under

to reduce it by some 2%. Since our general cargo trade is expected to expand much more than this by 1980 we look forward to increased general cargo through the Port of London despite the Channel Tunnel.

The reason for this operationally small effect is that 60% of London's general cargo trade is deep-sea and of the balance a large amount is Scandinavian area and other non-Channel Zone short-sea trade.

## Facilities at Other Ports

It is considered in some circles that there is a national over-provision of container facilities. Even if this is so we must look at quality, in terms of draught and size, as well as total tonnage capacity. And we must look at each locality. Certainly in the South East, bearing in mind large container ships and even bigger vessels in the next container-ship generation, I do not believe we

have over-capacity—rather the reverse. In any event it is what the customers want that counts. I trust we shall not see a government of this country directing, in effect, to which port the traffic must go—and I doubt whether this would be in accordance with the Treaty of Rome. Shipowners are naturally concerned if they feel physically dependent upon one port for handling their largest vessels. The obstruction of that port, by hazard in the shipping channel or otherwise, can leave them with no alternative British port in that area of the country.

Between its opening in 1915 and the start of Port Authority operation in 1948, Port Newark suffered from the effects of two world wars—when its facilities were taken over largely by the military—and the great depression of the 1930's. When the Port Authority assumed responsibility for Port Newark in 1948, the seaport had only fourteen usable deep-sea berths. Its transit

have over-capacity—rather the reverse. In any event it is what the customers want that counts. I trust we shall not see a government of this country directing, in effect, to which port the traffic must go—and I doubt whether this would be in accordance with the Treaty of Rome. Shipowners are naturally concerned if they feel physically dependent upon one port for handling their largest vessels. The obstruction of that port, by hazard in the shipping channel or otherwise, can leave them with no alternative British port in that area of the country.

## Conclusion

My major responsibility is the Port of London, and I make no bones about it—I will work as hard as I know for the success of my port. That is my duty—my business responsibility. It's hard work, but I enjoy it.

sheds and cargo buildings, its roadways and railroad tracks were in critical need of reconstruction and rehabilitation.

### **Port Newark today**

During the past 25 years, the Port Authority has invested some \$143,300,000 on the development of Port Newark alone. Today the 789-acre seaport has unmatched facilities and services. Located about 8 miles from the Narrows by way of Kill Van Kull, the great seaport on Newark Bay has been extended outshore along Port Newark Channel to the Bay, south along the Bay to a newly dredged Elizabeth Channel, and inshore from the Federal Channel in Newark Bay along the Elizabeth Channel which forms the southern boundary of Port Newark. The seaport now has 23,201 linear feet of wharf out of a planned berthing space of 23,794 feet of wharf.

In creating a modern and efficient marine terminal, the Port Authority has provided many new improvements, including 17 new or rehabilitated cargo terminal buildings, 12 new wharves, and 34 cargo distribution buildings. It has also built 17 miles of roadway, public cold storage warehouses, a frozen meat inspection building, wine terminal, passenger terminal, and fumigation buildings.

In addition, it has provided 70 miscellaneous service buildings, public truck scales, 2 cargo-handling equipment maintenance garages, a Waterfront Commission Employment Information Center, a Seamen's Church Institute Recreation Center, and two commercial bank buildings.

The seaport also boasts 180,000 square feet of ground level storage buildings, 320 acres of transit and open storage, as well as over 4,000,000 square feet of paved upland area. There is a 10-acre railroad container transfer and storage yard, and over 38 miles of railroad tracks permit the loading or discharging of cargo at the waterfront or at distribution buildings in the upland area.

In the 25 years of Port Authority operation, tonnage and employment at the seaport have grown spectacularly. In 1947, the last full year



**Containerships at berth in Elizabeth channel at the Elizabeth-Port Authority Marine Terminal (The Port Authority of NY & NJ)**

of City operation, Port Newark handled 450 vessels and 811,780 tons of cargo with 1,537 workers earning \$5,379,600. Last year, the seaport handled some 991 vessels and 3,744,376 long tons of cargo. During the year, 4,300 people earned \$38,211,000—nearly three times as many jobs as in 1947 and a payroll more than seven times as large.

### **Development of the Elizabeth-Port Authority Marine Terminal**

Anticipating the radically different terminal needs resulting from containerization, the Commissioners of the Port Authority, in 1956, authorized the acquisition of the marshland adjacent to Port Newark and initiated construction there of an entirely new marine terminal—the first container seaport anywhere in the world.

The Elizabeth marine terminal was developed by dredging out Bound Creek on the southern boundary of Port Newark into a new Elizabeth Channel. Thus was created on the south side of that channel an entirely new marine terminal to accommodate the containerships which the Port Authority felt would handle a large part of the nation's international trade.

Work on the transformation of

this unproductive meadowland south of Port Newark in 1958. The new deep-sea port commenced service just four years later.

### **America's Container Capital**

The 1,165-acre Elizabeth-Port Authority Marine Terminal, the world's largest and most modern containership facility—America's Container Capital—was opened for business in August 1962. Sea-Land Service's S.S. Elizabethport was the first vessel to call at the seaport, thus heralding a new era in shipping transport. During its first full year of operation in 1963, the terminal handled 1,504,021 tons of cargo on 242 vessels and employed 730 people who earned \$4,015,000.

Over the last eleven years, tonnage and employment at Elizabeth have increased tremendously. Last year, the terminal handled 7,360,743 tons of cargo on 1,215 vessels. At present, the Elizabeth facilities provide employment equivalent to 3,000 people who earn \$27,000,000 annually. In addition, at the peak of construction, an average of 800 people earned \$6,900,000 a year on construction jobs alone at the new facility.

Development of the Elizabeth terminal is moving ahead at a rapid

pace to keep up with the steady demand for containership space in the bi-state port. Today, 19 container cranes service fully equipped container berths totaling 16,624 linear feet of berthing space supported by 793 acres of open storage area and distribution building space. This includes twelve huge cargo distribution buildings with over a million square feet of space, six cargo terminal buildings and 27 other service buildings. To date the Port Authority investment in this great seaport amounts to \$158,800,000.

Ultimately, the terminal is expected to handle 12,000,000 tons of cargo a year, of which about 95 per cent will be containerized. The completed seaport will represent an investment by the Port Authority of \$223,600,000.

### **Port Newark/Elizabeth: The Full Service Port Complex**

Flexible is the word for facilities available to the shipping community at Port Newark and the Elizabeth-Port Authority Marine Terminal, which together comprise the full service port complex. Huge containerships operating from Elizabeth and Port Newark are complemented by conventional freighters carrying out break-bulk loading and unloading operations at Port Newark. The variety of services available include roll-on/roll-off as well as LASH (lighter aboard ship), and bulk services such as ores and scrap metal. Add to this acre-upon-acre of paved upland area for such shipments as imported automobiles and lumber, plus the ports' floating heavy-lift capability, and you can understand why Port Newark/Elizabeth has become all things to all shippers.

With more than 40 steamship companies serving Port Newark and the Elizabeth-Port Authority Marine Terminal, shippers have almost unlimited selection in moving their goods to the far corners of the earth. The following lines offer regularly scheduled sailings in eleven major steamship services:

**COAST-WISE:** Sea-Land Service, Inc.

**INTERCOASTAL:** Sea-Land Service, Inc. and United States Lines, Inc.

**EUROPE:** Atlantic Container

Line, Ltd., Cargo Lines, Finn Lines, Hapag-Lloyd Lines, Sea-Land Service, Inc., and United States Lines, Inc.

**MEDITERRANEAN:** Prudential-Grace Lines, Inc., Sea-Land Service, Inc., Spanish Line, and Zim Container Service.

**INDIA / PAKISTAN / BURMA:** American President Lines, Muhammadi Steamship Co. Ltd., and Waterman Steamship Corp.

**SOUTH AMERICA:** Hapag-Lloyd Lines and Prudential-Grace Lines, Inc.

**CENTRAL AMERICA-MEXICO:** Prudential-Grace Lines, Inc., and Sea-Land Service, Inc.

**FAR EAST:** American President Lines, Blue Sea Lines, Korea Shipping Corp. Ltd., Orient Overseas Container Line, Sea-Land Service, Inc., Ta Cheng Lines, United States Lines, Inc., and Zim Container Service.

**SOUTH AND EAST AFRICA:** Farrell Lines, Inc.

**WEST AFRICA:** Black Star Line, Farrell Lines Inc., and Seven Stars (Africa) Line.

**AUSTRALIA-NEW ZEALAND:** Associated Container Transportation, Atlanttrafik Express Service, and Farrell Lines Inc.

### **A Showcase for Integrated Transport**

The 2,000-acre Port Newark/Elizabeth complex is separated from Newark International Airport by the New Jersey Turnpike, and is only 25 minutes by truck from Manhattan. All trunk and short-line railroads in the Port of New York District serve Port Newark either by land or by lighterage. There is nothing quite like this concentration of transportation anywhere else in the world, and the Newark-Elizabeth land, sea and air complex has been called "a showcase for integrated transport."

The entire Port Newark/Elizabeth complex—its facilities, location and services—work to the advantage of those involved in the shipment of waterborne cargo. In few ports is there such comparable freedom of movement from ship to wharf to distribution building and convenient truck or rail access to inland points. Port Newark and Elizabeth offer the finest facilities available

for the moving of cargo by either truck or rail from shipside.

A network of spacious marine terminal highways are constantly being maintained and improved. They are directly connected to major interstate and state highways leading to all points. These include Exit 14 of the New Jersey Turnpike, U.S. Routes 1, 9 and 22, and the new Interstate 78. Numerous trucking firms maintain space in the port area, offering immediate and competitive service for transfer work and short or line-haul trucking.

Port Newark's 38 miles of railroad track afford direct rail service to all portions of the seaport—steamship berths and terminals, upland distribution buildings, warehouses and open storage areas. This service is provided by the Penn Central, Central Railroad of New Jersey, Erie-Lackawanna, Norfolk and Western, Chesapeake & Ohio, Reading and Lehigh Valley railroads.

The container terminals in Newark and Elizabeth are served by two major yards: the Penn Central International Container Yard, a 10-acre railroad container transfer and storage yard at Port Newark featuring direct road engine service without switching, and the Central Railroad of New Jersey's new Portside Terminal, adjacent to the Elizabeth-Port Authority Marine Terminal. Both of these terminals offer trailer-on-flat-car (TOFC) and container-on-flat-car (COFC) service. Multi-car rates to and from the Midwest make these terminals competitive with other North Atlantic ports.

### **Elizabeth Today**

A total of 8,471 linear feet of wharf and 364 acres are occupied by Sea-Land Service, Inc., the pioneer container shipping company which started service at Elizabeth in 1962, and this year dramatically expanded its terminal. Sea-Land provides regular containership service to Puerto Rico, the Mediterranean, Northern Europe, the United Kingdom, the Far East and U.S. ports from its Elizabeth terminal.

The combination container and roll-on/roll-off vessels of Atlantic



Container Line, Ltd. began transatlantic operations from the Elizabeth terminal in September 1967. Atlantic Container Line operates from 1,550 linear feet of wharf at Elizabeth, supported by 65 acres of paved upland area. This line, which offers regular service to North European ports from this facility—is a consortium of six of the world's leading steamship companies—Holland America, Swedish American, Swedish Transatlantic, Wallenius, French Line and Cunard Line.

Adjacent to ACL is Pittston Stevedoring Corp., which operates 1,090 linear feet of wharf. American President Lines offers container services to the Far East from the Pittston Terminal facility at Elizabeth.

In the spring of 1968, service at a three-berth, 87-acre public containership terminal was inaugurated by International Terminal Operating Co., Inc., United States Lines, Pace Line and Hapag-Lloyd Container Lines provide containership services on worldwide routes from ITO's facility at Elizabeth.

Maher Terminals, Inc. began service in their new 150-acre, 2,400-foot berth terminal in 1972. Zim Container Service to worldwide ports and Orient Overseas Container Line on Far East route operate from the Maher Terminal.

### **Seamen's Church Institute Recreational Center Helps Mariners Calling At Port Newark/Elizabeth**

A landmark for seamen whose ships call at Port Newark and Elizabeth is the unique Mariners International Center, in operation on the south side of Port Newark Channel since 1961 under the auspices of the Seamen's Church Institute of New York. The center offers recreation and relaxation for the men who transport the world's products, in surroundings of modern comfort, and an escape from shipboard routine.

Ships at sea can make long-range rendezvous for soccer games at the Mariners International Center's adjacent soccer field. The Center is a handsome three-story structure, open and spacious in interior design, with 11,850 square feet of space. The main floor accommo-



**Scene of the Elizabeth-Port Authority Marine Terminal (The Port Authority of NY & NJ)**

dates office and recreation areas, a color television theatre, a two-story chapel and a comfortable lounge area appointed with Scandinavian modern furnishings. Overlooking the chapel through a central well are additional informal lounge and recreational areas, including a library and writing tables.

Capable of accommodating several hundred seamen daily, the Mariners International Center at the Port Newark/Elizabeth complex is a pleasant reminder that interest in efficient facilities for international commerce does not overshadow concern for the men who sail on the world's trade routes. Like its counterpart headquarters of the Seamen's Church Institute in lower Manhattan, the New Jersey center enables the Port of New York and New Jersey to give the same careful attention to seamen as it does to the cargo carried by their ships.

### **Seaport Information Center At Port Newark-Elizabeth**

A welcome addition to "America's Container Capital" on Newark Bay since its opening in November 1971, the Port Authority's Seaport Information Center helps more than 150 people a day locate appropriate cargo facilities quickly and easily. The Center is part of

the bi-state agency's continuing effort to improve the movement of cargo at piers in the New Jersey-New York Port.

The unique information center is conveniently located in a forty-foot trailer on Corbin Street, at the head of Newark Channel. Visitors stopping to check the large directory of terminal tenants next to the center can go inside the trailer for specific directions or general information about export/import procedures.

In addition to these personalized information services, the Seaport Information Center provides traffic reports about conditions on the seaport's streets, at individual terminals and on the approach highways leading to the complex. By calling the Center's special number (201) 589-5290, truckmen can hear a twice-daily recorded announcement about these conditions. With advance advice of queues and probable waiting times at particular piers and warehouses, those engaged in moving marine cargoes are able to schedule their calls to the seaport more efficiently.

### **Port Newark and Elizabeth Look to the Future**

After 25 years of Port Authority operation, the Port Newark-Elizabeth marine complex is sub-

stantially complete, but construction now under way or soon to be undertaken insures a bright future for these two New Jersey seaports.

At Port Newark, the expansion of Universal Maritime Service Corp.'s container terminal on the north side of the Elizabeth Channel and the reconstruction of Berths 21 and 23 in the former Navy Area highlight the seaport's construction activity.

Universal's expanded terminal will comprise 3,058 feet of berthing space, 60 acres of supporting upland area, and two container cranes upon completion this fall. Additional receiving and delivery capacity will be provided by the construction of a new shed of approximately 154,000 square feet in the extended terminal area.

