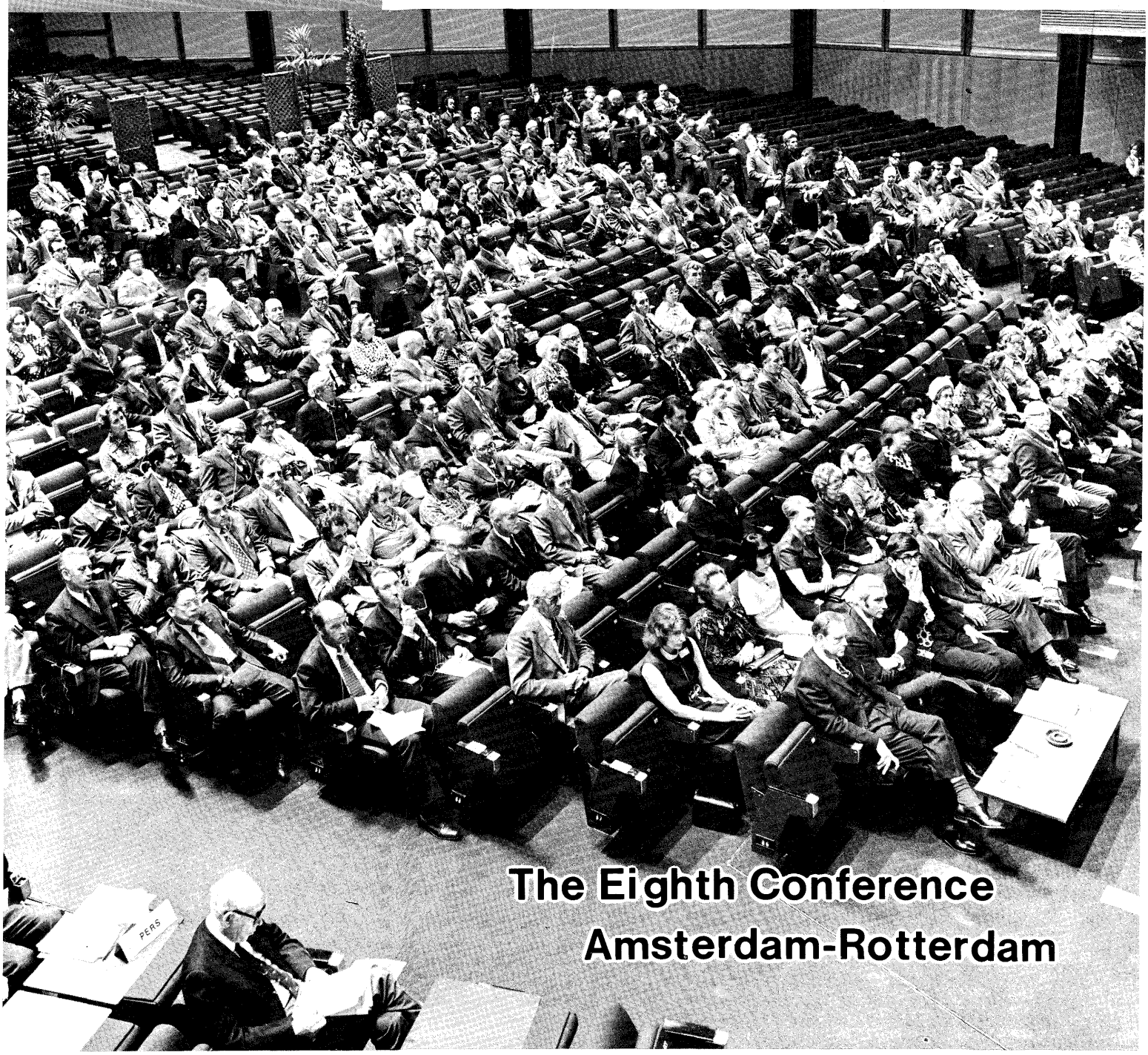
昭和44年11月15日第三種郵便物認可　昭和48年 7,8月合併号　昭和48年 7 月20日発行　第18巻第7,8号（毎月1回20日発行）

PORTS and HARBORS

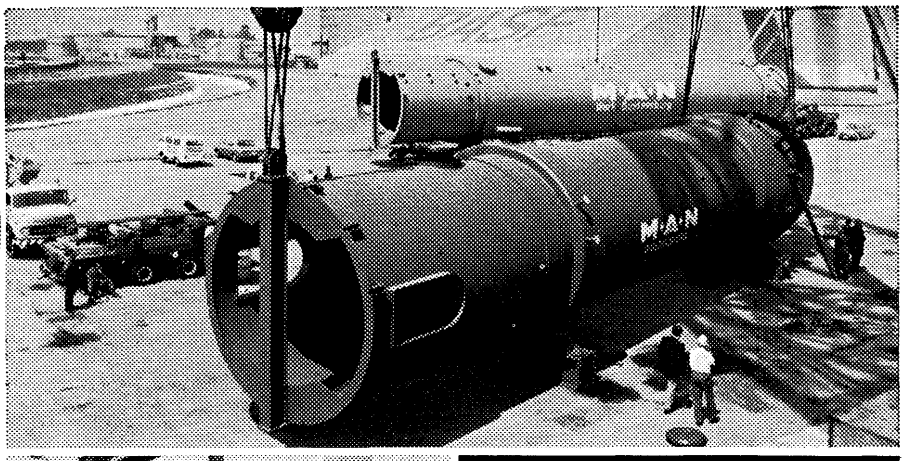
July-August, 1973 Vol.18, No.7-8

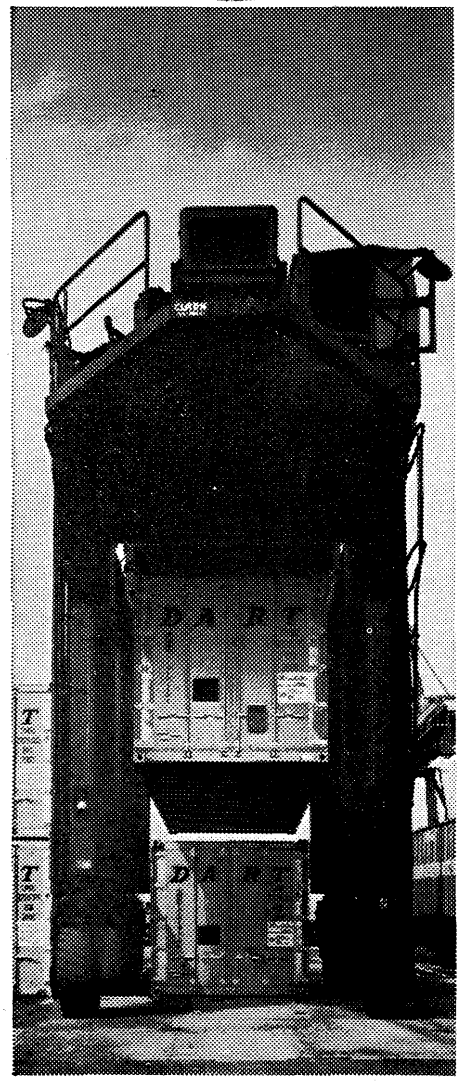


The Eighth Conference Amsterdam-Rotterdam

The Publisher: The International Association of Ports and Harbors

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





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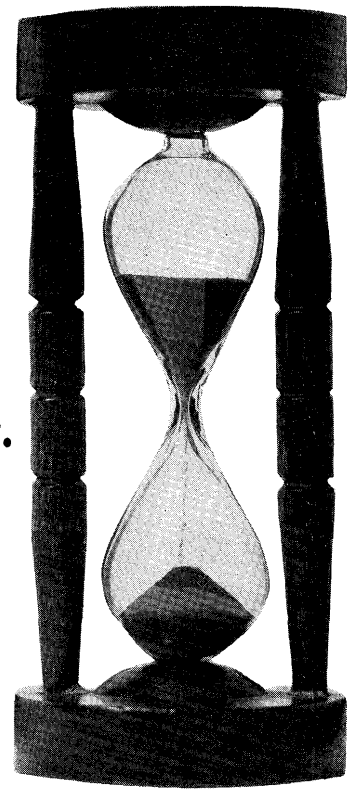

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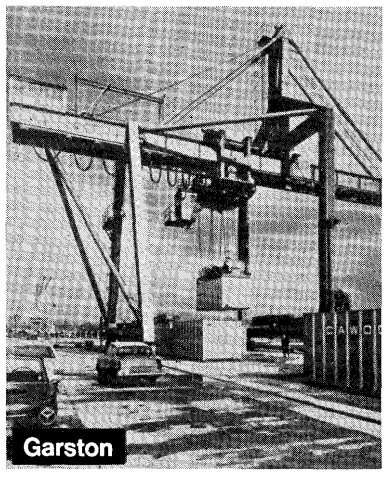
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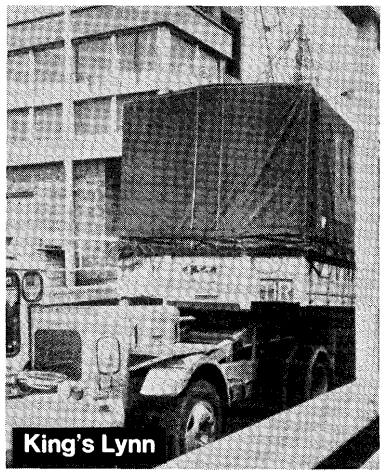
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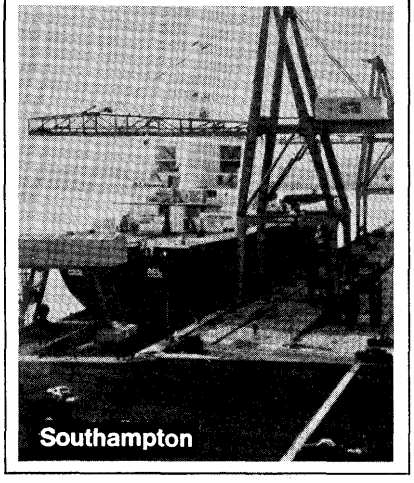
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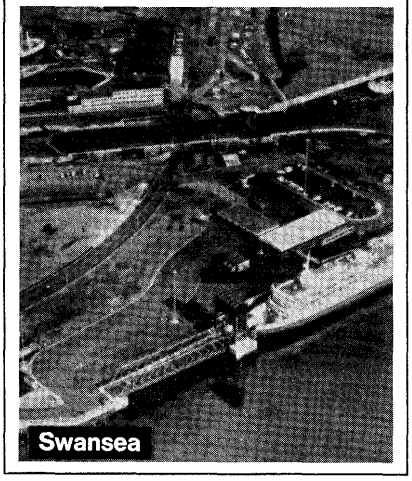
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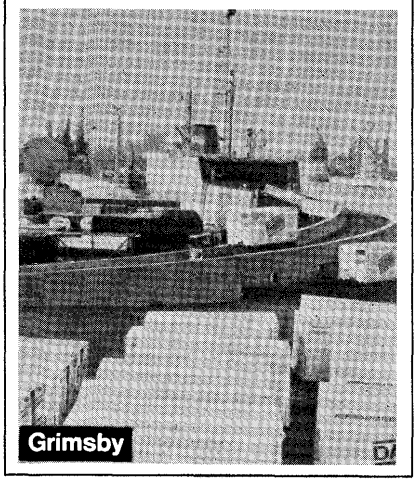
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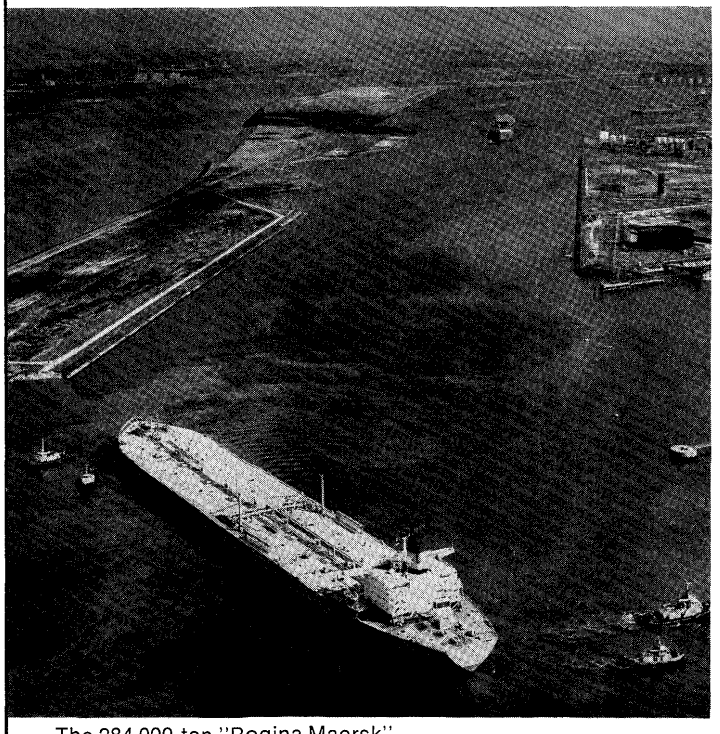
250,000-ton tankers can put into Rotterdam...