Reconstruction of Berths 21 and 23 in the former Navy Area on the north side of Port Newark provides additional modernized berthing facilities to accommodate ocean-going vessels. Scheduled for completion in 1976, the Navy Area project will provide Port Newark with additional upland area along 2,500 feet of new berthing space. At that time, the Port Authority's total investment in Port Newark will be \$185,000,000.

#### **Port Newark Annex**

Beyond construction now under way, there is a proposal for a further expansion of Port Newark to accommodate the steadily growing volume of worldwide waterborne commerce. Under a proposed agreement, the Port Authority would lease from the Penn Central Transportation for an initial term of 40 years, a 95.6-acre parcel of land north of the New Jersey Turnpike Extension and west of Doremus Avenue.

On this proposed site, the bi-state agency would build about 830,000 square feet of cargo distribution and storage space, and provide about 2.3 million square feet of paved upland area at an estimated cost of \$19,000,000. These improvements would be owned by the Penn Central Transportation Company, which would provide rail service to the area.

By 1976, under development programs now under way, Port Newark will have over  $4\frac{1}{4}$  miles of berthing

# ***Drilling and Dredging in North Wales for Oil Pipelines***

**Press Information From  
Bos Kalis Westminster Group  
Alton, Hampshire, England**

2nd October, 1973: — Amlwch Port is a small picturesque fishing and boating harbour situated midway between the Menai Bridge and Holyhead on the Isle of Anglesey in North Wales. The port in the late 19th century was well known for both ship-building and the export of copper ore mined nearby in an open site copper mine which, at that time, was considered the largest in Europe.

space, 416 acres of paved upland area, over 50 cargo storage and distribution buildings and numerous specialized cargo installations. The annual cargo handling capacity will be increased to six million tons.

#### **Elizabeth Construction**

Construction work now under way at the Elizabeth marine terminal includes the final stage of Sea-Land Service Inc.'s new 232-acre container terminal, and the expansion of Maher Terminal Inc.'s container facility on Newark Bay.

The new Sea-Land terminal, to be completed this year, will provide 4,519 feet of berthing space, 40-foot-depth berths, a turning basin, wider access channels to the berths and six shore-based gantry container cranes. The new container terminal has been specially designed to accommodate Sea-Land's new SL-7 class super-containerships which entered service on the North Atlantic last fall. It will complement Sea-Land's existing 132-acre terminal at Elizabeth. The 33-knot SL-7 vessels are 942 feet long, 105 feet wide, and can carry 27,000 tons of containerized cargo.

Expansion of the Maher Terminal at Elizabeth, to provide an additional 800 feet of berthing space and 63 acres of upland area, began in 1972.

Shell (U.K.) Limited, in their programme to feed Stanlow Refinery on Merseyside with crude oil directly imported by means of the larger super tankers, chose Amlwch Port with its available deeper waters close to shore as a suitable location for the discharge of these tankers.

The protection of the Isle of Anglesey from prevailing south westerly seas and the availability of deep water close to shore provides suitable

The expanded terminal, to be completed in 1974, will comprise 2,400 feet of berthing space and 153 acres of supporting upland area, including three container cranes and a 372,000-square-foot receiving and delivery building for container stripping and stuffing.

#### **Elizabeth Expansion**

Over the past several years, the Port Authority has leased contiguous parcels of land from the Central Railroad of New Jersey which will enable the bi-state agency to provide additional distribution space and upland marshalling areas required to meet future containerized cargo demands. Two parcels totaling 127 acres were leased in 1971 from the CNJ, and in July 1972 an agreement for an additional 119-acre parcel to be leased from the railroad was announced.

The Port Authority will develop the combined 246 acres at an estimated cost of \$38.6 million to provide cargo buildings for export-import use and open distribution areas. In addition, a new 4,750-foot-long, four-lane roadway linking Bay Avenue with North Avenue will be built on the leased property, thereby providing improved south-easterly access to the seaport.

berthing for such super tankers and this has resulted in the design and construction of two single buoy moorings, (S.B.M.'s), two miles offshore in positions where there is 45 m of water. Four 60 mm diameter pipes from each mooring, are to be laid from the S.B.M.'s to the shore just west of Amlwch Port and the crude oil from the tankers will then be pumped through these pipes to the tank farm at Rhos Gock, two miles inshore and onwards by land-line to the Refinery.

Shell (U.K.) Limited awarded Westminster Dredging Company Limited the contract for the dredging of a 15 m wide trench from the H.W. line to a distance of 300 m from shore to provide a gradual level approach for the pipelines through the rugged rock foreshore.

Rock Fall Company Limited, of Barrhead, in turn was awarded the sub-contract to drill and blast the hard Schistose rock, typical within that area, into suitable fragmentation for removal by Westminster Dredging's bucket dredger "Beaver Chief".

Protected as this area may be for the discharge of the large super tankers, it is notorious for the operation of smaller craft.

#### **Boiling pot...**

Tidal currents of two knots close to shore which is exposed to the north and the irregular but strong winds from these directions with their short waves together with the subsequent reflected waves from the steep rock shore and deflected oceanic swell round the Isle, create a real 'boiling pot'.

During Rock Fall's project investigation, the question arose whether drilling and blasting from a floating pontoon could be carried out successfully in reflection to the required accuracy of a relatively small drill pattern and the limited tolerance in the positioning of the pontoon. The limited acceptable heave of a drilling platform in swell during the drilling operations also had to be considered.

In addition the work was to be carried out outside the Board of Trade's official Smooth Water Limit and as there was no sheltered harbour in the vicinity, the craft to be used would have to be so seaworthy and strongly moored so as to be capable of riding out any bad weather

at the actual working site.

Surface blasting trials with the aid of shaped charges carried out by the Client during the planning stages had proved the method to be unsatisfactory for this type of rock.

Drilling could have been carried out from a self-elevating platform but apart from a very high operating cost of such equipment, the frequent re-positioning under such prevailing tidal and wave conditions would have caused inaccuracy and extensive delay when shifting from one drill location to the next.

By comparison, a floating platform with an accepted percentage of possible weather delay was considered to be a more economic proposition and the question remained as to what type and size of pontoon would be suitable and what likely percentage of weather delay associated with the use of such a pontoon would give the most advantageous solution.

#### **Current and wave conditions...**

Information was obtained about the weather and sea conditions in the area over past years and the availability of various types of pontoon likely to be suited for the project. The Bos Kalis Westminster Group's Research and Development Department then made a detailed wind and sea analysis for the location over the approximate period of the year that the project would be in operation.

The effects of the current and waves on the various types of pontoons were calculated to find a balance between more draught, higher current and less wave influence and less draught with less current effect and increased motion.

The study showed that a seaworthy pontoon of 33 m  $\times$  18 m with a depth of 2.5 m and constructed with 15 water tight compartments with swim ends forward and aft and ballasted to a calculated amount, would give acceptable support.

After the percentage of weather delay had been established Rock Fall prepared to go ahead with the operation.

To safeguard against personnel and equipment being washed onto the rugged rock shore in the event of bad weather, a storm mooring was installed north of the site consisting

of a 10-ton Darnforth Anchor coupled to a 75 mm chain and 300 m of 50 mm diameter wire rope. The mooring was installed by salvage vessel 'Vigilant' and coupled to the barge by means of a safety bridle and made ready for immediate use in the event of weather deterioration.

Other site preparations included the making of shore anchor points by drilling a nest of holes and inserting 38 mm diameter steel bars at a number of points along the rocky foreshore.

#### **Drill rigs...**

The chosen pontoon was equipped with five drill rigs equipped with Atlas Copco BBE 57 drill heads capable of handling 88 mm diameter casing to bridge the gap between deck level and rock bottom and able to drill 56 mm diameter holes in the type of rock involved.

These drill rigs were mounted mid-length on the port side of the pontoon and in such fashion that one row of holes covered half the width of the trench. In this way the trench could be covered in two parallel runs providing a good pattern accuracy within each cross section. The pontoon was further equipped with the necessary air compressors and six winches for controlling the position and movement of the pontoon.

Fuel and water tanks of sufficient capacity to last the entire duration of the contract were fitted and the pontoon was installed with accommodation and provisions in case it was marooned during bad weather.

With safety equipment set to Board of Trade standards and the required certificate of seaworthiness obtained Rock Fall's barge was now ready to start.

The drilling of the trench was executed in two runs of the drilling units, one run on either side of the centre line which produced very good fragmentation in the Schistose rock. The bedding planes of the rock lay at an angle of 45° inclined to the north and seaward. The rock formation was at depths of approximately 30 m of water at the outermost end of the contract and rose very steeply at the shore culminating in fairly steep cliffs. This required considerable extra care while completing the inshore section particularly as the contract required to blast

the rock almost to the High Water mark. This together with up to 5 m tidal range and extremely jagged rock outcrops called for precautions to ensure the barge did not go aground.

The advantage of high spring tides had to be taken while good weather prevailed to get into the area's innermost portion to ensure adequate water for floatation and to avoid backwash off the shore by any swell which would put any extra strain on the short lengths of shore anchor wires and anchor points.

With an analysis of operating efficiency based on average conditions over the years, much depended on occurring weather conditions during the relative short time allowed for this project to be completed.

Operations started with weather conditions preventing the tow of the pontoon from Bromborough to Amlwch but, after this initial setback mother nature remained good humoured.

Although some strong N.E. gales were experienced during which the pontoon rode 4 m swells anchored to her storm mooring the pontoon in general behaved as predicted and average good weather enabled Rock Fall to complete the project and the additional rock to be blasted in an eight week working period.

From this point, Westminster Dredging took over to complete the dredging section of the contract using bucket dredger "Beaver Chief" supported by sea-going hoppers.

Both Westminster Dredging Company Limited and Rock Fall Company Limited are members of the Bos Kalis Westminster Group.

## *Rouen Port News*

**Rouen Port Information Bulletin,  
International Issue, 29th June, 1973**

**Encouraging Figures for Commercial Traffic:** The global river and maritime trade of the port of Rouen in 1972 reached the figure of 23 648 380 tons, being composed of 13 895 611 tons of maritime trade (to which are 242 037 tons of victualling and bunkers) and 9 510 732 tons of river trade.

Rouen is henceforth in the fifth position among French maritime ports, after Marseilles (82,8 M/tons), Le Havre (64,4 M/tons), Dunkirk (27,4 M/tons), Nantes-Saint-Nazaire (14,0 M/tons) and before Bordeaux (13,8 M/tons). However if dry goods only are taken into consideration (solid bulk and assorted goods) it can be seen that Rouen comes second with 8,5 M/tons, after Dunkirk (17,6 M/tons) and before Marseilles (7,6 M/tons) and Le Havre (6,2 M/tons).

This last classification is more significant because dry goods generate numerous activities for the port as a whole from the services point of view. Rouen's trade progressed in 1972 at the same rate as in the previous year i.e. by 4,2%. The port would doubtless have attained the level of progress of about 8% which was that of French ports, if the social movements which disrupted the activity of French ports at the end of the year had not come about to penalize heavily the port of Rouen where the proportion of goods requiring handling is particularly important.

**Containers-up by 43%, Roll-on/roll-off-up by 144%:** The Port of Rouen is constantly adapting to new techniques. Thus in 1972 container traffic increased by 42,6% especially after the creation of the S.N.C.D.V.'s service of integral container carriers to west Africa. In particular the tonnage ascribable to 20 foot containers has been multiplied by 20, going from 1 800 tons in 1971 to 35 200 tons in 1972.

Moreover roll-on/roll-off traffic (horizontal handling) has progressed by 144%, present services being concentrated on Great Britain and the Scandinavian countries. Finally Rouen has for the first time received "bargettes" from the cargoes of transatlantic barge-carriers.

**Opening of the: ROUEN-QUIVILLY Container Berth:** The Rouen-Quevilly container berth came into service the 24th April. The first vessel to take advantage of these facilities was the German container-carrier Beteigeuze, under charter to the Societe Navale Chargeurs Delmas-Vieljeux, which took aboard a record number and tonnage of containers: 243 units of 30 cb.mts. (20 ft) representing a total cargo of 2 500 tons. The vessel took to sea bound for Dakar, Abidjan, Lomé, Cotonou, Apapa, Douala, Libreville, Pointe-Noire and Matadi, the customary ports of call of the "Africatainers" service of the S.N.C.D.V.

This specialized berth of the Port of Rouen Authority is equipped with two powerful cranes each capable of lifting 25 tons with a reach of 25 metres. They are also capable of being coupled together and electronically synchronized to handle lifts up to 43 tons. Extending back from these two cranes are 70 000 sp. mts. of Rouen-Quevilly open storage including two sheds totalling 4 800 sq. mts.; thus the storage of containers poses no problem. Lastly, the berth is accessible to vessels drawing up to 10 metres draught.

The container traffic actually got under way in the Port of Rouen during the year 1972 ensuing from the opening of an initial all-container service by the S.N.C.D.V. inaugurated the 27th January 1972 with fortnightly sailings to four African ports, the service developed to three monthly sailings plying nine African

**(Continued on Next Page Bottom)**



# *Move Cargo by Ship During Energy Crisis*

Toronto, Ontario, Canada, December 4 (Toronto Harbour Commissioners):—Because less energy is required per ton mile to move cargo by water than by air, rail or truck, the Toronto Harbour Commissioners have asked Transport Minister Jean Marchand that steps be taken to encourage the movement of goods by ship within Canada and in international trade to combat the energy crisis.

The Port Authority also called for the reopening of the Montreal-Toronto oil pipeline and greater use of low-sulphur Western Canadian coal as an energy source.

"The Government's announcement on the extended crisis concerning energy sources for Canada brings back into perspective the economic advantage of the movement of goods by water," said Harbour Commission chairman Harold W. Thomson in a letter to the transport minister.

Mr. Thomson also pointed out

that Harbour Commissioner engineers have written a paper showing that ships produced the least harmful effect on the environment and generated the highest cargo ton miles when compared to other modes of transportation.

To encourage transportation by water, especially via the St. Lawrence Seaway which could easily handle more ships, Mr. Thomson suggested the removal of compulsory pilotage in the open waters of the Great Lakes, the suspension of tolls on the Seaway and lockage fees on the Welland Canal, and the extension of the shipping seasons for both canals to the latest possible date.

"Last year the St. Lawrence Canals were closed on Dec. 22, and this year are proposed to be closed on Dec. 16, but not because of weather conditions," he said.

He also said that in previous years the Welland remained open as late

ports.

Thus container traffic increased from 55,500 tons in 1971 to 79,200 in 1972, but above all the 20 ft.-container trade (justifiable for a specialized berth) increased twentyfold to total 35,200 tons in 1972 compared with 1,800 tons in 1971! Rouen's trade in large containers is essentially concentrated to two lines: the West Coast of Africa (all-container, and mixed) and the Indian Ocean (Reunion, Mauritius, Islands, Madagascar). It should be borne in mind that the handling of containers in small quantities to, for example, conventional ships, can be easily undertaken from any berth in the port with the use of selfpowered floating crane of 30 tons lifting capacity, and capable of carrying a total of ten 20-ft. containers on its deck. With suitable equipment, which does not excluded flexibility, the port of Rouen should enjoy the means of seeing

progressive growth in this take-off in containerized trade.

**The Port Authority Moves Home:** In less than two weeks the various departments of the Port of Rouen Authority became gathered together within the new "towers" of the boulevard de Boissguilbert. Thus those representatives of the P.A.R. hitherto dispersed throughout the city of Rouen, some from the Palais des Consuls, others rue de Crosne or the Ile Lacroix, joined those of "52" (quai Gaston-Boulet) all finally together under the same roof. Our new address is now as follows:  
**PORT OF ROUEN AUTHORITY**  
34, boulevard de Boissguilbert,  
76037 ROUEN CEDEX.

Telephone and telex numbers remain unchanged:

—Telephone:

(35) 71.74.54—

(35) 71.74.71 (Harbour Master).

—Telex: 77.865.

at Jan. 7, but this year it will be closed on Dec. 31.

Mr. Thomson recommended the reactivation of the Toronto-Montreal oil pipeline and greater utilization of Western Canadian coal which has a low sulphur content as other means of alleviating the present energy crisis in Eastern Canada.

"It would appear feasible that the Toronto-Montreal pipeline could be reactivated in a reasonably short period of time at a reasonably small cost compared to building a new pipeline from Sarnia to Montreal," he said.

"This would permit cargoes to be moved by water from Sarnia to Toronto and then by pipeline to Montreal," he added.

The commissioners noted that should there be a shortage of vessels for the shipment of oil directly to Montreal, the pipeline could provide additional supplies into that energy-starved area.

"And if the Welland Canal season is extended next year to its fullest possible limit, the period of time during which the Sarnia-Toronto oil shipments could not be made would only be a matter of a few weeks," said Mr. Thomson.

He explained to the transport minister that there has been a major conversion in the Greater Toronto area from coal as a source of energy to oil and natural gas "due to the pollutant factor of the type of coal used, namely American, which has a high sulphur content."

However, it was the Harbour Commission's understanding that Western Canadian coal, which is low in sulphur, was being sold to Japan and exported via the West Coast.

"The Commissioners request that consideration be given to this type of coal being moved east to the Lakehead and then by ship to the Toronto area as an additional source of acceptable energy," the chairman said.

As a final request to the transport minister, it was suggested that priority be given in the canals during peak periods, "or at the beginning or end of the season", to ships carrying energy cargoes.

# Singapore Beckons You for the Ninth IAPH Conference in March, 1975



## ← THE PORT OF SINGAPORE AUTHORITY

An aerial view of PSA wharves. The Port of Singapore Authority owns and maintains a stretch of approximately 4.8 km (3 miles) of commercial wharves comprising 26 deep-water and five coastal berths. A 24-hour berthing/unberthing service enables vessels to be taken out at night leaving berths free for new vessels at daybreak.

Ships coming into the Port are assured of a 24-hour tug and pilotage service handled by the Authority's seven harbour tugs which are also equipped for fire-fighting purposes and are capable of supplying steam or electricity during emergencies.

## → PORT OF SINGAPORE

The picture shows the Singapore Container Port in the foreground.

The Container Port comprises a feeder berth of 213 m (10.4 m LWOST) and three container berths of 914 m (13.4 m LWOST) on 27 hectares of land. Two berths are now fully operational and the third berth is scheduled for completion by the end of 1973.

In the background is a view of the Eastern Anchorage, a major anchorage at Singapore which can accommodate ships of all sizes.



Singapore, the venue for the 9th IAPH Conference in March 1975, is the focal point of the exotic East. Situated at the cross-roads of South-east Asia, the Republic is one of the world's premier ports. It is an "Instant Asia" of over 2 million people, a garden city which is clean and green. And over the years, it has developed its traditional role as the emporium of the region into the region's manufacturing and financial centre. All these, and more, will be laid out for delegates to the 9th IAPH Conference.

Delegates will take warmly to friendly and hospitable Singaporeans, whose diverse cultures and colourful way of life stem from their various ancestral roots. Multi-racialism is also clearly evident in the city's life-style, and within the fast growing city, Christian churches, Chinese and Indian temples and Muslim mosques rise within a stone's throw from one another.

In an eating complex, you sample authentic Chinese, Malay and Indian food which will satisfy the most discriminating palate. Discover for yourself the succulent "roast suckling pig" or the Malay "satay" (spiced barbecued meat on skewers). Or, if you prefer something spicy, there is the Indian curry.

Another attraction on the island is its shopping. It is a fact, as has been proved by the many satisfied visitors that Singapore is a shopper's paradise. It is no boast that the Republic is the emporium of the East.

You will hear more about Singapore and S.E. Asia in due course. Singapore welcomes you to the 9th IAPH Conference—exotic "Instant Asia" awaits you.

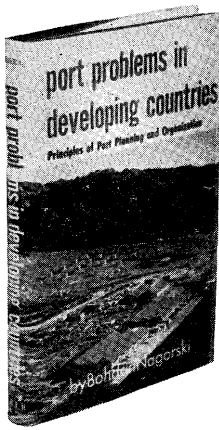
(Port of Singapore Authority)



A Lion Dance in Chinatown.



Satay for you too?



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

IAPH Publication—

# port problems in developing countries

by Bohdan Nagorski

US\$12.00 (including surface mailing charge)

Order to:

**The International Association of Ports and Harbors**

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

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

*—Editor, the Dock and Harbour Authority*

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

*—Assistant Secretary General, ICHCA*

## ANNOUNCING !!

Bohdan Nagorski's "Port Problems in Developing Countries" is now available in New York and London at the following address.

☐ **Marine Terminals**

**The Port Authority of New York and New Jersey**

**One World Trade Center**

**New York, New York 10048**

**Telephone: (212) 466-7000**

☐ **Office of the General Manager**

**The Port of London Authority**

**World Trade Centre**

**London, E. 1, England**

**Telephone: 01-476 6900**

# port problems in developing countries

by Bohdan Nagorski—Published by IAPH

Price : US\$12.00 (including surface mailing charge)

I order \_\_\_\_\_ copy/copies of the book to be sent  
by airmail/surface mail to :

Mr. \_\_\_\_\_

Name (please use block letter)

(first - last)

Address \_\_\_\_\_  
\_\_\_\_\_

Delivery on Receipt of Remittance Only

**Affix  
stamp  
here**

---

**To:**

---

(Please address this either to the publisher or one of distribution centers)



---

# Orbiter Probe

---

## CHCA's New Policies

London, 12th December (ICHCA Press Information):—The international Council of ICHCA (International Cargo Handling Co-ordination Association) at their recent Autumn meeting in London, have accepted the invitation from the President of the Italian National Committee of the Association to hold its 12th International Biennial Conference in Florence, Italy from 11th to 15th May, 1975.

Other decisions taken by the ICHCA Council:

**1. To establish an ICHCA Air Cargo Section:** The interests of the Association cover the movement of goods from origin to destination in all modes and phases of the transport chain. Therefore, following the positive outcome of preliminary discussions with Airfreight interests within the Association, the Council decided that an Air Cargo Section be established. This will deal with the problems connected with the handling and transport of cargo by air, in the same manner as that applied so successfully to the handling and transport of goods by sea. A forum for discussion between all interested parties within the airfreight industry will thus be provided.

ICHCA will ensure that the work of the Air Cargo Section will not duplicate the valuable work already being done by IATA, or other existing Associations, in any way.

An all-out effort is being launched to bring into ICHCA membership those interests in the air cargo industry that are affected by, or have an effect on, cargo handling techniques.

In addition to air carriers, ICHCA is inviting into membership air-frame manufacturers, airfreight forwarders, airport authorities, terminal operators, handling equipment manufacturers, materials handling consultants, and others in

similar categories.

**2. To establish a new category of membership for students:** Bona fide students within the field of transportation are invited to become members of the Association. The fee for students will be at the reduced rate of £5 per annum. Apart from other advantages, student members will have access to the unique Central Office Library for research purposes.

**3. To form specialised Sub-Committees:** Apart from the already approved Technical Advisory Sub-Committee (TASC) and the Publications Sub-Committee (PSC), the Council also approved the establishment of two Sub-Committees for closer working relations with UNCTAD and ISO. The ICHCA/UNCTAD Sub-Committee will be chaired by Mr. E. Rath (U.S.A.), and the ICHCA/ISO Sub-Committee will be chaired jointly by Mr. J. van Leeuw (Belgium) and Prof. Ir. G. C. Meeuse (Netherlands).

## FIATA 13th World Congress

Zurich, Switzerland (FIATA News, Special Congress Issue, 1.10.73):—More than 1100 participants from 50 different countries in all parts of the world attended our 13th World Congress September 16-20th in Cannes. The General Assembly at the Palais des Festivals reelected unanimously President Jacques Dervien for another 2 years term.

## Revised Closing Dates

Cornwall, Ontario, December 7 (Seaway Notice No. 19 of 1973):—Reference is made to Seaway Notice No 18 or November 21, 1973.

In order to facilitate the movement of as many petroleum products as possible during this period of critical shortage and to take maximum advantage of the fuel economies inherent in waterborne transportation, weather and ice

conditions permitting, the closing dates for the current navigation season on the St. Lawrence Seaway System between Montreal and Lake Erie are hereby amended as follows:

## A) MONTREAL — LAKE ONTARIO SECTION

- i) No upbound vessels will be accepted for transit through St. Lambert Lock after 1200 hours on December 20, 1973.
- ii) No downbound vessels will be accepted for transit through Iroquois Lock after 0800 hours on December 20, 1973.

## B) WELLAND CANAL

- i) No upbound vessels will be accepted at CIP-15 (Lake Ontario) for transit of the Canal after 1200 hours (noon) on January 4, 1974.
- ii) No downbound vessels will be accepted at CIP-16 (Lake Erie) for transit of the Canal after 1200 hours (noon) on January 4, 1974.

Closing dates for the U.S. and Canadian Sault Ste. Marie Canals remain as stated in Seaway Notice No. 18.

## Professor Named to Harbour Commission Post

Toronto, Ontario, Canada, December, 1973 (Toronto Harbour Commissioners):—H. Roy Merrens, 42, a geography professor at Toronto's York University, has been named to the five-man Board of the Toronto Harbour Commissioners. Mr. Merrens will fill the post held by Oakah Jones until his death last October. Mr. Jones was chairman of both Consumers' Gas Company of Toronto and Home Oil Co. Ltd.

John Jursa

Director

Public Information Dept.

Toronto Harbour Commissioners

60 Harbour Street

Toronto, Ontario

Tel. (416) 863-2036

## Tonnage Record Seen

Baltimore, Md., December 7 (News from Maryland Port Administration):—Significant increases in both export and import trade paced the port of Baltimore to a total of

27.2 million tons of foreign commerce handled through the first nine months of 1973.

Exports rose 25.5 per cent to slightly over 7.5 million tons while imports showed a healthy increase of 20.4 per cent to a total of 19.7 million tons, high-lighting the port's overall rise of 4.86 million tons in foreign trade over last year.

A total of 3.6 million tons of import-export cargo moved through Baltimore during the month of September, placing the port just 1.9 million tons below the over-all total for the entire year of 1972.

According to the Maryland Port Administration, an agency of the Maryland Department of Transportation, Baltimore is currently averaging 3.02 million tons of foreign trade per month. If this pace continues for the remainder of 1973, the port will set a new import-export trade record of more than 36 million tons for a single year.

The largest single export commodity for Baltimore through the first nine months was coal, which reached a mark of nearly 3.2 million tons, a 13.3 per cent rise over 1972.

Grain shipments, led by 83 and 69.7 per cent increases in wheat and corn exports, respectively, totaled more than 2.6 million tons through September, an increase of 803,761 over the same period last year.

Also continuing a strong showing as an export was iron and steel products, 23.3 per cent ahead of 1972 at 407,597 tons.

The leading overall import and the largest single commodity handled in the port through nine months of 1973 was petroleum and petroleum products, which rose nearly 20 per cent over a year ago to 8.16 million tons.

A large portion of the petroleum arriving at Baltimore comes from Venezuela rather than the Mideast. In 1972 the port handled 9.2 million tons of import petroleum.

Iron ore imports also were impressive, increasing 38.3 per cent or 2.04 million to an overall mark of 7.36 million tons.

The port of Baltimore's record high for overall import-export commerce is 32 million tons, set in 1957.

# **NPC Book :**

## ***NPC Forecasts of 1980 Trade Levels***

**National Ports Council, U. K.**

London, 12th December, 1973:— By 1980 the six original Common Market countries—Belgium, France, West Germany, Italy, Luxembourg and the Netherlands—will become the United Kingdom's major overseas market for non-fuel goods, according to trade forecasts published today by the National Ports Council\*. The Council's economists estimate that in 1980 traffic with 'The Six' will exceed 26 million tonnes, compared with 15 million tonnes in 1971.

The United Kingdom's total non-fuel traffic in 1980 is estimated at 134 million tonnes, compared with an actual 98 million tonnes in the base year of 1971 — an annual growth rate of 3.6 per cent. In the same period the growth of traffic with 'The Six' is likely to be at an annual rate of 6.4 per cent.

Describing the forecasts as the most comprehensive to be published since the UK joined the EEC, the Council's Chief Economist, Mr. R. E. Baxter, said today that the forecasts were expressed in tonnage, rather than value, terms because they were specifically designed to meet the needs of the port transport industry.

"But we do hope that they will also be a useful guide to all engaged in the international movement of freight at a time when the enlarge-

ment of the European Community promises to change significantly the level and pattern of international freight flows."

Forecasts are given for 50 commodity groups, import and export, and for each of 13 overseas areas of origin and destination. The publication also includes commentaries setting out the main influences affecting trade of a wide range of individual commodities with particular emphasis on the effects of the enlargement of the EEC.

"These forecasts were prepared before the current crisis in energy supplies; however, we have tried to display in as much detail as practicable the arguments upon which our view of UK trade in 1980 is based," said Mr. Baxter. "The report includes assessments of the likely effects of variations in basic assumptions such as the growth of the UK and world economies."

Actual UK non-fuel imports and exports for 1962 and 1971, and the Council's forecasts for 1980, all in 1,000s of tonnes, are shown in the table, together with the annual growth rates for the two periods.

The figures for Scandinavia are heavily influenced by iron ore imports; without these the annual growth would be 3¼% between 1971 and 1980 compared with 3¾% from 1962 to 1971. The decline in the rate of growth in trade with Australasia is mainly due to an expected drop in imports of food-stuffs to the UK.

The publication also contains es-

\* United Kingdom International Trade 1980. Published by the National Ports Council, Commonwealth House, 1-19, New Oxford Street, London WC1A 1DZ. Price £25.00.