11 Adriaan Volker dredgers making new harbour basins for Rotterdam



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PORTS and HARBORS

Editor: Yoshio Hayashi

Published monthly by

The International Association of Ports and Harbors

Consultative Status, N.G.O., United Nations, IMCO

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July-August, 1973 Vol. 18, No. 7-8

CONTENTS

The Cover:

The delegates and their ladies are assembled in the Main Hall of RAI International Congress Center just prior to 15.30 hours Monday, May 7, 1973 when the Official Opening Ceremony of the Conference was due to commence. The Conference hosts and certain IAPH officers are seated in the front row, while many of their accompanying ladies are seen in the second row.

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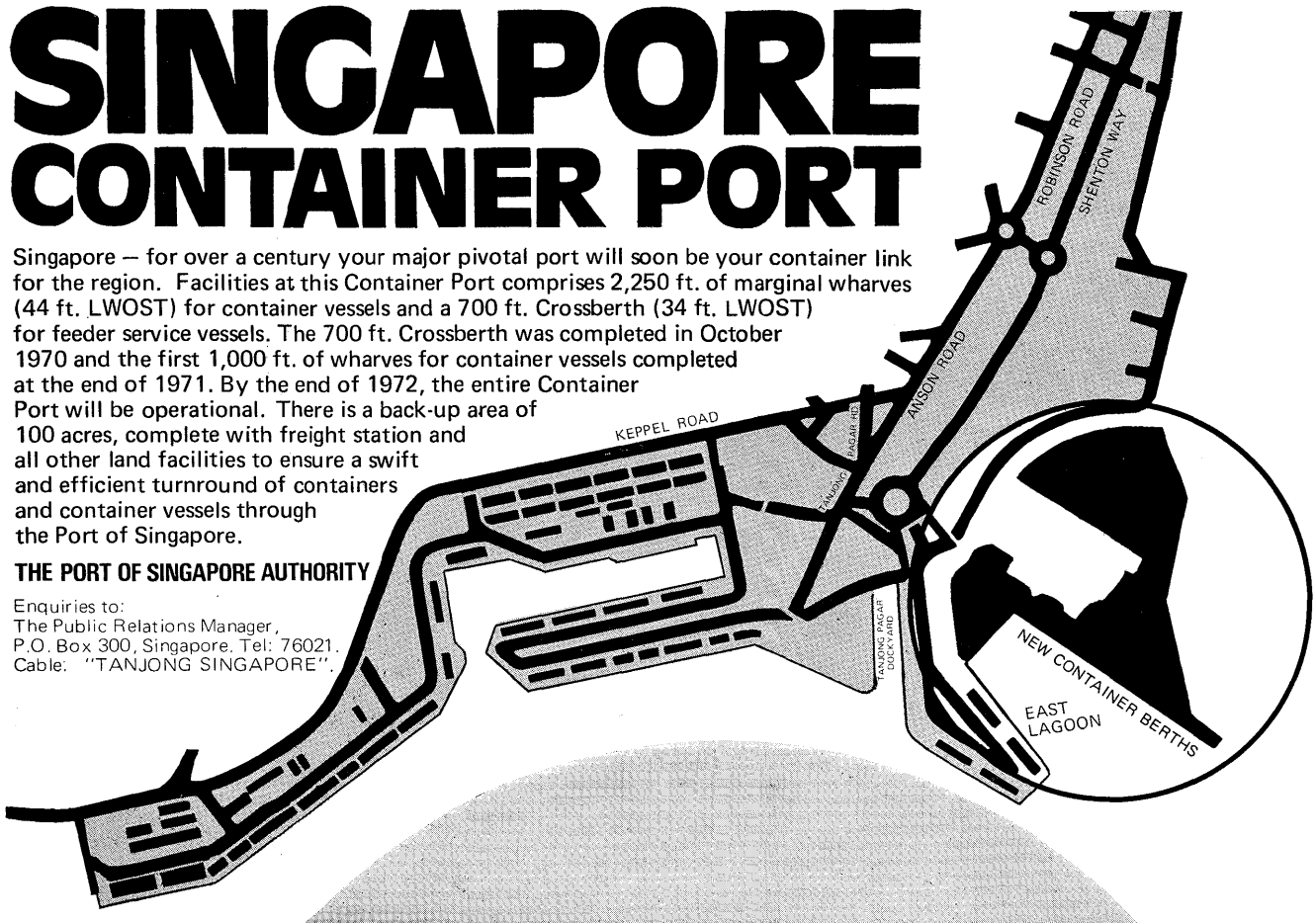

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SINGAPORE
YOUR CONTAINER LINK FOR THE REGION

PORTS and HARBORS

May 7, 1973, 15.30 hours, Official Opening Ceremony: On the rostrum, from left to right, Messrs, L. M. Vleugels, Belgium, R. K. Trimmer, New Zealand, Joseph Stanton, U.S.A., Julio Maymi Pagan, Puerto Rico, Fernando Moreira, Portugal, Peter Kabibi Kinyanjui, Tanzania, W. H. Brotherson, Australia, Howe Yoon Chong, Singapore, A. Lyle King, U.S.A., J. den Toom, The Netherlands, Toru Akiyama, Japan, Chujiro Haraguchi, Japan, Lord Simon, U.K., Stanley Johnson, U.K., J. McConnell, Australia, Ben E. Nutter U.S.A., D. E. Taylor, Canada, Gengo Tsuboi, Japan, and B. J. Udink, Dutch Minister of Transport, Water and Public Works (at the speaker's stand).

The Eighth Conference of our Association was scheduled for the week of May 6–12, 1973 at the RAI International Congress Center in Amsterdam, hosted by the Port Managements of the Cities of Amsterdam and Rotterdam.

All the delegates and ladies were assembled in the Main Hall for the Official Opening Ceremony to begin at 15.30 hours on Monday, May 7, 1973.

Ir. J. den Toom, Conference Chairman (Managing Director, Port of Amsterdam) took the chair at the appointed time. He pointed out that it was the first time an IAPH Conference was held on the continent of Europe, and expressed welcome to all present.

The first of the guest speakers introduced was Mr. B. J. Udink, Minister of Transport, Water Control and Public Works (See page 8). His address was followed by that of Dr. I. Samkalden, Mayor of Amsterdam (See page 9).

The next item on the program was "Announcement of the Conference Vice-Chairmen." The five names introduced were actually chairmen of the five Working Sessions (See below.), and they were all members of the Executive Committee. This fact was particularly emphasized and appreciated by the Conference Chairman.

Then messages from friendly organizations were introduced. They were from Mr. Stanley Turner, President, International Cargo Handling Co-ordination Association, Mr. Chevalier-Annez-Taboada, Secretary General, Customs Co-operation Council, Mr. P. O. Aggrey, Presi-

Opening Address For The Eighth Conference

by Mr. B.J. Udink, Minister of Transport, Water Control and Public Works

at RAI International Congress Center
Amsterdam, The Netherlands
May 7, 1973

Mr. Chairman, Ladies and Gentlemen.

Your acceptance of the invitation extended to you by our seaports to come to this country for your biennial international congress gives me great satisfaction. People down the centuries in many walks of life in this country have been interested in everything happening in and around the seaports, for the simple reason that the country's fortunes have always been bound up with her ports. Interest has been tinged with criticism in certain circles of recent years, because people are beginning to realise that the expansion of a seaport has its disadvantages. As you are allowing me to open your congress with a few words, you might like me to tell you how the Dutch authorities tackle these problems. First of all, let me give you a few facts.

In point of area, the Netherlands is a small country but it has a population of 13 million and a population density of nearly 400 per square kilometre, so it is one of the most densely populated regions in the world. Consequently, we Dutch people have to make the most of every inch of space we have; this is one of the main reasons why we attach such vital importance to town and country planning.

Our natural resources are very limited. We do have some natural gas, as long as the supply lasts, and some oil has been found here and there. Together with a few other minerals, gas and oil certainly do contribute to our prosperity but I think one of our major assets is undeniably our favourable geographical position. Our coasts are washed by the North Sea, virtually the most crowded stretch of water in the world; we straddle the mouths of the rivers Rhine, Maas and Scheldt and we have a very extensive industrialized hinterland. Is it surprising, then, that trade and transport should have been the primordial roots from which our economy grew? Trade and transport are still the mainstays of our economy

(Continued on Page 26)

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dent, Port Management Association of West and Central Africa, Mr. Y. Nyun, Executive Secretary, United Nations Economic Commission for Asia and the Far East, and Mr. Manuel Perez-Guerrero, Secretary General of UNCTAD. (See page 12).

Mr. A. Lyle King, IAPH President, was the next speaker. His friendly address went as follows:

Address by President A. Lyle King

Mr. Chairman, Mr. Queen's Commissioner, Mr. Burgomaster, distinguished guests, ladies and gentlemen:

The members of the International Association of Ports and Harbors are happy to be in Amsterdam and Rotterdam and are looking forward to a week of pleasure and of productive business sessions.

One of the satisfactions and benefits of an international organization is the opportunity to learn more about nations and people with whom we have political and commercial ties. In the past 18 years of IAPH existence, it has been our privilege to attend conferences in such interesting and stimulating cities as London, Tokyo, Melbourne and Montreal. These colorful cities have given us knowledge and some wonderful memories. Amsterdam and Rotterdam, I am sure, will do the same.

Amsterdam, the growing port city, the city of Rembrandt, the city that originated stock exchange; Amsterdam and Rotterdam, cities whose unique engineering talent has been an example for other cities throughout the world; Rotterdam, the city that has built its commerce, its port and its industry with methodical tenaciousness ever since Count William IV of Holland gave the city its right in 1340. Since 1850, particularly, Rotterdam has accelerated its commercial development until now the Port of Rotterdam is the world's largest.

I hope that the world-wide splendid reputation of Amsterdam and Rotterdam will be even further enhanced as a result of this week's exposure to participants numbering over 500 from 57 nations of the world.

I am confident that we will enjoy this week in Amsterdam and Rotterdam and we will return home much richer for the experience.

Thank you.

Next, President King announced the names of Chairmen and members of four Conference Committees, of which the Chairmen's names only are given below: Nominating Committee—Chairman, Mr. Ben E. Nutter, U.S.A., Resolutions and Bills Committee—Chairman, Mr. J. Kerwin Rooney, U.S.A., Honorary Membership Committee — Chairman, Mr. W. H. Brotherson, Australia, Ways and Means Committee —Chairman, Mr. Bernard J. Caughlin, U.S.A.

The light dimmed in the hall until it was pitchdark. Presently a sound film "Sky Over Holland" was projected on the screen.

From 17.00 hours until 18.30 hours, Informal Get Together was held in the Lounges (upstairs) of the Main Hall where drinks were served to all.

Address By Dr. I. Samkalden

Mayor of Amsterdam

At the Opening Ceremony of the Eighth Conference May 7, 1973

Excellency
Ladies and Gentlemen,

Standing with you on the threshold of some seven days that will be busily occupied by lectures and by contacts and discussions between partners in seaport activities, I take great pleasure in welcoming you all to this city.

Amsterdam's citizens feel happy and consider it a privilege, that the International Association of Ports and Harbors has chosen their city to serve as a meeting place for this port conference.

Seaport operations in this town can glory in a long tradition and maritime activities have contributed a great deal to Amsterdam's welfare through many centuries.

And although Amsterdam is actually not on a par with such giant world ports as Rotterdam, Yokohama and New York, it ranks as a major full fledged ocean terminal center, offering a broad variety of cargo handling and deep water fronted industrial facilities.

The port area of Amsterdam is flanked by a modern intercontinental airport. Sea and air terminals are closely linked to hinterland Europe via all modes of inland transport by barge, truck, rail and pipeline.

This transportation system is a logical consequence of Amsterdam's fortunate location, which for many centuries already has put merchant men of Amsterdam in a position to solve problems of international trade and finance.

These ties with many countries and different people, have in turn put a mark upon the way of life and the atmosphere of this city.

As is the case in many ports and harbours elsewhere in the world, port authorities in this country have, during the last few decades, been facing great changes and shifts in transport and transportation technology.

New technical developments and new structures in organization have presented themselves in ocean shipping, cargo handling and inland transport, covering all modes of cargo movement. Modernization and mechanization have taken many forms through the lines of transport systems and, as in many other branches of industry, new technical applications have given rise to the advantages of the economies of scale, replacing labour by capital, at the same time reflecting a strive for rationalization in the use of capital assets.

Ocean trade all over the world has been demonstrating a continuous progress during the past few decades, whereby the annual increase in weightvolume shipped between all nations amounted to something between seven and eight per cent on an average. And it is generally believed, that this constant growth in global maritime trade will go on expanding for many years to come.

Keeping pace with the continuous upward move in world trade, a radically new trend in the developments taking place within the international transport systems has set in as a result of revolutionary changes in ocean shipping, no matter whether these concern the conveyance of liquid or dry bulk, or the move of general cargo.

This trend is marked by the increase of ships' measurements and faster turnround times, and can likewise be observed as regards transportation on land, not only in the ports themselves but also in respect of all transportation techniques serving the move of cargo to and from the ports.

The elements of manload were and will be furthermore squeezed to a minor impact: already nowadays in certain trades, such as over the North Atlantic haul, a great part of general cargo consignments is shipped the container or ro/ro-way.

The loss over traditional manload traffic is doublesided, either towards stevedoring as utilized cargo or through systems of bulk cargo handling.

In international trade as such, not only the volume of trade, but also the whole pattern of the flows of cargo has changed and will be changing in several aspects, both at the various typical loading areas of marine cargo as well as in the respective centers for discharge and redistributing of ocean borne shipments.

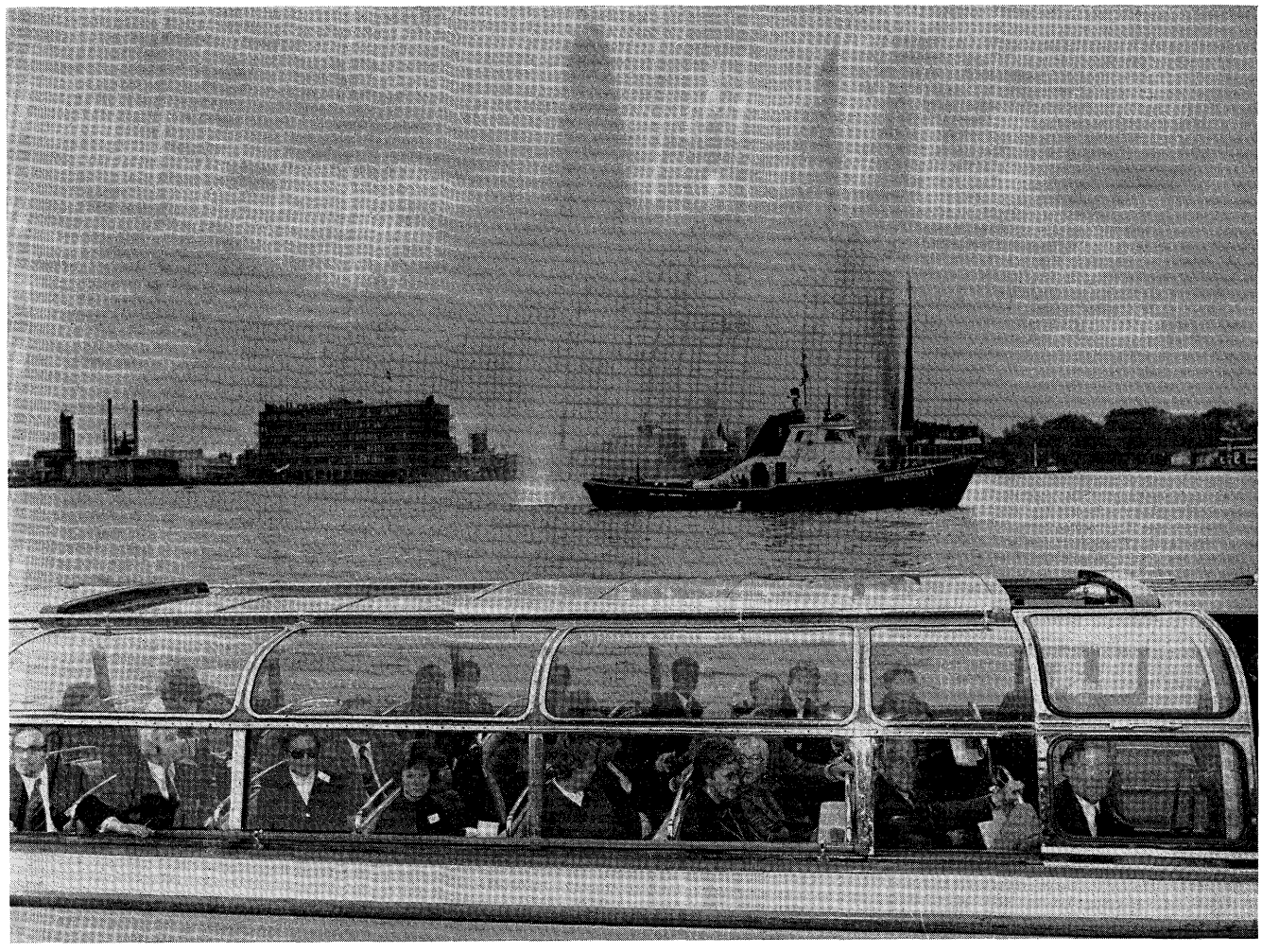
New production areas are constantly developing and a change and reshuffle—more than once a concentration—is taking place of consuming areas for raw materials and other bulkload commodities.

There is a continuous increase also in the average length of haul in ship's voyages, seavessels bridging ever greater distances between their ports of departures and remote destinations.

Tendencies such as longer trade routes and the concentration of single shiploads, together with improvements in shipbuilding know-how and the introduction of new port terminal equipment, are all contributing their part to improve efficiency in sea transportation.

Maritime operations are rationalized through the use of larger ship-size and the adaptation of unitized cargo load systems, serving the shortening of ships' turnround times.

There is a whole scala of breakthroughs in traditional procedures and a growth and scaling-up of activities and terms like concentration, specialization, integration and clustering in the field of transportation have now come to express key concepts in modern transport economy. No seaport authority—most definitely not when it is confronted with competitive actions from neigh-



Amsterdam Port Visit, Monday, May 7 morning: One of the sightseeing boats being backdropped by a barrage of jet sprays from a port patrol boat.

bouring ports and harbours—can afford to ignore the new trends and shifts in trade and transport.

These developments are of direct importance to seaport structure and economy and therefore port management organization will be more and more forced to take up a deliberate attitude towards the process of change in maritime logistics.

For many ports there is a need to establish firm and determined policies as to what has to be their answer in terms of renovation, new investments and expansion.