	1962	1971	1980	Growth	
				1962-71	1971-80
TOTAL	80, 195	97, 579	134, 300	2.2%	3.6%
EEC (The Six)	9, 818	15, 087	26, 415	4.9%	6.4%
Scandinavia	14, 010	16, 547	19, 405	1.9%	1.8%
North America	15, 520	18, 642	23, 595	2.0%	2.7%
Australasia	4, 160	6, 008	7, 160	4.2%	2.0%

timates of the implications of the forecasts for container and roll on/roll off traffic. Actual figures for 1971 showed that 71 per cent of the estimated potential unitised market with The Six was already moving on unitised services, compared with 79 per cent of the Republic of Ireland, 20 per cent of the Scandinavian, 30 per cent of the North American, and 37 per cent of the Australasian.

Mr. Baxter said that the Council are currently carrying out research into unitisation in the UK, the results of which will ultimately be combined with the forecasts set out in the report to produce estimates of UK container and roll on/roll off trade in 1980.

"It has not been possible or appropriate to anticipate this research by discussing such a complex subject in depth in the present report," he said. "However, on the basis of broad definitions of potential demand confining the analysis to published statistics, an attempt has been made to throw some light on the possible course of container and roll-on traffic.

"From this analysis it seems that the growth rate of container and roll-on traffic with the EEC (The Six) will slow down, but will relatively fast rate. Container and nevertheless continue to rise at a roll-on traffic with Scandinavia has the potential for very rapid expansion up to 1980."

### **Tonnage Rising to Record Heights**

Houston, Texas, 11-7-73 (Port of Houston News Release):—Statistics for September show cargo tonnage figures for the Port of Houston continuing to rise to record heights. Total tonnage for the month was again in the 7 million ton range (6,838,587), better by 13.4 percent compared to September a year ago.

The tonnage total for the first three quarters of 1973 is running 28.5 percent ahead of the same nine months of 1972.

Bulk cargo movement for the year shows a significant increase in both import and export trade. The flow of bulk grain, much of it wheat for Russia, contributes largely to this change in export tonnage, while in-

creased shipments of crude oil and iron ore concentrates are responsible for the rise in imports.

General cargo exports for the month showed an increase of more than 65,000 tons over last September, enough to make up for a slight decrease in general cargo imports chiefly due to the drop in steel receipts. Total foreign trade general cargo through September is running a million tons ahead of the same period in 1972 at better than 4.4 million tons.

Containerized cargo movement is up 85 percent compared to figures for the first three quarters of last year, and the Port of Houston is pushing forward with the construction of new facilities to handle this rapidly growing trade.

Projections for the final quarter of 1973 show the Port of Houston well on its way to another record year, topping last year's record of more than 71 million tons, even if minor slackening should occur.

## **The new Port of Boston lets you travel in fast company.**



### **These companies:**

ACT/PACE—Australia and New Zealand  
 American Export Lines—Northern Europe, Mediterranean, Far East  
 Atlantic Container Line—Northern Europe  
 Atlantica Lines—Mediterranean  
 CNCA (Portuguese) Line—Portugal  
 Columbus Line—Australia and New Zealand  
 Dart Line—Northern Europe  
 Finnliness—Northern Europe  
 Japan Line—Far East  
 K Line—Far East  
 Maritime Coastal Containers Limited—Halifax  
 Mitsui OSK Lines—Far East  
 N.Y.K. Line—Far East  
 New England Express Line—Northern Europe  
 Sea-Land—Puerto Rico, Europe, Far East  
 Y-S Line—Far East  
 Zim Line—Mediterranean and Far East

**massport**

470 Atlantic Ave., Boston, MA 02210



**RECORD LIFT**—The South Carolina State Ports Authority's 400-ton crane, known affectionately around the Charleston area as "The Monster," made an SPA record lift recently when it hoisted this 370-ton nuclear reactor vessel from a barge to a waiting custom-built flatcar. Believed to be the heaviest piece of equipment ever lifted by a fixed dockside seaport crane in the Western Hemisphere, the reactor vessel was built by Combustion Engineering, Inc., of Chattanooga, Tenn. The giant component, headed for its installation site at a Duke Power Co. plant near Charlotte, N.C., was brought by barge to Charleston because the port has the only crane on the U.S. Atlantic Coast that could handle the load. (December 12)

## First People's Republic of China Cargo Vessel Calls at West Coast

Long Beach, Calif., 12/18/73 (Port of Long Beach News):—The first cargo vessel representing the People's Republic of China to call on U.S. West Coast ports in more than 25 years arrived in Long Beach Harbor in mid-December to load 10,000 bales of California cotton destined for Shanghai. It also called at Longview, Washington and San Francisco.

The 19,000 ton vessel, MV Caspian Sea, is owned by Yick Fung Shipping & Enterprises Co., Ltd. of Hong Kong and is one of several on time charter to the China Ocean Shipping Company, shipping division of the People's Republic. Transmarine Navigation Corp. is general agent for the Chinese shipping divisions on the U.S. West Coast.

Arrival of the Caspian Sea marked the start of regular cargo service between the United States and Mainland China. Transmarine officials noted that the new service would be at least monthly and possibly weekly in the near future.

Long Beach Harbor Commission president Henry H. Clock presented Captain Jack Rigby with a satellite photo of Southern California taken by Apollo 9 and clearly showing the Port from 105 miles in space.

Cheung Man-Piu, chairman of the Crew Welfare Committee, greeted the Harbor and shipping officials and in turn presented a hand-made banner to the Port of Long Beach. He said through an interpreter that the Chinese crew members were overwhelmed by their reception and that they all hoped this initial ceremony marked a return of fullscale commerce between the two nations.

The crew, most of whom are from Canton Province, were guests of the Harbor Commission on bus tours of attractions in the Long Beach area during their stay in port.

## Mr. Caughlin, Your Successor is Yet to Be Found

Los Angeles, December 13 (Port of Los Angeles):—The Los Angeles Board of Harbor Commissioners yes-

terday (Wed., 12/12) asked General Manager Bernard J. Caughlin, who had announced his retirement January 2, to remain on at the Port for another 90 days or until his successor is chosen, whichever is sooner.

The extension, subject to approval by the Mayor, is permitted under the provisions of the Los Angeles City charter.

John Y. Chu, president of the Harbor Commission, said, "We believe it is essential that continuity is maintained in the management of the Harbor Department during this transition period, so we have asked Mr. Caughlin to remain on the job until a replacement for him can be found."

Chu said that a number of applications already have been received for the position of Harbor Department General Manager.

At the same time, the Commission is interviewing applicants for the first and second deputy manager positions at the Port, and reportedly will announce their selections in the next week or ten days.

These positions were vacated through a retirement and a resignation, the latter when the assistant returned to private business.

Caughlin joined the Harbor Department in 1946 as assistant general manager, after 24 years with the Luckenbach Steamship Company. For the past 21 years, he has been the Chief Executive at the Port.

### Outer Harbor Dredging

Los Angeles, Calif., December 5 (Port of Los Angeles):—An agreement to gather information, data and environmental impact evaluation for proposed Outer Harbor dredging at the Port of Los Angeles was authorized today (Wed.-12/5) by the Board of Harbor Commissioners.

The information and data is necessary for the preparation of a required environmental impact report (EIR) for construction of a liquified natural gas (LNG) terminal near Berths 301-3 on Terminal Island, and also will be useful in preparation of permit applications for other harbor dredging projects.

The Board authorized the Harbor



**San Francisco, December 5 (Marine Exchange of the San Francisco Bay Region):—A "CORDIAL" CHRISTMAS THANKS** was given by Miss Miriam Wolff, San Francisco Port Director and vice president of the Marine Exchange, and John R. Page, Exchange president and president of General Steamship Corp., Ltd., to 1971-73 Exchange president Edward D. Ransom (center). Ransom, a leading admiralty attorney and partner of Lillick, McHose, Wheat, Adams and Charles, received the commendation of the Exchange's Board of Directors for his long service to the industry, most recently as head of the Golden Gate maritime service and promotional agency. A holiday engraved set of silver cordial glasses accompanied the "well done."

Department general manager and chief harbor engineer to negotiate an agreement with the University of Southern California (USC) to investigate the ecological effects of hydraulic dredging at Los Angeles Harbor.

Water and bottom samples will be taken. Toxicity tests, chemical analyses and other studies will be performed during the data gathering.

Cost for the data gathering and EIR preparation, budgeted from Harbor Department revenues, is a total of \$325,000. USC will be paid an estimated \$220,000, while an additional 25% is being reserved for unanticipated extra work.

The remaining \$50,000 will be needed for Harbor Department expenses in preparing the EIR and any other incidental work as may be necessary.

### New Patrol Boat

Los Angeles, Calif., November 28 (Port of Los Angeles):—Purchase of a new patrol boat for Port of Los Angeles law enforcement efforts was authorized recently by the Board of Harbor Commissioners.

The new 31-foot craft will be delivered in 90 days by Uniflite, Inc., of Bellingham, Washington, the lowest bidder for the contract, at a cost of \$38,771.

The new patrol boat will replace a 25-foot craft in the Port Warden's fleet of three regular patrol boats, which now will be either 27 or 31 feet in length.

The Port Warden's division is the law enforcement agency of Los Angeles Harbor. During 1972 the patrol boats logged nearly 19,000 man-hours of surveillance and water safety cruising in the Port.



Regular duties of the patrol boat crews include the issuing of warnings and citations for boating violations. Other duties include working with Coast Guard, other police and fire agencies.

Patrol boats escort new ships vessels with dangerous cargo and tankers into the Port of Los Angeles and provide inspection and official tours of the Harbor area.

The Port Warden also maintains car and motorcycle patrols in the Port, and has a regular aerial surveillance program with an emphasis on pollution prevention.

### Foreign Trade All-time High

New Orleans, December 12 (Port of New Orleans Press Release): — Foreign trade will reach an all-time high of nearly 30 million tons, worth over 4.5 billion dollars at the Port of New Orleans by the end of calendar 1973.

End-of-the-year estimates based on U.S. Department of Commerce figures for the year's first three quarters indicate a whopping total of 30,276,000 (short) tons of total foreign commerce with a value of \$4,654,000,000.

The estimates include imports of 8,527,000 tons, worth \$1,612,000,000 and exports totaling 21,749,000 tons worth \$3,042,000,000.

The tonnage gain in total foreign trade over calendar 1972 is 5,449,000, representing a 22 per cent increase. Included is an increase of 969,000 tons of imports (or 13 per cent) and 4,480,000 tons of exports (26 per cent).

In value, imports gained \$194,000,000 (or 14 per cent) while exports were up \$969,000,000 (47 per cent). The total gain in value for 1973 over 1972 was \$1,163,000,000 or a 33 per cent increase.

Grain exports, expected to top out the year at 315 million bushels, will show an increase of 14 million bushels for a five per cent gain. Cotton exports will total about 773,000 bales for a gain of 152,000 bales (or 24 per cent) over the previous year.

The number of containers, measured in 20-foot equivalents, will reach 90,000, or 27,000 more than in 1972—a 43 per cent increase over

1972.

The port's public bulk terminal, geared to the rapid handling of dry bulk materials, has continued as the port's fastest growing facility, moving a record 2,200,000 tons of cargo, 57 per cent more than during the previous year when 1,400,000 tons were handled.

Customs duty collections—up 16 per cent for the year—top out at about \$100 million.

General cargo—usually the highest valued of all categories—totaled 7.5 million tons, up 32 per cent over the 1972 total of 5.7 million tons.

With an economic value to the community of \$20 per ton, this total alone has an impact of \$150 million dollars.

### France Road Container Terminal

New Orleans, La., December 3 (Port of New Orleans Press Release):—The first ship berth of the Port of New Orleans' France Road Container Terminal will be formally dedicated Monday, December 10, beginning at 10:00 a.m. at a public ceremony on the Industrial Canal site.

The terminal, in operation for over a year by Sea-Land Service, Inc., is located on the west bank of the Industrial Canal near France Road and Florida Avenue.

Berth One is the first full container facility of its kind at the Port of New Orleans and is one of the most modern on the Gulf Coast. It has the capacity to handle a million tons of containerized cargo per year. Sea-Land has a fulltime work force of over 100 at the terminal, and an additional 20 are employed when a ship is working.

The Port Commission, along with Sea-Land, have spent over \$10 million on the terminal. A major portion of the port's expenditures—totaling about \$5.5 million, came from funds appropriated by the Louisiana State Legislature under Act 15 of the 1969 session. Sea-Land's expenditures, not including the cost of containers and trailers at the terminal, do include the two container cranes which are worth \$1.5 million each. Sea-Land's total investment is about \$5 million.

The wharf has a frontage of 830 feet on the port's Industrial Canal, at a point where it is joined to the 36-foot-deep Gulf Seaway, which is 76 miles from the Gulf of Mexico. The wharf is 147 feet wide and has 45-foot ramps at both ends. The container cranes have lifting capacities of at least 30 tons and can work an average of over 25 containers an hour each.

Berth One has a total area of 33 acres and is equipped with a consolidation shed, two-story office building, garage and maintenance building, gate house and two scales. Over 1,000 spaces are provided for 35-foot containers; nearly half of these spaces can handle the larger 40-foot containers. The wharf can sustain weight loads up to 750 pounds per square foot. Adequate lighting provides for round-the-clock operations throughout the terminal area.

Heavy duty roads connect the terminal with the interstate highway system via I-10. New Orleans Public Belt railroad tracks connect the terminal with the seven major trunkline railroads which serve New Orleans.

M. R. McEvoy, chairman of the board of Sea-Land Service, Inc., will deliver the principal address. Governor Edwin W. Edwards will dedicate the wharf. Eads Poitevent, port commission president, will be master of ceremonies and the welcoming address will be made by Edward S. Reed, director of the port. The invocation will be given by the Rev. Ralph E. Carroll, pastor of St. Gabriel the Archangel Church.

### "Cruises Via New York"

New York, N.Y., 10/19/73 (The Port Authority of NY & NJ):—The Special Issue of *Via Port of New York*, Vol. 25 No. 8, August 1973, highlights the variety of cruises available to worldwide destinations from New York. It also includes special features on the new Passenger Ship Terminal under construction along the Hudson River in mid-Manhattan, on New York tourist attractions, and on the history and tradition behind many ships that call at the Port.

For obtaining copies of this colorful special issue, write to:

"Cruises Via New York"

Marine Terminals Department  
The Port Authority of New York  
and New Jersey  
One World Trade Center, Room  
71S New York, N.Y. 10048  
U.S.A.