Excellency,

Ladies and Gentlemen,

Questions and features of the like and many other factors in seaport development will be focussed upon during the working sessions of the next few days. Rotterdam and Amsterdam being municipal ports, the Burgomasters and Aldermen of both cities know only too well what management of a port involves.

We therefore feel very much at home in this company and will participate in the coming events in the week ahead, as much as we possibly can.

I sincerely hope that all of you will take pleasure in participating in the future meetings and—after this gathering—in the items of a programme which we have prepared for the duration of your stay in this city.

May your activities be both productive and enjoyable, to make the results of the conference together with your stay in our city a satisfying and memorable experience.

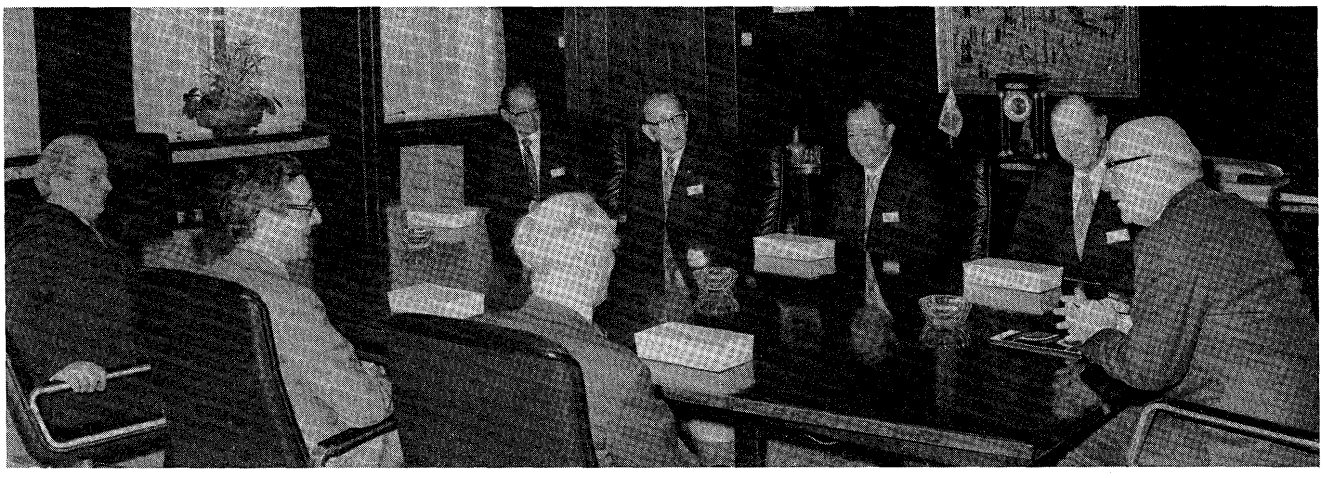
Call on Burgomaster by IAPH Officials

High officials of IAPH have visited the Mayor of Amsterdam Dr. I Samkalden at the City Hall around noon of Monday, May 7. (See photo on page 11).

Amsterdam Port Visit

Monday, May 7, 09.15 hours, the delegates and their ladies boarded a dozen Amsterdam City buses in front of the RAI Congress Center. Around 10.10 hours the buses arrived at the Coenhaven Ferry Terminal. There the party got off the buses and boarded several sightseeing boats.

The boats went round various facilities of the Port of Amsterdam, and closed in on a tall waterside building which housed the General Port Management. Many of the port staff were waving at the visitors from their office windows and balconies. The Amsterdam City Band blared out loud to greet the waterborn guests.



Monday, May 7, 1973, around noon, high officials of IAPH visited the Mayor of Amsterdam Dr. I. Samkalden at the City Hall. At extreme right is the Mayor. Others are anticlockwise, Mr. A. L. King, President, Mr. Howe Yoong Chong, Second Vice-President, Dr. C. Haraguchi, former President, Mr. T. Akiyama, Secretary General, Mr. J. Bootsman, Alderman of Amsterdam, Ir. J. den Toom, First Vice-President, and Rt. Hon. Viscount Simon, former President (back to camera).

Presently the boats squeezed themselves into the city canals of the old Amsterdam and weaved through the history of Amsterdam until they came to a stop at the RAI backyard basin at 12.45 hours.

City of Amsterdam Reception at the Rijksmuseum (State Museum)

On Tuesday, May 8 evening, the delegates and ladies were admitted into the State Museum (Rijksmuseum) in the city a 20:30 hours for the reception hosted by the Municipality of Amsterdam. Drinks were served in the reception hall. The guests were welcome to walk through the richly adorned with historical paintings and the superb collection of Rembrandt's pictures, including his famous "Night Watch". (See page 14).

Resolutions

The following resolutions are introduced for your reference.

No. 1

A BILL

WHEREAS, the definition of "Delegate" set forth in Section 6 of the By-Laws of The International Association of Ports and Harbors should be amended to reflect that there are several classes of associate membership; now, therefore, be it.

ENACTED by The International Association of Ports and Harbors in a conference assembled at the City of Amsterdam, the Netherlands, on the 11th day of May, 1973, that the By-Laws of the Association be amended by changing the definition of "Delegate" set forth in Section 6 to read as follows:

" 'Delegate', as used in these By-Laws, shall mean a person appointed by a Regular Member or an Associate Member to represent that member as its delegate to a Conference of this Association."

RESOLUTION NO. 1

RESOLUTION SUSPENDING SECTION 37 OF THE BY-LAWS AND AUTHORIZING THE PRESIDENT TO APPOINT THE NOMINATING COMMITTEE AT THE EIGHTH CONFERENCE OF THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS.

WHEREAS, it has been the practice at all past conferences of THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS for the President to appoint the members of the Nominating Committee; and

WHEREAS, Section 37 of the By-Laws of this Association provides that the Nominating Committee shall be appointed by regional caucuses; and

WHEREAS, in accordance with the By-Laws the Conference agenda for the 8th Conference of the Association was prepared well in advance of that Conference, no time was allocated in the agenda for the holding of such caucuses and it would now be difficult to adjust the agenda to provide for the caucuses; and

WHEREAS, the President has appointed the members of the Nominating Committee for the 8th Conference in keeping with the past practice in order to promote a smooth functioning of the Conference, such appointments being consistent with the By-Laws in terms of total number and regional representation, namely, three members from each of three regions; now, therefore, be it

RESOLVED by the membership of THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS, assembled at its 8th Conference, that appointment of the Nominating Committee by regional caucuses is hereby found to be difficult and impracticable; that Section 37 of the By-Laws, insofar as it requires appointment of the Nominating Committee by regional caucuses, shall be and is hereby suspended for said 8th Conference; and that the President be and he

Message of Mr. M. Perez-Guerrero, Secretary-General of UNCTAD

• It gives me great pleasure, on behalf of the UNCTAD secretariat, to send greetings to the Eighth Biennial Conference of the International Association of Ports and Harbours and to express our wish that-this Conference, like your past ones, will prove to be outstandingly successful and of great value to all taking part.

• Our relations with IAPH and with many-of its individual members have always been cordial and, we hope, also mutually-beneficial. We are very happy that you have now applied for consultative status with UNCTAD and we will give our full support to your application when it is considered by the Trade and Development Board in August/September 1973. Like you, we are also working for the improvement of port operations, conscious of the key role played by ports in the service of international trade.

• As you are no doubt aware, UNCTAD's primary objective is to secure a more just international division of labour through appropriate measures in trade, monetary, financial and other fields. The permanent machinery of UNCTAD includes four main committees. Among them is the Committee on Shipping which has adopted a comprehensive work programme in the field of shipping and ports. The work is carried out within UNCTAD secretariat by the Shipping Branch of the Division for Invisibles.

• Complementing the research programme of the UNCTAD secretariat are technical assistance activities which are designed to give practical effect to the fruits of our research. In the-field of shipping and ports, the UNCTAD secretariat has provided substantive support to technical co-operation activities financed by the United Nations Development Programme (UNDP), in its capacity as an executing agency of the UNDP, and also in some cases to those financed through UNCTAD by bilateral resources. I may mention, in this connexion, a UNDP-financed course in shipping economics and management for participants from developing countries held in Geneva in 1971, which is to be repeated in French this year. But, perhaps, of particular interest to you is a training course in port management which UNCTAD organized in Gothenberg in 1972, with the help of a grant from the Swedish International Development Authority. A similar course in French is to be held in Algiers this year. Three courses have been arranged to meet an expressed need for adequately trained personnel in developing countries in the field of shipping and ports.

• In addition, the UNCTAD secretariat is taking steps to arrange short seminars at which the results of recent port studies may be presented to the management of ports in developing countries. The first series-of such seminars on the subjcet of methods of improving berth throughput is being planned for later this year. The report on this subject, together with another on port pricing, will be made available to the Committee on Shipping at its session in October this year.

• Another aspect of our technical assistance activities includes the work undertaken by our two Interregional Advisers on Shipping and Ports. Their rols is to help governments in identifying and solving their problems and, where appro-

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is hereby authorized to appoint the Nominating Committee at said Conference.

RESOLUTION NO. 2

RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF AGREEMENT WITH THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS HEAD OFFICE MAINTENANCE FOUNDATION RELATING TO MAINTENANCE AND OPERATION OF THE HEAD OFFICE OF THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS.

RESOLVED by the membership of THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS assembled at its Eighth Biennial Conference in Amsterdam, the Netherlands, on the 10th day of May, 1973, that certain Agreement dated the 11th day of May, 1973, by and between THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS and the INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS HEAD OFFICE MAINTENANCE FOUNDATION, a Japanese corporation, providing for the maintenance and operation of the Head Office of this Association by said Foundation shall be and the same is hereby approved; and be it

FURTHER RESOLVED that President Lyle King shall be and is hereby authorized to evecute and shall be and is hereby authorized to attest said Agreement on behalf of THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS.

AGREEMENT

THIS AGREEMENT, made and entered into this 11th day of May, 1973, by and between THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS, an unincorporated association, hereinafter referred to as the "Association," and the INTERNATIONAL ASSOCIATION OF PORTS AND HARBROS HEAD OFFICE MAINTENANCE FOUNDATION, a Japanese corporation, hereafter referred to as the "Foundation,"

WITNESSETH

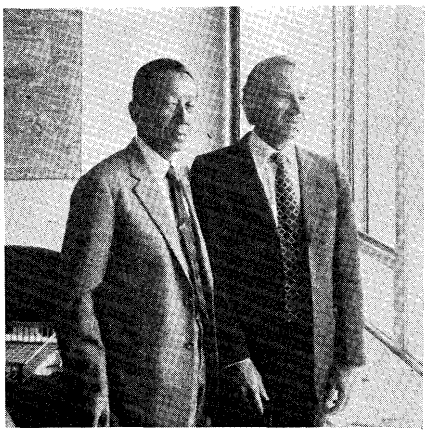
WHEREAS, the Association has been formed for the objects and

priate, in formulating technical co-operation projects for submission to the UNDP. You may be interested to know that we keep an extensive roster of experts in shipping and ports for technical co-operation activities. In this connexion, we would welcome your co-operation in suggesting suitable candidates for addition to our roster, particularly French or Spanish-speaking experts who are, at present, less well represented on our roster than English-speaking ones.

• In closing, may I say how happy we are to be participating once again in your Conference and wish it every success.

UNCTAD Visited

(By Katsuya Yokoyama, IAPH Deputy Secretary General) It was September 15th of 1972 that Mr. W. R. Malinowski, Director, Division for Invisibles of United Nations Conference on Trade and Development (UNCTAD) sent a letter to the Secretary General of IAPH, suggesting IAPH's application for consultative status with UNCTAD as a non-governmental organization and IAPH's participation with that status in future sessions of the Shipping Committee of UNCTAD. On the day of October 30th 1972, the Secretary General of IAPH, submitted the application for consultative status with UNCTAD as a non-governmental organization to the Division for Conference Affairs and External Relations of UNCTAD.



Mr. Katsuya Yokoyama, Deputy Secretary General of IAPH (left) with Mr. S. G. Sturmey, Deputy Director, Division for Invisibles, UNCTAD.

Visit to UNCTAD

Under these circumstances, I called on UNCTAD in Geneva on the day of May 2nd 1973. I was welcomed by Mr. S. G. Sturmey, Deputy Director, Division for Invisibles, (Mr. Malinowski was out of Geneva), to whom I expressed grateful thanks for the kind consideration UNCTAD has given for IAPH. A minute explanation in regard to the latest constructure and activities of UNCTAD, inter alia, of Shipping Committee and Division for Invisibles which is the secretariat unit responsible for servicing the Shipping Committee, was made by Mr. Sturmey, with whom I had a long meaningful talk subsequently.

When application may be approved

Mr. Sturmey presented his view that IAPH's application will be dealt with by the Trade and Development Board which is scheduled to have its next meeting during 21st August and 14th September and may be approved on some day of September 1973.

Sixth session of the Committee on Shipping

Mr. Sturmey pointed out that IAPH may wish to send delegates to the next Shipping Committee to be held during 16th and 26th October 1973 in Geneva, since the Committee will have before it three very important reports dealing with questions of ports.

No. 1 port pricing
No. 2 Berth throughput: systematic methods for improving general cargo operations
No. 3 Trade practices and shipping

He could not say exactly when during the Committee these reports would be discussed, but it would most likely be between 18th and 23rd October.

Miscellaneous

Further discussion was made in regard to the manual "Port statistics" prepared by the UNCTAD secretariat in 1971 and also the possibility of having a seminar in this connection under the co-operation of UNCTAD and IAPH, sponsored by some governments.

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purposes set forth in Article II of its Constitution and is carrying out those undertakings set forth in Article III of its Constitution in order to accomplish the said objects and purposes; and

WHEREAS, the Board of Directors is the chief executive body of the Association for the determination of policies and general supervision of the business and affairs of the Association; and

WHEREAS, the Foundation has been formed for the purpose and objective of encouraging ports and harbors internationally and to promote international friendship by carrying on the business of the Head Office of the Association as set forth in Article 3 of the Articles of Incorporation of the Foundation and is prepared to undertake and fulfill the objectives as set forth in Articles 3 and 4 of its Articles of Incorporation; and

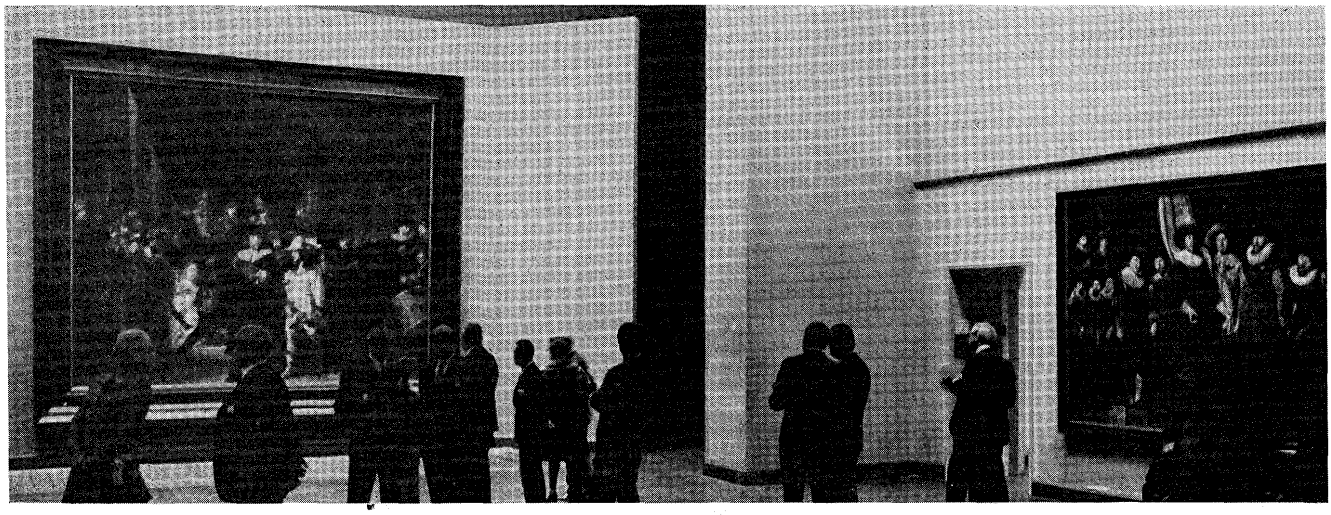
WHEREAS, the Association desires to transfer and entrust to the Foundation the function of maintaining and operating the Head Office of the Association; and

WHEREAS, the Foundation is willing to accept and carry out the function of maintaining and operating the Head Office of the Association, subject to the terms and conditions herein set forth; now, therefore,

IT IS AGREED between the Association and the Foundation as follows:

1. The Association, pursuant to action taken by its membership at the Eighth Conference of the Association, does hereby transfer to and entrust the Foundation with the function of maintaining and operating the Head Office of the Association and the Foundation hereby accepts such function and shall maintain and operate said Head Office in accordance with the terms and conditions set forth in this Agreement. The Foundation shall perform the functions hereby entrusted to it in the name of the Association.

2. The Foundation shall exert its best efforts to attain the objectives and purposes of the Association as set forth in Article II of the Con-



Watching the famous "Night Watch," Tuesday, May 8 evening, at the City of Amsterdam Reception at the State Museum.

stitution of the Association and shall carry out the undertakings set forth in Article III of the Constitution of the Association in order to accomplish the said objectives and purposes, subject, however, to the financial and other resources available to the Foundation.

3. In order to adequately and efficiently carry out the provisions of this Agreement, the offices of Secretary General of the Association and Director General of the Foundation shall be occupied by the same person. It is understood and agreed that the Association and the Fundation, through their appropriately appointed representatives, shall confer, prior to the appointment of any Secretary General of the Association taking office after the effective date of this agreement, as to the acceptability of the person intended to be appointed to the office of Secretary General of the Association. At anytime after such conference has taken place, the Association may appoint a Secretary General and within sixty (60) days after such appointment the Foundation shall appoint the same person as Director General of the Foundation.

4. In consideration of the Foundation maintaining and operating the Head Office of the Association, the Association shall pay over to the Foundation all revenues of the Association as such revenues are received, except any revenues derived from special dues or assessments. Such revenues shall be payable by the Association of the Foundation in Japanese Yen.

5. All expenses associated with the preparation, publication and distribution of any magazines, periodicals or other publications of the Association shall be paid by the Foundation. The Association expressly reserves and does not transfer to the Foundation any copyrights or other literary property rights to materials produced by and published in any magazines, periodicals or other publications of the Association.

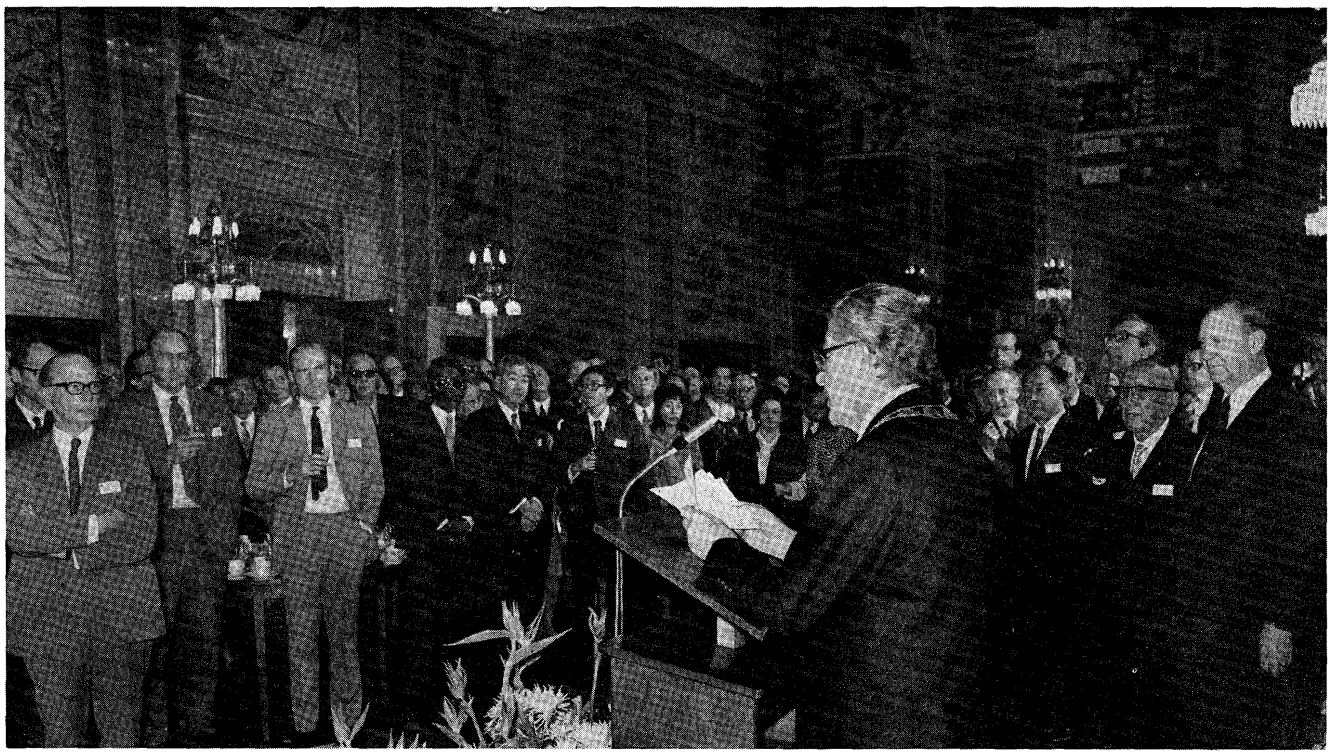
6. The budget and settlement of accounts of the Foundation for each year shall be reported to the Secretary General of the Association who shall attach the same to the budget of the Association to be submitted to the Conference of the Association in accordance with the By-Laws of the Association, as a reference material to consider the budget.