### World's First Turntable for Container Cranes

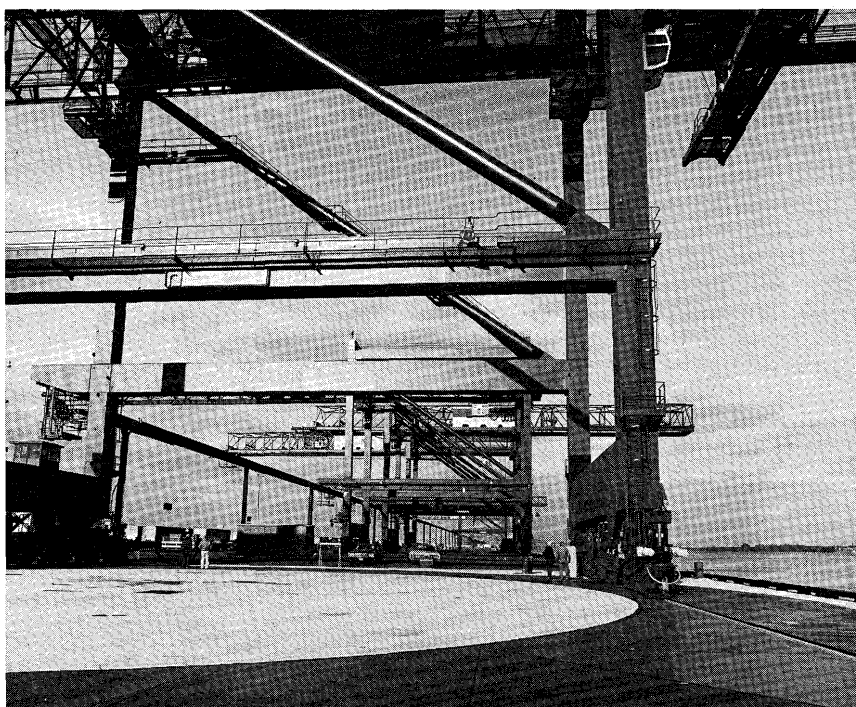
Alameda, California, December 3 (PACECO News):—A mammoth Paceco turntable capable of handling huge container handling cranes has recently been put into operation at the Sea-Land Terminal, Port of Elizabeth, New Jersey. (See photos on this page.) Paceco, A Division of Fruehauf Corporation, designed the turntable to enable six Low Profile MACH Portainers to service berths at right angles to each other at the terminal. The new turntable affords maximum utility of the six cranes. It is in the shape of a large "doughnut" ring, which rotates around a solid concrete center. The turntable ring has a 94 ft. inside diameter and a 127 ft. outside diameter. Placed in one corner of the large rectangular berth area, the turntable permits cranes to change berths in only five minutes.

The Portainer cranes, driven onto the turntable from one side of the berthing area, are rotated ninety degrees and driven off on the rails of the adjoining berth. The turntable is installed flush with the pier pavement, and when not operating provides a storage capability of 600 lbs. per square foot.

### SIX NEW CRANES

The six new cranes servicing the berths are Paceco's new Low Profile MACH Portainers, which are equipped with high speed power packages, specially designed sway stop trolleys, and provisions for the future addition of automation modules. Provision has also been made to increase the crane capacity from 30 Long Ton to 40 Long Ton if required.

This Low Profile design limits the overall height of the crane to 130 ft. The new Low Profile MACH Portainers are designed with a 300 ft.



No. 1—Crane entering onto Paceco's turntable.



No. 2—and rotating.

long sliding boom which provides a 115 ft. outreach and an 88'6" working backreach over the terminal area. The cranes ride on pier rails with 100 ft. gauge affording ample area beneath the crane for vehicular traffic and temporary container storage. The cranes are also equipped with storage girders 35 ft. clear

above the pier for the storage of hatch covers and stacking frames.

Each of the six new cranes has its weight distributed over 22 wheels—eight wheels supporting each of the four legs.

Each of the six cranes has a 35/40' long telescoping lifting spreader for the handling of 40 ft. as

**NEW YORK CITY,** The Maritime Association of the Port of New York—The Honorable Leonor K. Sullivan, chairman of the Merchant Marine and Fisheries Committee in the United States House of Representatives, was greeted by nearly 400 industry leaders at a 100th anniversary luncheon staged at New York City's Essex House by the Maritime Association of the Port of New York.

Congresswoman Sullivan, whose House tenure spans nearly twenty years and whose legislation consistently reflects needs to promote a strong U.S. Merchant Marine, viable marine transportation, and waterborne commerce, cited weaknesses and strengths, and the respective responsibilities of both the Congress and the industry to achieve a more satisfactory position for ship operators and world trade in general.

Touching on the many changes within the marine transportation industry, she cited here expectation that the Port of New York would remain in the vanguard, and by example showed the radical nature of these changes. She indicated the necessity to accept and to act upon the fact of great size of new vessels and subsequent obsolescence of port facilities, tankers being a case in point, and that the U.S. had no such ports—a fact restricting shipping. Likewise, cost and size of shipbuilding prospects must be dealt with affirmatively, and that construction requirements for transporting certain types of liquid cargo presses heavy cost disadvantages for U.S. ship operators.



well as the 35 ft. Sea-Land containers. All of the new cranes have ship's Trim and List adjustments to facilitate and speed the entry of containers into the ship's cell guides.

### **New Film "Shipping Showcase"**

New York, N.Y., December 7 (News from The Port Authority of NY & NJ):—"Shipping Showcase," a new film on the vast shipping and cargo-handling facilities in the Port of New York-New Jersey, will be shown for the first time in New York on Monday, December 10 at 5:00 P.M. at The World Trade Center before an audience of exporters, importers and other businessmen and public officials involved in international trade and transportation. The showing will be at the World Trade Institute on the 55th Floor of One World Trade Center (entrance at Church and Dey Streets).

The 15-minute film draws a dramatic portrait of the sprawling fifteen-hundred-square-mile harbor "where the main streets are rivers and its traffic the ships from every port in the world." Container ship-

ping facilities in New Jersey and New York, air cargo terminals at John F. Kennedy and Newark International Airports, the new Passenger Ship Terminal and the great World Trade Center are among the subjects covered by the fast-moving film.

"Shipping Showcase" will be used by the Port Authority's nine Trade Development Offices in the United States and overseas to illustrate for the world trade community the unmatched advantages of shipping via the Port of New York-New Jersey.

"Shipping Showcase" supplements three previously produced Port Authority motion pictures—"Portrait of a Port" which depicts the dynamic atmosphere generated by a port at work by taking the viewer "behind the scenes;" "Sixty-Seven South," which details the movement of export freight through the harbor, and "Today the Twenty-First," which shows twenty-first century techniques in handling containerized cargo already in operation in the New York-New Jersey Port. These three films, in English and foreign language versions, have

been shown over 6,000 times to several hundred thousand businessmen, government, civic and trade officials throughout the world. In addition, many millions have seen them on television in the United States and overseas.

"Shipping Showcase" was written and produced by the Port Authority's Port Promotion Manager, Robert F. Unrath, and narrated by John Tillman, Radio and Television Director for the bi-state agency.

### **Expanded Cruise Schedules**

Philadelphia, Pa., 10/12/73 (City of Philadelphia News release):—"The Greek Line will more than double its schedule of cruises from the Port of Philadelphia for 1974, increasing to nine from the current four, Jack Rogers, Philadelphia regional manager of the Greek Line, announced today.

"When we first came to Philadelphia in 1971, with two cruise sailings, we said we were here to stay," Rogers said. "The fine facilities at the Port and the popular response to cruises from Philadelphia has proved we were right."

City Representative and Director of Commerce Harry R. Belinger welcomed the announcement and said expanded cruise schedules also are expected from other shipping lines operating here to surpass the 11 cruises listed for 1973. Norwegian-Caribbean Lines and the Chandris Line also operate here.

On Tuesday, Oct. 16, the first of four cruises this year for the Greek Line's 23,000 ton OLYMPIA will sail from Pier 84 South at 5 p.m., for a five-day trip to Bermuda. The same trip will be repeated on Oct. 21. There will also be an eight-day cruise to San Juan and St. Thomas on Oct. 26, and a six-day cruise to Freeport and Nassau on Nov. 3.

To salute the first sailing on Oct. 16, the Police and Firemen's Band will play festive music to welcome passengers aboard ship at 4 p.m. As the vessel departs, she will be escorted by fire boats, Coast Guard cutters and tugboats as far as the Walt Whitman bridge.

### New Terminal Company

Toledo, Ohio, December 21 (Toledo-Lucas County Port Authority):—Toledo Overseas Terminal, Inc., a new name and new organization at the Port of Toledo's overseas cargo center, will operate the port's principal dockside general cargo terminal in 1974. On December 20, the new company took possession of the stevedoring dock facilities, equipment and leasehold interests formerly held by the Oglebay Norton Company of Cleveland, Ohio.

Last September the Toledo-Lucas County Port Authority consented to the proposed transfer of operations between the two companies. Final Port Authority action was concluded on December 19 with the transfer of leases.

The New T-O-T, Inc. is a wholly-owned subsidiary of the Edward J. DeBartolo Corporation of Youngstown, Ohio, one of the nation's leading industrial development companies. It is also an affiliate of the Toledo Foreign Trade Zone Operators, Inc., TFTZO, operators of the Foreign Trade Zone No. 8, the Great Lakes primary foreign trade zone facility.



**Port of Manchester:—No. 9 Dock, with the Container Terminal at the left hand side.**

Walter T. Zeplien, vice president and general manager of the TFTZO, will direct the new TO-T, Inc. operation. Mr. Zeplien has been associated with the Toledo zone since 1961.

"We have enjoyed an excellent period of growth during our years of operation here at the Port of Toledo and are most optimistic that it will continue. Toledo has the finest general cargo accommodations on the Great Lakes and it is our goal that the new Toledo Overseas Terminal, Inc. will play a leading role in the port's future growth," said Zeplien.

The new T-O-T, Inc. will operate berthing facilities for seven vessels, two outside transit sheds totaling 160,000 square feet, railroad tracks and an outside dock storage area of 31 acres, all located at the Port Authority's 135-acre overseas cargo center. The new firm has also acquired assorted dock equipment that includes four gantry cranes with lift capacities rated up to 35 tons.

The Port Authority will continue to operate one public berth at the cargo center, and Big and Little Lucas, the port's two heavy lift cranes.

### 6th International Harbour Congress, Antwerp

Antwerp: — According to an already established tradition, the

K.V.I.V. (Royal Flemish Institution of Engineers) will sponsor the Sixth International Harbour Congress which will take place in Antwerp from the 12th to the 18th of May 1974.

As well as the previous Congresses in 1949, 1954, 1958, 1964 and 1968 this 6th Congress will be held in Antwerp. In 1968 fifty countries participated in the activities of the Congress, with representatives from 84 ports and many industries.

The Sixth Harbour Congress will deal with problems related as well to maritime as to inland ports.

Technical journeys to important port and industrial accommodations will be arranged.

The Sixth International Harbour Congress will also feature the Third International Harbour Exhibition of models, photographs, maps, diagrams, small tools, drawings, technical and economic data, etc. pertaining to ports and their activity and to harbour engineering and equipment. It will be arranged that the same building can house both the Congress and the Exhibition. All information concerning the stands and participation fees can be obtained at the Secretary's office. Information can be requested by means of the green form.

For further details, write to: Sixth International Harbour Congress Ingenieurshuis

Jan van Rijswijklaan 58  
B-2000 Antwerp  
Belgium

Refer to and Harbors, October, 1973, page 56 second column "Harbour Exhibition in Antwerp."

### OOCL Forms New Company

London, 3 December (Press Information from Orient Overseas Container Line):—In a significant move to develop its rapidly growing trade between the Far East and the whole of Europe, Orient Overseas Container Line—part of the C. Y. Tung worldwide shipping group—has formed its own subsidiary based in London.

Known as Orient Overseas Shipping Agencies (UK) Limited, the company is located at Plantation House, Fenchurch Street, and it is already in operation to handle all general agency work for the container line.

The new agency company takes over sales and customer service responsibility throughout the UK and the rest of Europe from Mundy Overseas Agencies Limited, with effect from December 1, 1973.

According to a company spokesman, "This new arrangement gives OOCL direct control and responsibility for the British and EEC markets, including agents in Spain, Portugal, Norway, Sweden, Finland and the rest of Europe." He added, "Our trade with Europe is already worth some 25 million U.S. Dollars a year in freight revenues and, ever since we introduced a direct service to the UK (using Felixstowe as the sole British port of call), we have been sailing to capacity.

Six, fast, fully-containerised OOCL ships with a total capacity of 15,000 boxes a year, operate to and from the Far East every 12 days, returning via four major European ports.

Recently Mr. C. Y. Tung purchased a one-third share of Dart Containerline and this gives the group substantial interests in a network of container and shipping services that circle the globe.

### New Direct Shipping Service from London to Mexico

London, 19th December (PLA News):—Due to load in the PLA's Tilbury Docks this coming weekend is m.v. BERLIN, a 6,500 g.r.t. conventional general cargo ship of Deutsche Seereederei Rostock, agents Cory Bros. Shipping.

The ship will inaugurate a new service of regular direct sailings from London to Mexico.

After loading at Nos: 36/38 sheds Tilbury the m.v. BERLIN will leave for Bermuda, Nassau, Vera Cruz and Tampico on the first of regular monthly sailings by the Line.

Cargo bookings for this first sailing are described as "extremely encouraging."

### Speakers at Thurrock

London, 26th November (PLA News):—Mr. N. N. B. Ordman, PLA Assistant Director-General, and Mr. John Black, PLA Director of Maplin, were two of the speakers in the one-day conference organized by the Thurrock Technical College and held today (Monday November 26th) at Thurrock's Thameside Theatre.

Within the conference theme "The Port Worker—his future" Mr. Ordman said: "The Maplin seaport project must be seen as an integral part of the planned, gradual move of the port down river. At Maplin there is a broad expanse of sheltered water with natural deep channels, freedom from congestion and the potential for ample back-up land. Here we can provide port facilities of a standard unequalled in the South East and the South of England and which will present a powerful challenge to our Continental competitors.

There is only one way for a port to ensure its continued well-being and that of its workers; that is to provide the facilities and services required by its customers. This is the concern of everyone who gets his living in the Port—yours and mine. Part of my job is to try to anticipate future needs and I am convinced that by developing Maplin as an integral part of the whole

port we have an unrivalled potential for meeting our customers' most exacting needs for the foreseeable future."

Mr. Ordman was recently appointed to membership of the Maplin Development Authority.

### PLA Charges

London, 29th November (PLA News):—At a meeting of the Port Users' Consultative Committee today the P.L.A. announced charges proposals and improved working arrangements to take effect at the beginning of 1974.

The charges proposals which are within the Price Code for Stage 3 effectively increase gross revenue by only 9.8%, still leaving total P.L.A. charges representing less than 1% of the value of the Port's trade.

The opportunity is being taken to simplify further the Import Charges Schedule by reducing the number of rates from the present 200 to 16.

P.L.A. are also taking positive steps to alleviate the effects of port surcharges. To this end the Temporary Shift Working Charge on ships loading exports is being reduced by 20% as a first step towards its eventual abolition. It is expected that shipowners will also benefit from revised arrangements for the handling of overquay import cargo.

Again charges for through palletised cargoes receive favourable treatment.

P.L.A. are informing their customers of full details of the proposals in the usual way. (The proposals are summarized below).

From 1st January 1974, Conservancy Charges, Dock Charges, and Port Rates on goods (other than coal and coastwise oil traffic). Import and Export Charges, Charges for the hire and use of Quay and Floating Cranes, Towage and ship discharging to be increased by 15%. Charges for grain handled at the Tilbury Grain Terminal to be increased by 10%. Goods on pallets, in skid packs or unit loads: Export discount increased to £2.45 per tonne and Import discount increased to £3.20 per tonne.

Also, from 1st February 1974, Temporary Shift Working Charge to be reduced by 20%.



Subject to the approval of the Price Commission it is proposed to increase Port Rates on coal and coastwise oil traffics by 15% with effect from 1st January 1974 or as soon thereafter as is approved.

### **"Don't Put Clock Back"**

London, 27th November (PLA News):—Speaking at the British Transport Staff College at Working last night, the PLA Director-General, John Lunch, said that the need to work within Government legislation on pay was essential even though it placed heavy demands upon individuals.

In the Port of London great progress had been made in recent years by improving the service to port users with two and three shift working and by eliminating stoppages and disputes over piecework by the introduction of a regular and steady wage. These service improvements had contributed much to the recent commercial success of the Port of London. He felt that farseeing men at all levels in the Port of London would want to keep, and build upon, the gains they had made—and do nothing to put the clock back. It is only by providing the first class service that the customers want that real job security can be maintained for all who work in the port.

### **Maplin Was Eyed Long Since**

London, 27th November (PLA News): — John Lunch, Director-General of the PLA said last night:

"PLA cargo berths on Maplin Sands would cost the same as elsewhere, like for like. They could be better and deeper than anywhere else on the South or East Coasts. Deep, safe channel already there."

"The extension of London docks downriver to the Thames Estuary at Maplin Sands is part of a plan on which PLA have been working for 10 years to meet the needs of London's trade. That's why we extended our port limits in 1964. We need constantly to keep ahead of the Continental competition."

"British ports must be able to cope with Britain's trade—we must not become dependent upon our Continental competitors.

Folly of this clearly shown in current fuel crisis."

"Currently no alternative to Southampton in the south east for the largest container ships. Makes transport vulnerable — too many eggs in one basket."

Mr. Lunch was speaking at the British Transport Staff College, at Working in the top management series of lectures—"Personal Viewpoint."

Mr. Lunch said that it was unfortunate that the controversy surrounding the total Maplin development had tended to overshadow the commercial attractiveness and fundamental good sense of extending London docks downriver into the Thames Estuary.

What was not generally realised, said Mr. Lunch, was the modesty of the proposed initial investment in general cargo facilities at Maplin—some £17 m. to provide about two deep sea and three short sea berths. These berths would be served by a good safe existing deep channel and could handle the largest container-ship at all states of the tide, 24 hours a day.

Dependence upon Continental ports must be a mistake, making Britain vulnerable and placing British imports and exporters at a disadvantage said Mr. Lunch.

On the Channel Tunnel, Mr. Lunch said that PLA had been studying the potential effect of a tunnel since 1961. Some 60% of London's trade was deep sea and of the balance a large proportion was not Channel Tunnel zone traffic. So the effect of the Tunnel on the Port of London's general cargo trade was estimated at only some 2%. And the normal expansion in London's trade should well outstrip any traffic lost through the Tunnel.

### **Two More Executive Members**

London, 19 December (B.T.D.B.): —The appointment of Mr. John Collier-Wright, CBE, deputy managing director, and Mr. Alan Tomsett, financial controller, of the British Transport Docks Board as full-time members of the Docks Board for terms of five years from 1st January 1974, was announced today (Wednesday 19 December) by

the Minister for Transport Industries.

These new appointments by the Minister strengthen the Board by bringing up to four the number of executive members—Mr. Collier-Wright and Mr. Tomsett joining Mr. Stanley Johnson, CBE, managing director, who has been a member of the Board since January 1966, and Mr. Donald Stringer, port director, Southampton, who was appointed to the Board from June 1969.

The Minister has also announced the re-appointment of Mr. Raymond Cory as vice-chairman and member of the Docks Board for a three-year term from 1st January.

The Docks Board, under the chairmanship of Sir Humphrey Browne, CBE, now consists of nine members.

**Mr. John H. Collier-Wright, CBE, MA, FCIT**

Mr. Collier-Wright was appointed deputy managing director of the Docks Board on 1st July 1972. Previously he had been assistant managing director for nearly two years, after holding the post of chief commercial manager since he joined the Docks Board in June 1964.

Mr. Collier-Wright has spent his entire working life in the transport industry and began his career as a traffic apprentice with the London & North Eastern Railway in 1936. He spent the war years with the Royal Engineers in France and the Middle East, rising to the rank of Lieutenant-Colonel. After the war Mr. Collier-Wright joined the East African Railways and Harbours, with whom he served until 1964, becoming chief commercial superintendent. He is a member of the Economic Development Committee for the Movement of Exports; a director of British Transport Advertising Ltd; and a member of the Docks Board's Humber and Southampton Local Boards.

**Mr. Alan J. Tomsett, B Com, FCA, FCIT**

Mr. Tomsett, who is a chartered accountant, was appointed deputy chief accountant shortly after the Docks Board was set up in 1963, be-

coming chief accountant in 1964 and financial controller in 1970. He completed his training with a London firm of chartered accountants after serving with the Royal Air Force during the war (Middle East 1942-1945) and was for several years with an industrial holding company before joining the British Transport Docks Board.

#### Mr. Raymond Cory

Mr. Cory was first appointed a member of the Docks Board from 1st January 1966 and vice-chairman of the Board on 15th September 1969. He is also chairman of the family shipping business of John Cory & Sons Ltd, chairman of a number of associated companies connected with shipping, and a director of a number of shipowning and industrial companies.

#### Goole Traffic Up

London, 7 December (B.T.D.B.):—Figures issued today (Monday 10 December) by the British Transport Docks Board for the port of Goole show that cargo passing through the West Riding port during the first eleven months of the year totalled 1,453,569 tonnes and is already 100,000 tonnes higher than the total for the whole of last year.

A breakdown of the figures shows that a record has already been set in one category of Goole's trade and that at least two others are likely to be established by the year end.

Export general cargo (that is, excluding coal and coke shipments) has reached its highest ever tonnage for the port, at 287,938 tonnes, and will comfortably exceed 300,000 tonnes by the end of the year. Included in this are exports of iron and steel which have passed the 100,000-tonne mark.

Imports over the 11 month period have totalled 631,686 tonnes, and port officials are hopeful that last year's record import total of 683,947 tonnes will be surpassed. Increases have been achieved in the tonnage of paper, iron and steel, machinery, vehicles, miscellaneous cargo, and timber.

Imports of timber are already at their second highest tonnage on record and could foreseeably improve

on the 1968 record timber import of 111,535 tonnes.

Shipments of coal and coke to date have exceeded half a million tonnes and are 150,000 tonnes up on last year.

#### 'DOCKS' November Issue

London, 7 November (B.T.D.B.):—An interview with Mr. John Meyer, CBE, chairman of Montague L. Meyer Ltd., one of Britain's biggest timber importers, appears in the November issue of 'Docks', the employee magazine of the British Transport Docks Board.

Mr. Meyer's views on a number of topics include:

#### The timber industry

Wood will be used in various forms on an increasing scale. He is not at all concerned about the long term future of the timber trade (p4 col 2).

The timber industry is not appreciated in the City as much as it ought to be (p4 col 3).

#### The building industry

Window-frames made of timber encased in vinyl are totally weatherproof, and last for 25 years without any maintenance (p3 col 3).

Houses with factory-made wooden frames would speed up the housebuying programme (p4 col 1).

#### Timber ships

Timber ships though already the optimum size as far as the majority of British ports are concerned are going to get larger still (p2 col 2).

#### Ports

Newport and Cardiff have the greatest potential of the Docks Board's ports for timber, but Hull could come back in importance (p3 col 1).

He hopes to put 450,000 tonnes or more of timber through Newport next year (p4 col 3).

Extensive developments soon are planned for the timber terminals at both Newport and Hull (p4 col 3).

He has a great affection for

Garston (p3 col 2).

#### The Docks Board

The service provided by the Docks board is good and frequently underestimated (p4 col 2).

#### Set for Record Year

London, 29 November (B.T.D.B.):—Total traffic dealt with by the 20 ports operated by the British Transport Docks Board has risen by over six million tonnes to 74,929,000 tonnes in the first ten months of the year, indicating that in 1973 the Docks Board's annual tonnage may well reach 90 million tonnes for the first time ever.

The previous highest tonnage dealt with by the Docks Board's ports in a year was 87,538,000 tonnes achieved in 1970; the total last year was 83,606,000 tonnes, compared with 80,694,000 tonnes in 1971.

A Docks Board spokesman in London said today that a record would almost certainly be set this year, although current difficulties over fuel supplies might have an adverse effect on trade through the ports.

Individual results for the Board's main port groups in the first ten months were as follows: the Humber ports up by over five million tonnes to 27.3 million tonnes; Southampton up by nearly a million tonnes to 26.6 million tonnes; the South Wales ports about the same at 17.6 million tonnes (despite a one million tonne decline in coal imports); and the Board's small ports showing a slight increase at 3.3 million tonnes.

#### Activity in Port of Lisbon in the Year 1972

Lisbon (Boletim do Porto de Lisboa, Jan/Feb/Mar 1973, Summary in English):—1—Incoming shipping. In 1972, 8,384 ships, 3,622 of which being Portuguese and 4,762 of foreign flags, with a total of 42,247,374 g.r.t., came to the port of Lisbon.

This means a decrease of 493 vessels in relation to previous year. However, there was a growth of nearly 3 million g.r.t. as regards 1971.

## 2—Commodities.

Last year, 10,887,463 m.t. of commodities were handled in the port of Lisbon. This amount represents 2,681,683 m.t. of loaded cargo plus 8,205,780 m.t. of unloaded cargo.

The increase of sea-cargo concerning 1971 was of 9.8 per cent.

The general cargo represents about 37 per cent of the total of handled commodities, the bulks being of 63 per cent.

In 1972, 29,435 containers (of 20' or over) with 290,198 m.t. of commodities were handled in the port, against 22,199 unities with 180,258 m.t. which were moved through in previous year.

## 3—Sea passengers.

The amount of these passengers in 1972 was of 331,745. Thus, an outstanding decrease was registered in relation to this traffic in 1971 (381,341 passengers), which resulted in favour of commercial air navigation.

## 4—River traffic.

The total of passengers who have crossed the Tagus estuary by boat in 1972 was of 27,856,567 against 28,701,837 in previous year.

In which concerns vehicle river traffic, 630,521 unities were registered last year, against 779,248, which crossed the estuary, by means of ferry-boat, in 1971.

## 5—Investment and finance.

The investment which Administração-Geral do Porto de Lisboa (AGPL) have effected under the development plans in the period 1959–1972 reached nearly 717,000,000 escudos. Among the financing sources, it is outstanding that one which corresponds to the autofinancing, by means of the AGPL Improvement Fund, in the amount of 428,192,000 escudos; the loans are considered as the second source of financing.

In that period of 14 years, the contribution of the State General Budget was only of 56,114,000 escudos (7.8%). No repayable subsidies of 36,000,000 escudos were received from the Supplying Fund, which were purposed to the fishing port facilities at Pedrouços.

# Port of Barcelona Today

Puerto de Barcelona Boletín Informativo, March–April and May–June 1973 issues:—The Port of Barcelona reaches the half-way point of its first millennium at a time that shall pass into the History of Transportation as one of change in thought and method in this particular field of human activity.

During the past five centuries our Port acquired its actual form due to the efforts of many generations, in their fight against the Elements.

The pattern of our installations and the functional structure of the port were molded to fixed determined circumstances by the structure of transport that it had to serve and all through this evolution and progress it arrives to present times, in which a very rapid growth of necessities, with a substantial modification in transport organization, presents the need, on one hand, of adapting the installations and organization to To-day and on the other hand, of predicting the future evolution of the surroundings together of course with the new direction in which we must orientate ourselves.

Certainly the overall aspect of a port depends to a great extent on the size and type of ships and the maritime transport organization, but no less so, it depends on the structure etc. of land transport. Thus the siting of large ports is still determined by the location of rivers and canals, the only means of large scale transport before the entry of the Railway, which in turn having imposed itself on long-distance haulage, brought about new ports, sited and organized as rail terminals.

Today, the planning and organization of a modern port is more and more intensively complicated with problems of entry of the marine traffic, problems of connection with land transport and the networks and

tie-up of fast motor-ways and Rail, all important in the progress and functioning of a port.

On the other hand, the progressive increase in cargo unit size; the anfora, the drum, the pallet and now the container, effects in a basic way the concept of transport. Now, a new concept of aspect of unification in carrying from point of origin to destination for large units or at least from point of packing to un-packing, has created the figure of the new style transporter, replacing the traditional ship owner and land carrier.

It is also evident that the giantism in naval construction allows very reduced transport costs for primary materials, previously unexploitable and that these materials can now be incorporated into world trade and that the new industrial structure, on the basis of specialization in determined fields gives place to very intense traffic, beginning with the bulk materials and ending with, at the end of a voyage, its transformation in or near a port region.

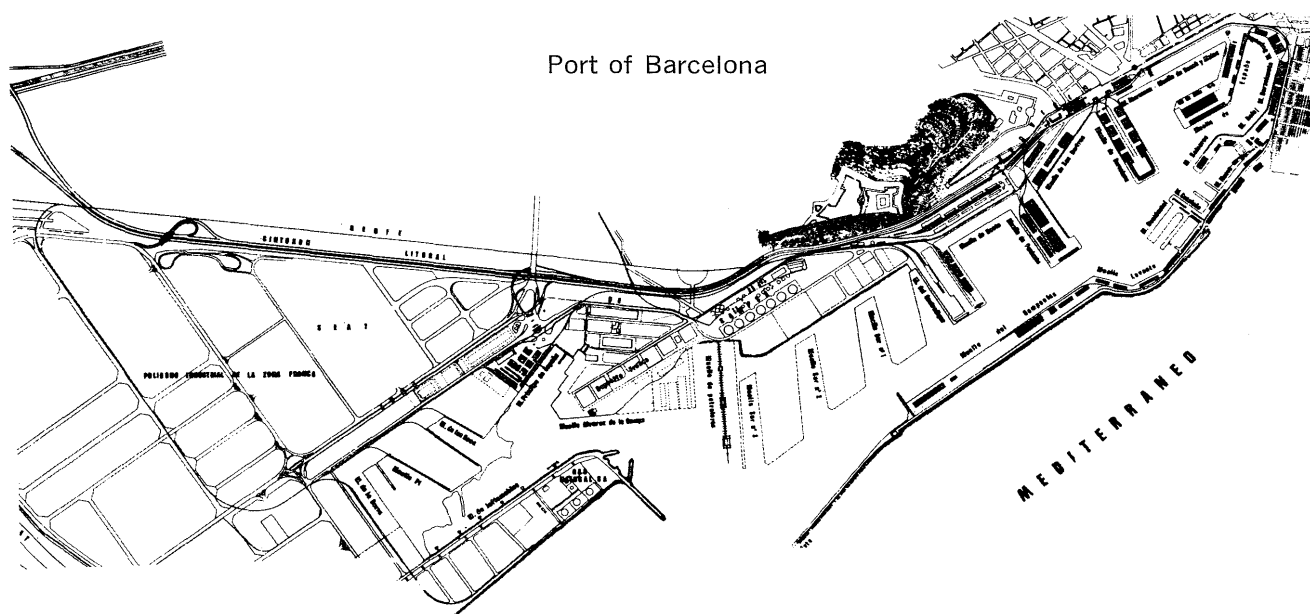
All this of course obliges a conception and development of modern ports on a basis of great amplitude in installations and to have near the installations sufficient areas for the transformation of the primary materials transported on a massive scale.