7. It is agreed that all persons employed by the Association upon the effective date of this Agreement serving in its Head Office shall be automatically transferred to and become employees of the Foundation. The Foundation shall thereupon become responsible for paying the compensation and allowances of such employees and for providing retirement benefits including time served as employees of the Association.

8. It is understood and agreed that the Special Port Development Technical Assistance Fund, hereinafter referred to as the "Fund," having been raised pursuant to special dues, shall remain the property of the Association; all financial and bookkeeping functions related to the Fund shall be administered and carried out by the Foundation. Disbursements from the Fund shall be made only by the Secretary General of the Association.

9. Upon the effective date of this Agreement all funds of the Association, whether held in cash or on deposit in a bank, except those belonging to the Fund or raised pursuant to special dues or assessment, shall be transferred to the Foundation, and upon the same date the Foundation shall assume and pay all outstanding legal claims against and debts of the Association.

10. The Association shall assign to the Foundation all its right, title and interest in and to contracts relating to the Head Office to which it is a party upon the effective date of this Agreement. The Association shall also transfer and deliver to the Foundation legal title to and physical possession of all of the usable and movable equipment and supplies and working documents of the Head Office of the Association, without compensation. At the time of such transfer a detailed inventory shall be made of such equipment and supplies, including a listing of book values, and a copy thereof approved by both of the parties hereto shall be delivered to each party. In the event that this Agreement is terminated, upon the effective date of such termination the Foundation shall return to the Association all



Wednesday, May 9, Visit to Rotterdam-Europoort: Mr. W. Thomassen, Burgomaster of Rotterdam welcomes IAPH delegates at the City Hall. Behind the Burgomaster, Mr. Howe Yoon Chong, Ir. J. den Toom, Dr. Chujiro Haraguchi and Mr. Lyle King are seen. *(Kimiko Takeda)*

such usable and movable equipment and supplies and working documents of the Head Office in their then existing condition, without compensation. The Foundation shall reimburse the Association for any missing items at the book value shown in said inventory and upon reimbursement therefor the Foundation shall be relieved of any claim in connection therewith. The Foundation shall also transfer to the Association, at the same time, ownership of any usable and movable equipment and supplies then in the possession of the Foundation, in addition to those specified in said inventory, which are necessary for the proper functioning of the Head Office. Also at the same time, the Foundation shall reassign to the Association all of its right, title and interests in and to any agreements relating to the Head Office outstanding at that time.

11. Either party herto shall have the right to cancel and terminate this Agreement by giving to the other party one year's prior written notice of such cancellation and termination. Cancellation and termination by the Association shall be authorized by the membership of the Association. From and after the effective date of such cancellation and termination neither party shall be liable to the other party for any claims, demands or causes of action arising after the effective date of such cancellation and termination.

12. This Agreement shall become effective on the first day of June, 1973.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed the day and year first above written.

THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS, an unincorporated association,

By *Signed*
President

Attest *Signed*
Secretary General

INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS HEAD OFFICE MAINTENANCE FOUNDATION, a Japanese corporation,

By *Signed*
President

Attest *Signed*
Director General

RESOLUTION NO. 3

RESOLUTION INSTRUCTING WAYS AND MEANS COMMITTEE TO STUDY AND REPORT ON MEMBERSHIP DUES STRUCTURE.

RESOLVED that the Ways and Means Committee of THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS shall make a comprehensive study of the membership dues structure of the Association, recommending a new dues formula with a view towards the Association becoming self-supporting at the earliest practicable time; and be it.

FURTHER RESOLVED that the Ways and Means Committee shall render its report at the Ninth Conference of the Association to be held in 1975.

RESOLUTION NO. 4

RESOLUTION OF CONDOLENCE UPON THE PASSING OF V. G. SWANSON.

WHEREAS, an untimely death has taken V. G. SWANSON, C.B.E., E.D., Chairman of the Melbourne Harbor Trust Commissioners, Port of Melbourne, Australia; and

WHEREAS, V. G. SWANSON

Wednesday, May 9, 15.30—18.30 hours. Visit to Rotterdam-Europoort: Delegates and their ladies are enjoying port tour aboard the city's luxurious sightseeing boat, mv. "Stad Rotterdam."

served as the immediate Past President of THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS and was an Honorary Member of THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS and a sincere friend and staunch supporter of this Association; and

WHEREAS, the members of this Association desire to record their cherished memory of him and their respect, esteem and affection for him; now, therefore, be it

RESOLVED that THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS hereby testifies to its deep sorrow in his passing and to its sincere feeling of loss and that this Eighth Conference of THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS be adjourned in the memory of him and as an expression of the friendship and affection its members bore for him.

RESOLUTION NO. 5

RESOLUTION OF CONDOLENCE UPON THE PASSING OF THE HONORABLE HALE BOGGS.

WHEREAS, an untimely death has taken the Honorable HALE BOGGS for many years a member of the United States House of Representatives from the State of Louisiana; and

WHEREAS, said HALE BOGGS was an Honorary Member of THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS and a sincere friend and staunch supporter of this Association; and

WHEREAS, the members of this Association desire to record their cherished memory of him and their respect, esteem and affection for him; now, therefore, be it

RESOLVED that THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS hereby testifies to its deep sorrow in his passing and to its sincere feeling of loss and that this Eighth Conference of THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS be adjourned in the memory of him and as an expression of the friendship and affection its members bore for him.

RESOLUTION NO. 6

RESOLUTION OF CONDOLENCE UPON THE PASSING OF JOHN-IWAR DAHLIN.

WHEREAS, an untimely death has taken JOHN-IWAR DAHLIN, the former General Manager of the Port of Helsinborg, Sweden; and

WHEREAS, JOHN-IWAR DAHLIN served as the President of THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS from February, 1958 to June, 1959 and was an Honorary Member of THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS and a sincere friend and staunch supporter of this Association; and

WHEREAS, the members of this Association desire to record their cherished memory of him and their respect, esteem and affection for him; now, therefore, be it

RESOLVED that THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS hereby testifies to its deep sorrow in his passing and to its sincere feeling of loss and that this Eighth Conference of THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS be adjourned in the memory of him and as an expression of the friendship and affection its

Presentation to Ir. F. Posthuma By A. L. King, President, IAPH

at

Rotterdam Dinner, May 9, 1973

From time to time there emerges in the Port industry, a strong leader who approaches the solutions to the many port problems with wisdom and vigor; a leader who has broad vision to plan on a massive scale and to implement plans with forcefulness, gaining the respect of the entire industry and his community as he does so.

Such a man is Eng. Frans Posthuma. He was graduated as a Civil Engineer from the Technical University of Delft in 1941. He immediately assumed an active role in the reconstruction of Rotterdam, particularly the quay walls, locks and industrial areas. He continued the building of port facilities from 1945 to 1950 as a member of the Rotterdam Municipal Port Management. In 1959 he was appointed General Manager of the Port of Rotterdam, being responsible for the entire development and administration of the port.

He has found time to be active in the IAPH, as a Director and Chairman of the Committee on Large Ships, and as a member of the Committee on International Port Development. He has been advisor to the World Bank for Reconstruction & Development, and to the United Nations. He has traveled extensively and aided many ports of the world with his advice. He has been advisor to the Foundation of Netherlands Consultants concerning engineering projects outside the Netherlands.

Under his leadership of the Port of Rotterdam, the Port tonnage increased from less than 100 million in 1962 to 265 million in 1972. Between the years of 1953 and 1971 he directed the construction of at least 5 famous areas of the port representing a total investment of over 1800 million guilders, the equivalent of about 650 million dollars. He was the leader in providing deeper channels, and his 65-foot drafts are now being studied with 72 feet in view. He has shown a very great interest in safety in handling hazardous commodities, moved into the container age with no delay, and has always shown an interest in helping the developing countries with their problems.

There always comes a time when such a leader decides to give the helm over to someone else. Eng. Posthuma has decided to give over his active administration next fall, and devote his time to consultant activities. We all wish him well in his retirement. As a token of the esteem with which I hold Frans and which represents the feelings of all of the ports, as President of IAPH I am pleased to present to him this engraved silver bowl, to remind him of his many friends.

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members bore for him.

RESOLUTION NO. 7

RESOLUTION RELATING TO WATER POLLUTION IN PORT AREAS.

WHEREAS, THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS is strongly aware of the increasing general concern regarding pollution of waters in port areas; and

WHEREAS, it is recognized that in many ports a major element in this concern relates to the discharge of sewage from ships; and

WHEREAS, certain of the methods now being adopted in dealing with the sewage of vessels require that accumulated sewage or effluent be pumped from ships to port reception facilities, either in certain circumstances or as routine, in order to preserve the quality of the waters concerned; and

WHEREAS, it is apparent that a full solution of the problem for the ports affected will require the elimination of the practice of direct discharge of sewage from ships while in these ports; now, therefore, be it

RESOLVED that THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS shall inform the INTER-GOVERNMENTAL MARITIME CONSULTATIVE ORGANIZATION, first, that the Association considers it of the greatest importance that action be expedited to ensure that ships are fitted with apparatus which will eliminate the discharge of sewage into waters while in the port and, secondly, that, for the purpose of making efficient arrangements for the reception by appropriate authorities of accumulated sewage or treated effluent from ships where necessary, all ships which have tanks in which such sewage or effluent is accumulated should be provided with outlets from those tanks which are above the water-line and include standard fittings for hose connections; and be it

FURTHER RESOLVED that THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS commends to those of its members who are desirous of taking positive action to promote the fitting of apparatus in ships to prevent the discharge of sewage into the waters of ports, consideration of the practicability of their instituting a compulsory port sanitary service for ships which are fitted with such apparatus, all the expense of instituting and operating such a sanitary service to be recouped by imposition of an adequate rate or charge upon those ships; and be it

FURTHER RESOLVED that copies of this resolution be forwarded to any other governmental or private agency or any legistlator or other official as may be appropriate to effect the purposes of this resolution.

RESOLUTION NO. 8

RESOLUTION RELATING TO LEGAL PROTECTION OF PORTS AND NAVIGABLE WATERWAYS

WHEREAS, the rapid and continuous development of the flow of the sea traffic in unavoidably accompanied by an increasing number of navigation accidents occurring in

Introduction of Mr. Toru Akiyama at President's Dinner Evening of May 10, 1973 by A. Lyle King, President I.A.P.H.