These general principles have effected, effect and will continue to effect the Port of Barcelona and thus simple look at our General Plan will show the difference between the relative size of the wharfs and basins in the old part of the port to those new extensions in construction or planned.

The progress of the port toward the South permits us to establish a connection with the system of land communications south of Mount Montjuic, freeing us and the city from the very heavy traffic of vehicles that the port carries.

It remains in our hands a more apt planning for the future and given this, we have to consider if the port activity, in not so many years hence,

The availability of the AGPL Improvement Fund is at present very low because of its intensive participation in the development plans.



ought to be thought of as being enclosed inside the limited confines of its service zones. To-day, the transport needs, referred to before, do not allow this isolation but the reverse: the development of the installations in conjunction with the urban and industrial ordinances over a wide part of the surroundings.

Consequently, we hope that in the immediate future of our port, there exist a close understanding between the economic, industrial, programation and development authorities in our area, that the progress and existence of the port be tied by a bilateral relationship with regional planning. Certainly, what the port of Barcelona could be, what it could represent not only in the national economy, but also of Europe, shall depend on the dexterity shown in its planning and development from this moment on.

### CONFERENCE

The Committee of Maritime Law of Barcelona has organized its XIV course whose inaugural session took place on the 7th May in the Conference Hall of the Consulate of the Sea. In this inaugural session the Chairman of the Board of the Port of Barcelona, Don Ramón Guardans, gave an important conference about the topic "On the concept of port autonomy".

### EXECUTIVE COMMITTEE OF THE PORT AUTHORITY

During the session held on the 28th March, the following point, among others, were discussed:

Technical approval of the General Port Directory of the "Complementary Work on the Combined Transport Terminal" project, with a contracted budget of Ptas. 32,399,524.50; Final approval of the settlement of work on the following projects: "Partial paving of the Coast wharf", "Paving of the Barceloneta wharf", "Paving of the Barcelona wharf", "Lighting of the Western wharf" and "Extension of the Maritime Station on the Barceloneta wharf"; approval of the provisional reception of the work involved in the following projects: "Transit sheds on the wharf backing onto the sea-wall", "Overall repair on the second section of the floating dock" and a twenty-one month extension for the completion of work on "Eastern Dock Completion".

### MARITIME '74

Gothenburg, Sweden:—On May 14-18, 1974 Gothenburg will become a meeting-place for the Swedish, Nordic and International shipping world. Between these dates, two important international conferences will be held, namely the Annual Maritime Conference, and the

Shipping Fair which will be opened in the Swedish Fair Building and Congress Centre in Gothenburg. A number of other congresses and conferences are also scheduled. Maritime 74 is unique in offering simultaneous contacts with ship-owners, shipbuilders and transporters.

Sweden is the world's number two shipbuilding nation and by far the majority of this industry is centred around Gothenburg and along Sweden's west coast together with a great deal of the shipping business.

Furthermore, Gothenburg is Scandinavia's biggest and busiest port—seldom is a city so qualified to invite the world to international shipping conferences and exhibitions.

Send your preliminary booking now and underline Maritime 74 in your itinerary as one of the most important activities of 1974.

The halls are modern and well equipped in order to facilitate the construction of stands and stand installations.

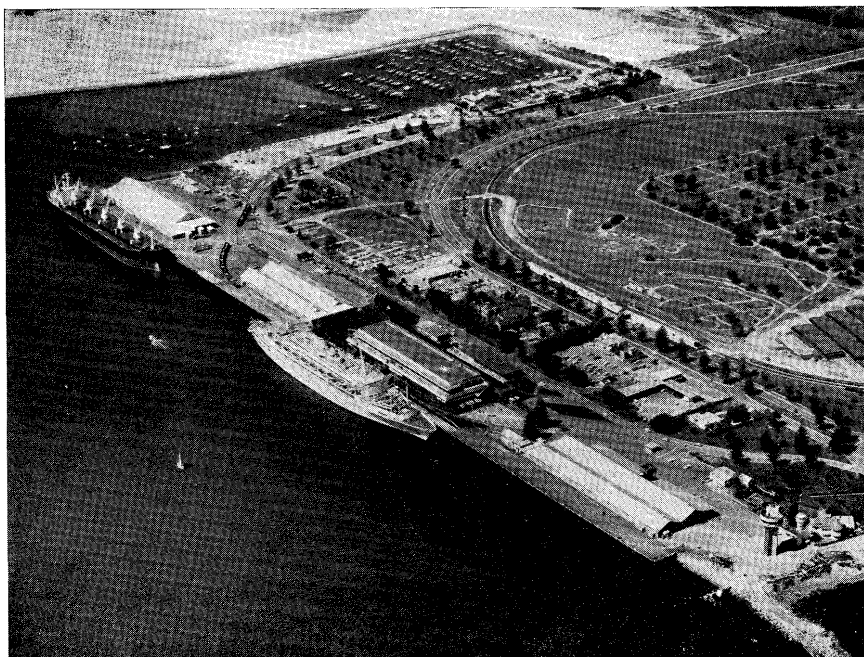
The Fair assists the exhibitors as to technical details and puts them in touch with stand builders/decorators—it is possible to move into a stand set up in advance.

For further details, write to: Svenska Mässan Foundation, Skånegatan 26, S-41251 Gothenburg, Sweden.

## New Passenger Terminal at Port Adelaide

(See photo.)

- Comprising the upper floor of a new cargo shed at Berth No. 2 at the Outer Harbor of Port Adelaide.
- The cargo shed is 115 metres long and 30 metres wide.
- The passenger terminal hall is 104m × 21m and has an observation deck around its 4 sides, 5.5m wide on wharf side and ends.
- The terminal is reached from ground level foyer by escalators, lift and stairs. Two sets of outside stairs give access to the observation deck when the terminal building is closed.
- The waiting hall occupies 60% of the upper floor (60m × 21m) and the customs hall has the remaining portion.
- The waiting hall is equipped with modern toilets, ladies lounge, baby feeding facilities, chairs, tables etc. Its floor is covered in a tough long-wearing carpet to minimize noise and acoustic troubles.
- Services consist of a servery for snacks, drinks, sweets etc. at one end and island booths for postal services, tourist bureau/immigration enquiries and baggage agents. The servery can be closed off from the hall by a movable partition and be open for business when the terminal is closed.
- A V.I.P. lounge at the side of the waiting hall is available for interviews, small group functions etc. It is well-furnished and will be air-conditioned if found necessary.
- The customs hall (44m × 21m) is ample in size and well equipped for a rapid throughput of passengers and baggage. Modern inspection and examination facilities, offices and toilets are located within the customs area. The floor is carpeted throughout.
- Cabin baggage will be taken into the Customs Hall for inspection but hold baggage will be held in part of the cargo shed at wharf level, examined and delivered after completion of work on the



**Adelaide, South Australia:—New Passenger Terminal at Outer Harbor, Port Adelaide. "Galileo Galilei" at berth on 21/10/73.**

- cabin baggage.
- Passengers and visitors go directly between ship and terminal by way of two overhead gangways. The public will not be permitted at wharf level while ship is in port.
- The ground level entrance is served by well set out roadways, taxi and bus stands and several nearby public car parks. The entrance foyer is dominated by a large mural on two walls, the mural being specially commissioned from an Adelaide artist.
- The ground floor accommodates, besides cargo and baggage, Departmental local control offices and the general H.M. Customs offices, mess and toilets. It also has the normal elevated offices for the supervision of cargo operations within the building.
- The building is steel-framed and concrete decked, enclosed by brick walling on the ground floor, plastic covered asbestos sheeting on the upper floor and roofed with corrugated aluminium, all to minimize maintenance in the marine environment. The walls of the waiting and customs halls facing seawards are all glass (heat resisting type) providing excellent views of ship and surroundings. The terminal is not air-conditioned but relies on through drafts

and insulation to moderate conditions on hot days.

- The wharf (recently modernized), swinging basin and approach channel are suitable for the largest passenger liners calling at Australian ports.

## Capital Works Programme

Melbourne, Australia (Melbourne Harbor Trust, Port Gazette, September, 1973): — Approximately \$8.2 million is to be spent on capital works in the Port of Melbourne in the 1973/74 financial year.

The Commissioners of the Melbourne Harbor Trust, aware of the constant need of improving and increasing the efficiency of the port, approved the expenditure for this year's works programme at a recent board meeting.

The revolutionary changes which have occurred in the shipping industry in the post war years both in cargo handling methods and ship design have to date involved the Trust in capital expenditure in excess of \$70 million.

The Trust in the last 10 years has pursued a carefully evaluated programme of graduated expenditure, averaging out at approximately \$6.5 million annually in capital works, directed to a great variety of projects designed to offer the highest





**Port of Fremantle Authority:—In June 1973 the causeway linking Garden Island with the mainland was completed. The completion of the causeway in the Port of Fremantle Outer Harbour will enable the further construction of a Naval Support facility on Garden Island. The siting of the causeway is complementary to the Port Authority's plans for the development of commercial berths in the outer harbour.**

service to its users.

A perusal of the money allocations authorized in the preceding three years show that capital works for 1969/70 amounted to \$6.1 million; 1970/71 \$7.3 million; and 1972/73 it was \$5.1 million.

In the allocations for this year's programme of capital works more than \$5 million dollars will be spent in reclamation, construction of new wharves and sheds, dredging and road works.

Reclamation will account for \$1 million dollars, wharves and sheds \$2.3 million and dredging \$2 million.

The principal areas of the port on which most of the moneys earmarked for reclamation are to be spent are in the Swanson/Appleton and Webb Dock areas.

Both these sections of the Port play a vital part in the door-to-door concept of today's seaborne traffic, because they are the areas which form the link between the three principal transport mediums—road, rail and sea. Today's modern port must be able to provide areas of land to allow the construction of specialized berths, ancillary equip-

ment and facilities which are necessary to make the concept a success.

The greater proportion of moneys allocated to road works will be spent in the Appleton and Webb Dock areas. These two sectors of the port are handling in excess of 6 million tons of cargo a year and development of roads in these areas are aimed at moving cargoes by road transport to and from these sectors as rapidly as possible.

In the sector of wharves and sheds most of the \$1.5 million is being spent on extensions to No. 21 South Wharf for B.H.P.'s two new roll-on roll-off ships, improvements to No. 1 Maribyrnong and construction of No. 4 Webb Dock, a new specialized berth for Australian National Lines second generation roll-on roll-off ships.

Of the \$2 million dollars allocated to dredging more than \$1.1 million will be spent in the work associated with the construction of a fourth berth at Webb Dock. The balance of the dredging allocation will be used in general works associated with the Trust's constant programme of widening and deepening the

River Yarra with special work being carried out in the Swanson Dock area.

## Operation Beautify

Melbourne, Australia (Melbourne Harbor Trust, Port Gazette, September, 1973):—The Commissioners of the Melbourne Harbor Trust have embarked on a programme aimed at beautifying the Port. Conscious of the need to break the monotony of the all too familiar day to day port scene of cranes, ship's derricks, miles of concrete wharves and asphalted roadways, the Commissioners through the Civil Engineer Maintenance Section of the Trust, have created pockets of green in a number of areas of the port and plan to extend these "green belt" sections further.

Established "green belt" areas are at Appleton Dock corner (5,300 sq. metres), Holden Dock (5,500 sq. metres), the back of 23 Victoria Dock (13,400 sq. metres) and behind 33 South Wharf (1,200 sq. metres). In addition to these areas, grass plantations have also been laid at the entrance to Webb Dock, the entrance to Victoria Dock and the entire area around and within the Trust's new Workshops in Dudley Street, which also carries 150 native Australian and New Zealand trees and shrubs.

Some of the trees and shrubs that have been planted in the Port area are Red flowering gum, mahogany gum, spotted gum, bushy yate, yellow gum or white ironbark, pink flowering yellow gum, mauna gum, sallow wattle, willow myrtle, sweet scented Hakea, Monterey cypress, New Zealand Christmas bush, rusty myrtle and smooth-barked apple.

The role the Trust has played in the battle against pollution of its waters is well known. In addition to initiating prosecutions for pollution offences the Trust annually spends approximately \$20,000 in cleaning flotsam and jetsam which finds its way into the Port area.

The Commissioners sought the advice of the Natural Resources League of Victoria before designing the landscaping for the new \$800,000 incinerator located in Port Melbourne.

Taking operation beautify a step further the Commissioners have authorised the purchase of an industrial tractor with a number of attachments which will clean the beaches and also mow the grass areas in the Port.

Quotations have been called for one rubber-tyred industrial tractor, 40-60 b.h.p., petrol-engine, standard clutch, rear P.T.O. and three point linkage, 5/8 to 1 cubic yard front-end loader bucket, driver's cabin, counterweight, lighting to registration requirements.

A beach cleaning machine linkage, (suitable for rear mounting on the above tractor), a width of cut of 48 in and a depth of cut of 3 in. with rear refuse container and 1 in. screens will also be purchased together with a fully guarded mower attachment.

The beach cleaning attachment will be used to clean beaches from Pickles Street, Port Melbourne to West Princes Pier, which are at present cleaned by hand raking. The mower will be used to cut grassed areas of the Port which in the past have been cut by hand mowers.

### World Symposium on Marine Science

Hong Kong, December 10 (The Week in Hong Kong):—One of the largest international symposiums ever held on marine science opened at the University of Hong Kong today. A total of 63 marine science and sea pollution experts from all over the world are attending the Special Symposium on Marine Science. The five-day conference is organized by the Hong Kong Government Committee for Scientific Co-ordination and sponsored by the Pacific Science Association. Delegates from some 12 countries will present 32 papers on fisheries, oceanography, mariculture and pollution. A report on the discussions, findings and suggestions of the symposium will be published in June 1974.

### 10th Anniversary Celebrations

Kelang, Malaysia (Berita Pelabohan, Kelang Port Authority, Special Issue—10th Anniversary, 1st July 1973):—To commemorate the

Karachi, Pakistan (Karachi Port Trust, K.P.T. News Bulletin, August 1st, 1973):—The K.P.T. Administration clarified the incorrect reports which appeared in a section of the Press in regard to the

- 1) Port working.
  - 2) M.V. "MARBELLA".
- as follows:

#### I. PORT WORKING

It is true that the dock labour have not returned back to their normal rate of output but in spite of this, the total cargo handled at the Port during 1972-73 was about one million tons more than the previous year. The Dock Labour Board is handling the affairs of the dock labour and has completed the verification work which had never been done in the past. It had been previously maintained that there were only 3,500 doc-

kers but this has been proved to be wrong as the actual figure of verified dock workers is about 7,000. Due to increase in the Port traffic, even this number has been found to be insufficient on a number of occasions.

Following are the daily averages for the past three years:

Year	Total dry cargo handled	Daily average
70-71	4,959,364 tons	14,129 tons
71-72	4,916,373 tons	13,967 tons
72-73	5,891,608 tons	16,785 tons

The congestion in the Port suffered a set-back in May but since then there was a marked improvement and it was in recognition of this that the Conference Lines have reduced the Port surcharge effective 23rd July from 15% to 10%. Due to the present prolonged rainy season, the Port handling has

10th Anniversary of the Kelang Port Authority, several functions were held throughout the month of July.

The celebrations started on June 30 with a container seminar being held at the Embassy Hotel, in Port Kelang. Several papers dealing with the various aspects of containerization were presented.

This was followed by a cocktail party for members and officers of the Authority, port users and other government bodies. The function was attended by the Minister of Communications, Tan Sri Sardon.

On July 21, a tea-party was held at the Authority's Sports Club for children of the staff. This was followed by a big walk the following day.

A week later on July 29, the inter-department sports and athletic meet was held at the La Salle School field, Kelang.

South Port emerged the overall winner of the meet with 191 points. Second place went to Headquarters

(146 points) and third to Cargo Handling and Stevedoring (96 points). Engineering (95 points), North Port (92) and Security (58 points) took fourth, fifth and sixth place respectively.

T. Soosainathan from Engineering won the Sportsman of the Year award. The Best Performance of the Day award went to Looi Sai Meng from Headquarters. To Soosainathan and Sai Meng — Well done!

The anniversary celebrations wound up on the night of July 29 with a cultural show and beauty queen contest at the Dewan Hamzah, Kelang. The title of 10th Anniversary Queen went to Wan Marhaini from the Authority. With the title went a \$500 cash prize, a cosmetic set, a return air ticket to Bangkok and a trophy.

Make-up for the participants was by Max Factor.

Comperes for the night were A. Talib and A. Halim. Both of them also sang at the show.

been affected as number of commodities such as cement, rice, fertilizers are difficult to handle during this season, but inspite of this, the Port has been averaging about 12,000 tons a day. Recently, Dock Labour Board Inspectors have been appointed to resolve the day-to-day problems arising on the ships, but unfortunately their appointment coincided with the outbreak of rains and, therefore, full benefit of this measure has not been felt so far. It is, however, expected that after the rainy season the Port's output will show significant increase. The K.P.T. is also taking suitable measures to modernise and mechanise its cargo-handling equipment and a number of measures are being taken for automatic handling of bulk commodities.

The fact that the Conference Lines have reduced the surcharge by 5% after detailed study of the Port congestion by their delegation which visited Karachi last week, is a positive indication of the overall improvement in the working of the Port.

Mr. L. G. Hudson, Chairman of the Conference Lines, has also promised, as per the Notice issued by the Conference in the local papers, that the surcharge would be kept constantly under review and in case of further improvement in the Port handling, this will be progressively reduced.

## II. M. V. "MARBELLA"

The Ship "MARBELLA", Somali Flag Vessel, arrived off-port on 13th January, 1973, with 7,800 tons scrap cargo. The Ship itself was on its last voyage and on discharge of cargo, was to be broken up at Gadani Beach. After arrival at Karachi the Foreign Crew left and a scratch contract team was put on board. "MARBELLA" was brought into the Port on 6th February for replenishment of water. While she was alongside, there was a complete breakdown of the machinery and it became a dead ship. As the ship was in a difficult situation, she was given a clear berth on 10th February to discharge her cargo. While there, the ship caught fire and developed

heavy list and became unstable. The K.P.T., after tremendous efforts, managed not only to extinguish the fire, but save the ship from capsizing. As the ship was in dangerous state, she would normally have been taken out of the Port, but special consideration was shown to the ship and cargo. Operation continued inspite of there being no light or machinery working. The discharge rate was, however, pitifully low and the vessel was seriously affecting the handling of other important cargo. In view of the urgency for discharging wheat, fertilizer, etc., it was decided to shift this vessel to Repair Berth so that she could complete her repair which she was to be brought back to a normal commercial berth for expeditious discharge of the cargo. In the meanwhile the ship was placed under arrest by the High Court of Sind and has ever since been prevented from leaving the harbour. The vessel had no crew on board and even now is not fully mended to resume her normal work. A meeting was held about 10 days back by K.P.T. with the owners of the vessel at which a plan was drawn up with a view to removing her from Ship Repair berth and bringing her alongside the commercial berth for discharging balance of the cargo. Since then the ship has been supplied water and asked to raise steam. This has still not been done by the owners. An assurance was given to the owners that as soon as she is able to raise steam, he would be given berth. K.P.T. is still awaiting the final confirmation from the owners to that effect.

Had it not been for the efforts of the K.P.T. to put out the fire and to take other measures, the ship would have been a total loss and sunk. Obviously the ship being in the state that she was, could not be allowed to hamper the working of the Port and, therefore, had to be removed to a Repair Berth to get her machinery in order.

## Biggest Tug Arriving

Karachi, Pakistan, 1 December (Karachi Port Trust Press Release):

—The Tug "SHUHO MARU," purchased by K.P.T. from Japan at a cost of over Rs. 5.6 millions, is arriving in Karachi Port tomorrow (2nd December, 1973).

It would be the most powerful Tug in the Port so far, especially suitable for vessels of heavy tonnage. It will be used for shipping and general harbour duties.

M.T. "SHUHO MARU" has a bollard pull of 42.5 tons and develops 1,600 brake horse power. It is 97.58 feet in length and 28.20 feet in breadth, with a keel length of 69 feet and draft of 12.79 feet. Its net tonnage is 158.91 tons and gross tonnage 194.01 tons.

It may be mentioned that the K.P.T. has presently a shortage of tugs for shipping duties. The existing fleet comprises of only 4 shipping tugs, namely "Firdausi", "Taqqatwar", "Purjosh" and "Shehzore", each with a bollard pull of about 19 tons. There are also two other small tugs, "Tanowar" and "Zorawar", each with a bollard pull of 3.3 tons, suitable only for towing barges.

M.T. "SHUHO MARU" sailed from Moje Port, Japan, under its own power on 2nd November, 1973, reaching Karachi Port in just about a month's time.

## Reconstruction of Napier Mole Boat Wharf

Karachi, Pakistan, 29th November (Karachi Port Trust Press Release):—The K.P.T. has completed the first phase of Napier Mole Boat Wharf reconstruction for lighterage traffic at the Port of Karachi. The work is being done by the K.P.T. Engineering Department indigenously and without any foreign aid or assistance.

It may be mentioned that the N.M.B. Wharf, known as Ghas Bunder, is the oldest wharf of the Port and about 600 ft. of the Quay face has been reconstructed to cater for modern loading standards.

The completed portion of the N.M.B. Wharf will increase the cargo handling capacity from 50 to 350 tons per day. The Mobile Crane facilities can now be fully utilized.

# Leaders in International Banking Since 1880



The Bank of Tokyo, with more than 114 offices  
representatives, Affiliates and Associated institutions throughout the world,  
can offer you thorough knowledge of foreign and domestic banking matters.  
Our long experience enables us to deal with any financial or  
banking problems, including international capital transactions.



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

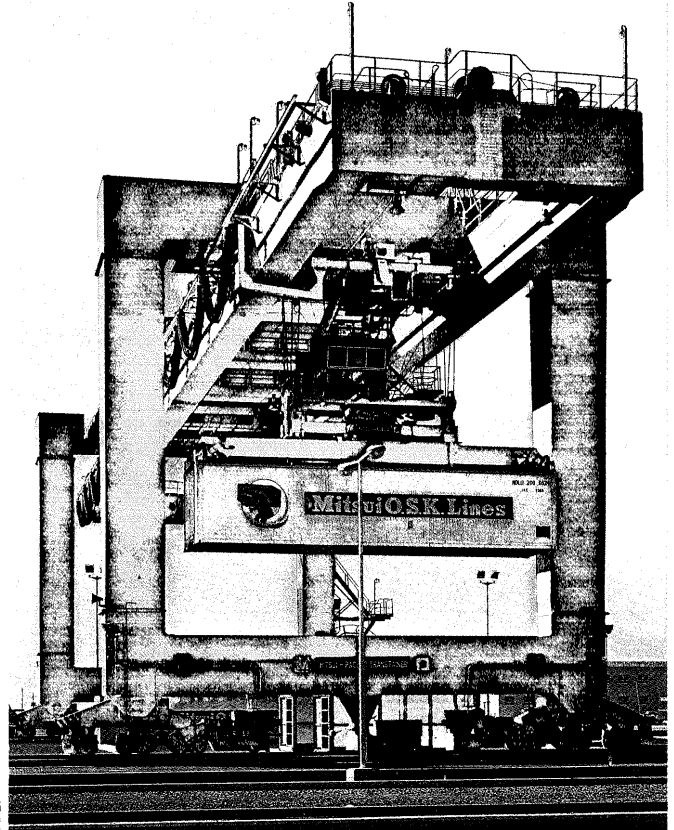
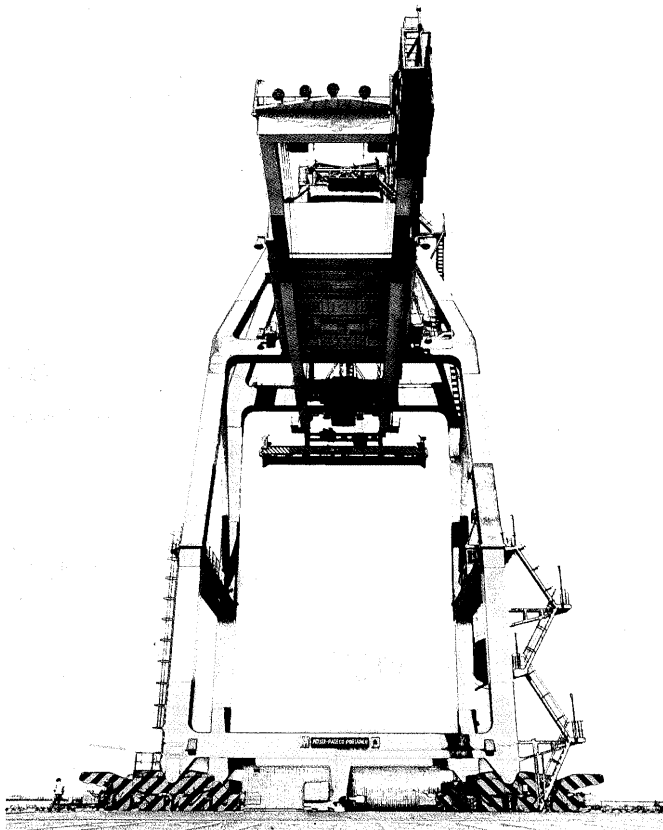


## **BANK OF TOKYO**

HEAD OFFICE: TOKYO, JAPAN

**BANK OF TOKYO GROUP:** THE BANK OF TOKYO OF CALIFORNIA, THE BANK OF TOKYO TRUST COMPANY, THE BANK OF TOKYO TRUST COMPANY (CAYMAN) LTD., THE CHICAGO-TOKYO BANK, VENTURES WEST CAPITAL LTD., INNOCAN INVESTMENTS LTD., BANCO DE TOKYO S/A, FINANCIAR-BANCO DE INVESTIMENTO S.A., FINANCIAR-CREDITO, FINANCIAMENTO E INVESTIMENTOS S.A., EMPREENDIMENTOS TOKYO, S/C LTDA. (BRASIL TOKYO HOLDING), BANK OF TOKYO (SWITZERLAND) LIMITED, THE BANK OF TOKYO (HOLLAND) N.V., BANQUE EUROPÉENNE DE TOKYO S.A., WESTERN AMERICAN BANK (EUROPE) LTD., BANK OF TOKYO HOLIDAY S.A., CURACAO TOKYO HOLDING N.V., "CENTROFIN" FINANZIERUNGS-VERMITTLUNGS-HANDELS-UND TREUHANDGESELLSCHAFT m.b.H., THE INTERNATIONAL BANK OF IRAN AND JAPAN, BANGKOK TOKYO FINANCE COMPANY LIMITED, MAGNUM FINANCE BERHAD, TOKYO FINANCE (ASIA) LTD., PARTNERSHIP PACIFIC LIMITED, BENEFICIAL FINANCE CORPORATION LIMITED.

# Push-Button Container Terminal by MITSUI-PACECO



## The Dawn of A New Generation of Portainers<sup>®</sup> and Transtainers<sup>®</sup>

Containerization is now being exploded widely, and containers must be handled quickly, safely and inexpensively.

Key to solution are high speed, reliability and automation of MITSUI-PACECO portainer, shoreside container handling crane. Mitsui is leading this field and challenging tomorrow.

Volume of containers is increased largely in the terminal, and keenly demanded are systematization, computerization and automation.

MITSUI is developing one answer and that is push button container terminal system.

MITSUI/PACECO automated and computerized Long-span Rail-mounted Transtainer and Rail-car System will materialize most efficient terminal operation, benefitting terminal operation, shipping line and all others.



**MITSUI SHIPBUILDING & ENGINEERING CO., LTD.**

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

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

### WORLD WIDE MANUFACTURING AND SERVICE OF PACECO

U.S.A. PACECO: Alameda, California PACECO INTERNATIONAL, LIMITED: London Australia: VICKERS HOSKINS PTY. LIMITED, Bassendean  
Canada: PACECO CANADA, LIMITED, Vancouver 2 France: ATELIERS ET CHANTIERS DE BRETAGNE, Nantes India: BRAITHWAITE & CO., LTD., Calcutta  
Italy: REGGIANE O.M.I., S.p.A., Reggio Emilia South Africa: DORMAN LONG (AFRICA) LIMITED, Johannesburg Spain: FRUEHAUF S.A., Madrid  
United Kingdom: VICKERS LIMITED, London