Some months ago, Mr. Toru Akiyama, our Secretary General, advised me that he planned to retire at the closing of this Conference. We have indeed been fortunate to have had his talents and expertise in the great task of furthering the objectives of our Association. I would like at this time, to give some of the highlights of Mr. Akiyama's impressive career.

He was born in the City of Osaka, Japan, a city which reminds one of Amsterdam because of its many canals and rivers.

He was graduated from the Department of Law at the Kyoto Imperial University in 1928 with an LLB. He started his career as a Government official by entering the Ministry of Interior affairs until he retired as the Vice Minister of the Ministry of Transport of the Japanese Government in 1952. He was commended by the Government for his service with the Prime Minister's Award in 1959, and was the recipient of the Maejima Award in 1962 (which was created in commemoration of Minister Maejima who first established the National Postal Service.)

After his retirement from the Office of the Vice Minister of Transportation, he started his career in the business world. Some of the highlights of his vast accomplishments are:

He founded and became President of the Japan Airport Terminal Company, which operates the Tokyo International Airport which position he held from 1955 to 1970. He is now advisor to the Board. He was President of the Tokyo Monorail Company, which runs the world's first and longest monorail between the Airport and the City. He is now its Counsellor Director. He founded the Pacific Steamship Company in 1956 and has been its President since the founding of the company.

He was the first President of the well-known Hotel Okura chain, which includes the luxurious Amsterdam Okura, one of the official hotels of this Conference.

Apart from his numerous endeavors in the commercial field, he presently carries the responsibility of the Chairman of the Site Selection Committee of the new Osaka International Airport.

Mr. Akiyama's involvement with ports and harbors is quite extensive. He assisted Mr. Gaku Matsumoto and Dr. Chujiro Haraguchi in founding the I.A.P.H. in 1955 and served as the Chairman of the Organizing Committee of the Fifth I.A.P.H. Conference in Tokyo in 1967. At the Tokyo Conference, he was appointed Secretary General of the I.A.P.H. succeeding Mr. Matsumoto.

The Japan Port and Harbor Association, on the occasion of celebrating its 50th anniversary, presented him with an award for his long dedication to the development of the ports and harbors of Japan.

Privately, he is well-known as an excellent writer and translator, as well as a prominent photographer. Many books and studies were introduced by him in Japan, and especially his books in the aviation field are widely read.

Most recently, he began the translation into Japanese of the I.A.P.H. publication, "Port Problems in Developing Countries" by Bohdan Nagorski, and the publishing of this Japanese edition is expected soon.

Mr. Akiyama is a well-known world traveler. His records of travel and excellent photographs are utilized for teaching materials for school children. An exhibition of the photographs taken on his recent trip to Africa is forthcoming.

Having worked closely with Mr. Akiyama these past two years, I know of his dedication and selfless devotion to the task of creating a truly international port association. He has been a valued friend and helpful associate. I wish him, his wife, his daughter Mrs. Tatsuta, who are with him tonight, and the other members of his family, the best of health and happiness for the future.

Mr. Akiyama, in recognition of your loyal support during my term of office, I wish to present to you this Steuben crystal.

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ports fairways, channels and waters; and

WHEREAS, the damage of all kinds, suffered in such occasions, by the ports and the environment (particularly in case of obstruction of fairways, channels and of berths, fire, pollution by oil or by chemical products spill) may be very important; and

WHEREAS, the removal of wrecks and of obstructions, the repairs after fire, after oil or chemical products spill, may be very costly, and the commercial losses of the port and of the traffic may be very substantial; and

WHEREAS, the limitation of the liability of the owners of sea-going vessels, as defined by the Brussels International Conference of 1957, and, in special cases, by other international agreements (nuclear powerships, tankers by international convention of private law, Brussels 1969) may be insufficient for an adequate compensation of the victim; and

WHEREAS, it is now common business practice for any business to accept full financial responsibility for any losses or damages caused by its operations; now, therefore, be it

RESOLVED that the INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS, acting through its world-wide membership, does hereby urge their respective governments and other international

organizations to secure the establishment of the following policies affording protection of ports and navigable waterways:

1. Full economic responsibility by owners of sea-going vessels for any and all damage caused by the vessels, including wrecks and other losses;
2. Abolition of any limitation of the liability of the ownership of sea-going vessels; and
3. Financial responsibility of vessels by compulsory insurance or other appropriate evidence of financial responsibility which should be included in the vessels documents on board ship;

and be it

FURTHER RESOLVED that copies of this resolution be forwarded to the Inter-Governmental Maritime Consultative Organization subcommittee of the United Nations and any other international organization having an interest in the subject matter of this resolution.

RESOLUTION NO. 9

RESOLUTION COMMENDING THE STAFF OF THE HEAD OFFICE OF THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS

WHEREAS, the membership of THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS desires to commend the staff of the Head Office of the Association for a job well done in carrying out the objects and purposes of the Association and in the efficient performance of day to day duties between the biennial conferences of the Association; and

WHEREAS, the staff of the Head Office of the Association has demonstrated a devotion to duty over the years which has earned the appreciation of the membership of the Association; and

WHEREAS, the membership of the Association desires to present to said staff a small token of such appreciation; now, therefore, be it

RESOLVED that THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS does hereby commend the staff of the Head Office of the Association for outstanding devotion to duty and a job well done, said staff consisting of Under Secretary YOSHIO HAYASHI, who is also the editor of Ports and Harbors magazine, Under Secretary KAZUKO TATSUTA, Under Secretary KIMIKO TAKEDA and SHIGEHIRO KUSU, RINNOSUKE KONDOH, NORIO KURATOMI and KIYOSHI FUJINAMI, and present to them as a gift a small token of the appreciation of the Association.

Thursday, May 10, 19.30 hours, President Reception and Dinner: At "Grand Ball" Room of the Amsterdam Hilton Hotel, Mr. King (center) dines with two Burgomasters, Mr. W. Thomassen of Rotterdam (his left hand side) and Dr. I. Samkalden of Amsterdam, who is giving an address of thanks from the main table of the dinner following to a cocktail at "Diamond" Room. *(Kimiko Takeda)*

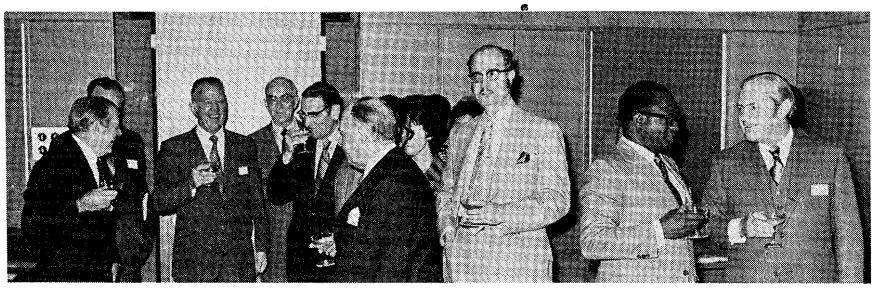
Thursday, May 10, 19.30 hours, President Reception and Dinner: Mr. King presents Mr. Akiyama a Steuben Glass crystal of bird after his delivering a speech in honor of Mr. Akiyama. *(Kimiko Takeda)*

RESOLUTION NO. 10

RESOLUTION OF THANKS

RESOLVED by THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS, in a plenary session assembled, that the Association does hereby express its sincere appreciation to the Municipalities of Amsterdam and Rotterdam and their Burgomasters, their Port Managements, to Ir. J. den Toom, Managing Director of the Port of Amsterdam and Conference Chairman, and to Ir. F. Posthuma, Managing Director of the Port of Rotterdam, to the Organizing Committee of the 8th Biennial Conference of this Association and to those who worked in close cooperation with this Organizing Committee, for arranging and providing an inspiring, educational, interesting and entertaining agenda and program for the delegates, representatives, and their ladies; and be it

Friday, May 11, 12.00 hours, Signing Ceremony: With reference to Resolution No. 2 (See Page 12.), signing to the Agreement between IAPH and the IAPH Head Office Maintenance Foundation, was made between Mr. Lyle King, the President of IAPH and Mr. Toru Akiyama, the President of the Foundation, while Dr. Hajime Sato sits the table to attest it at the Conference Secretariat, RAI Congress Center. Behind them, Messrs. J. den Toom, W. H. Brotherson, Bernard J. Caughlin and Gengo Tsuboi watch the signing. *(Kimiko Takeda)*



Friday, May 11, 12.00 hours, Signing Ceremony: After the signing was conducted, Executive Committee Members and the parties concerned are gathering together to celebrate the establishment of the Foundation with champagne. From left to right, Messrs. J. McConnell, Kerwin Rooney (Legal Councelor), W. H. Brotherson, Joseph Stanton, Ben E. Nutter, Fernando Moreira, D. E. Taylor, P. K. Kinyanjui, Patric J. Falvey (Legal Councelor). *(Kimiko Takeda)*

FURTHER RESOLVED that His Excellency, Minister of Transport and "Waterstaat", Mr. B. J. Udink, is particularly thanked for his outstanding contributions to the success of the 8th Conference of the Association.

RESOLUTION NO. 11

RESOLUTION HONORING TORU AKIYAMA UPON HIS RETIREMENT AS SECRETARY GENERAL OF THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS.

WHEREAS, Toru Akiyama has served as Secretary General of THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS since 1967 and is retiring upon the close of the 8th Biennial Conference of the Association; and

WHEREAS, Toru Akiyama will become Secretary General Emeritus of the Association and thereby continue to make available to the Association his valued assistance; and

WHEREAS, Toru Akiyama has rendered distinguished and devoted service to the Association for many years and has operated a highly efficient Head Office; now, therefore, be it

RESOLVED by the membership of THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS convened in Plenary Session, at Amsterdam, The Netherlands, on the 11th day of May 1973, that Toru Akiyama is hereby commended and honored upon his retirement as Secretary General for his many years of distinguished and devoted service to the Association and the membership does hereby extend to him its best wishes for many long years of health and happiness.

Mr. Akiyama's Resignation

Mr. Toru Akiyama, who served as the Secretary General since 1967, tendered his resignation which was approved by the Board of Directors. However, he was given a newly created status of Secretary General Emeritus so that his services for the Association may be made available in future. For the office of the Secretary General, Dr. Hajime Sato, until then Deputy Secretary General, was appointed to succeed Mr. Akiyama from May 12, 1973.

The Next Conference

President Vleugels then announced that it has been proposed by Mr. Howe Yoon Chong, First Vice-President, that the next conference be held in Singapore from the 9th through the 15th March, 1975. A film on Singapore was shown before Mr. Howe spoke, as follows:

"Mr. Chairman, Ladies and Gentlemen, the Port of Singapore feels greatly honored to be chosen to play host to the Ninth IAPH Conference and it is indeed a pleasure for me to invite all delegates to attend this conference which is scheduled to be held from the 9th to the 15th March, 1975.

"Though Singapore is only a small island, we are the meeting point of many great civilizations, and indeed one of the few countries where people from diverse ethnic

Address by the Retiring Secretary General

Mr. President, Officers, ladies and gentlemen,

I am deeply moved by the great honor bestowed on me, despite my little service I have done for your Association.

If I recollect correctly, one day in October 1951, Mr. Gaku Matsumoto, then President of Japan Port and Harbor Association came over to my office of Vice-Minister of Transport and asked my approval and support of his idea to promote an international gathering of world ports. He said that although the world ports are closely linked by the shipping lines, the managements had never seen each other. They are engaged in common business on common technique, and improvement of one port cannot contribute much to the trade until the port on the other end also achieved improvement. Therefore it is a worth-while task to promote world ports getting together to exchange views and informations. I thought this most sensible and I said O.K. and promised my support.

In Orient, we have an old saying that "the mouth is the gateway of all risks", or "When you say something, cold wind of autumn touches your lips right away."

This was the beginning of my involvement of the affairs of this Association.

In March 1952, I went to the general meeting of American Association of Port Authorities held in Washington, D.C. with my daughter now with me, she was 18 years old then, and extended our invitation to the International Conference of Ports and Harbors scheduled to be held in October that year at Kobe, under the hostship of Mayor Haraguchi, senior civil engineer—statesman. Mr. Gengo Tsuboi also helped us as a member of the secretariat.

The Conference was attended by most Pacific coast ports of U.S.A. and some other government representatives as observers. It was successful and a motion was carried to the effect that next meeting of similar nature will be held 2 years from that time sponsored by the Port of Los Angeles and meantime all preparations to make the Conference as an initiation meeting to formulate a permanent association of Ports and Harbors. I went one day to Los Angeles and discussed with Mr. Nordstrom, the City Attorney of that time, about the draft of the Constitution and By-Laws of this Association in the office of Mr. Bernard J. Caughlin, who was the General Manager of the great port at that time and he still is.

The first meeting of International Association of Ports and Harbors was successful and the Constitutions and By-Laws were adopted.

The development of the Association since then is well known by you. At the beginning nobody could foresee such phenomenal development as seen now, although everybody concerned was convinced of its theoretical righteousness.

After the 4th Conference of London, truly becoming the world-wide organization, we could meet you again at Tokyo to hold its 5th Convention. It was most memorable event for those Japanese port people concerned. I was elected as the Chairman of organizing committee, and we all made utmost efforts to welcome you.

At the Tokyo Conference Mr. Matsumoto recommended me to succeed him as the Secretary General. Until at that time this Association was entirely at its infantile stage. I set up as my goal to make it a truly independent, international organization, cut from all milking and nursing at the mercy of patrons. I started to reveal the financial problem little by little, to get good understanding of all members. But I have been very cautious because such matters are very delicate and touchy, and I did not want any catastrophe come upon us because of financial problems. I believed that to reach such goal takes time and patient efforts. On the other hand, due to world wide monetary turmoil and my retirement of my main job, the remedial measure to meet the financial shortage became imminent. So I worked out the Foundation plan, to alleviate the sudden financial crisis. This plan was so peculiarly devised to face two contradictory demands of domestic and international that some of you must have had difficulty to digest it. To this I feel very, very sorry. But I am very glad that this plan was approved unanimously by the members present.

I am very happy to receive the highest honor of the title of Secretary General Emeritus and this precious present, for which special resolution was passed. I am extremely happy for the commendation of our staff to have been given such fine mementos for their self-sacrificing, devoted efforts. Indeed I have been a kind of slave drivers, as somebody puts it, but they have responded their holy mission of international servant. I believe the acknowledgement you have given them stimulate and encourage their future dedication.

I am also very glad that my able and most popular port man in Japan Dr. Hajime Sato is appointed the new Secretary General. As I am the President of the Foundation as well as the Secretary General Emeritus, I promise that I will help him to fulfill his duty as much as possible.

Upon closing I sincerely pray for the infinite development of this Association.

Thank you

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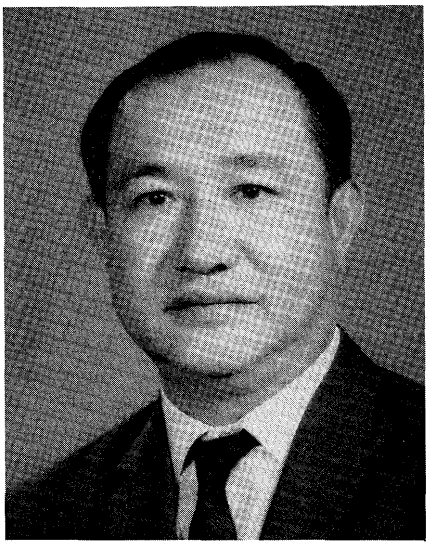
origins, cultures, religions, live in peace and harmony. As host we shall strive to do our best to look after your welfare and your comfort.

"We have many new and good hotels, and efforts are being made by our tourist promotion board to attract more and more international conferences to Singapore. In this regard we already have some experience as a convention center in South East Asia.

"One of the pamphlets distributed to you illustrates the various convention facilities available. The Ninth IAPH Conference can be convened either in one of our big hotels or in our conference hall which has been built specially for international conferences. We have chosen the early part of the year to hold the



Mr. Howe Yoon Chong, New First Vice-President (Chairman /General Manager, The Port of Singapore Authority)

Mr. Robert L. M. Vleugels, New President (General Manager of the Port City of Antwerp)

Conference as the climate will be more agreeable during that time, and possibly many of our friends from temperate climates will like a change from the cold of winter to the sunny weather in tropical Singapore.

"A special program will be drawn up for the ladies in order to maintain the very popular IAPH tradition. The ladies are, therefore, most warmly welcome. With the multiracial population, Singapore is in many ways a microcosm of Asia. Our tourist brochures proclaim that we are instant Asia, something like the instant coffee. The blending of four major cultures has produced a friendly and happy community while at the same time retaining some of the influences and imprints of the cultures without any jarring or unpleasant consequences brought about by the mixing of incompatible elements.

"Interesting cultural performances can be arranged for your benefit in the evenings and there's no lack of recreational facilities, the sun, the sea, the beaches, and the lush tropical greenery. Singapore is surrounded by many beautiful islands with sandy beaches and clear water for swimming and relaxation. Of course, there will also be free time for shopping and sightseeing.

"Though certain protective customs duties have been introduced to encourage industrialization, Singapore still remains very much a free port and somewhat of a shopper's paradise. All delegates and their ladies are specially invited to spend one day during the Conference to visit the port and see our industries, our urban renewal and public housing programs to get an idea of how our people live and work.

"For the post-conference tour, we are likely to introduce some innovations with the assistance of our good neighbors like Indonesia and Malaysia. We will arrange for special package tours for groups of delegates and their ladies to visit such exotic places as Bali, Borobudur, Kinabaru, Penang, Bangkok, etc., most of which are within one or two hours by air from Singapore with frequent daily flights.

"On the business side of the Ninth

Dr. Hajime Sato, New Secretary General (Director-General, The Japan Port and Harbor Association)

IAPH Conference, I have observed and learned much during the Conference here in Amsterdam and in

Special Dutch Farewell Party: Friday, May 11, 20.00 hours. Ir. den Toom had said, "It will be something you have never experienced in your life."

Rotterdam which has been skillfully arranged and organized in a most professional manner. We will continue to seek the suggestions and advices of various representatives on how best the program of the Ninth IAPH Conference should be planned, and to maintain the very high standards set by previous IAPH Conferences.

"Perhaps, the Executive Committee meeting next year will give us ideas and suggest to us how best to make the Ninth Conference a success.

"Mr. Chairman, ladies and gentlemen, once again the Port of Singapore Authority warmly welcomes you to the Ninth IAPH Conference in March 1975. Please keep the dates free. We look forward to welcoming you and seeing you in Singapore. Thank you very much".

Visit to Rotterdam-Europoort

All the delegates and the ladies gathered at the RAI Congress Center in the morning of Wednesday, May 9 to get aboard several coaches by 8.45 hours. Around 10.00 hours the coaches arrived at the City Hall of Rotterdam. The party was conducted upstairs to a magnificent hall where drinks were ready. Presently Mr. W. Thomassen, Burgomaster of Rotterdam, delivered a speech of welcome, and Mr. A. L. King, IAPH President, responded with an address of thanks.

Then the party was led into the Metro (subway) station nearby, got aboard, and got off at the Stadhuid Station after a transfer on the way. By the time the party got off, the Metro was an elevated railroad. The party walked across to the "Ahoy" sports and exhibition center.

Around noon a Dutch coffee-lunch began on the ground floor. After the lunch, at the same place, a sound film "Gateway for Giants" was projected on a screen. The film gave a very vivid account of ultra-modern reclaiming operations going on at the Port of Rotterdam in preparation for the expected visit of giant tankers and bulk carriers.

The party was then taken by coach to the vast reclamation area Maasvlakte of Europoort, and embarked on a three-hour tour of the port upstream on board two showboats "Stad Rotterdam" and "Pieter Caland", where drinks were served. It was befitting to the largest port in the world that NYK Line's "Kamakura-Maru" was berthed two hours upstream of the River Maas.

The boats came to a stop at the city center where several coaches got us in and delivered us at the Concert and Congress Building "de Doelen", an ultra-modern new building. It was around 19.00 hours. Upstairs, drinks were served, then, down on the ground floor hall, the entire party was seated for dinner by the Municipality of Rotterdam. Greetings were given by the Mayor and Ir. F. Posthuma, Managing Director of Port of Rotterdam, and Mr. A. L. King, IAPH President. (For Mr. King's address, see page 17).

Entertainments by way of sleight of hand, a violin duet and a music band went along with the dinner. It was past 23.00 hours that the party boarded coaches back for Amsterdam.

Special Dutch Farewell Party

Three hours after the Eighth Conference was officially closed on May 11, the Glass Hall, another section of the RAI Congress Center, was the stage for what Ir. den Toom dubbed a "Dutch Evening", a "Special

President and Vice-Presidents

(1973–1975)

President:	Mr. Robert L. M. Vleugels General Manager, Port of Antwerp, Belgium
First Vice-President:	Mr. Howe Yoon Chong Chairman/General Manager, The Port of Singapore Authority
Second Vice-President:	Mr. George W. Altvater Executive Director, Port of Houston Authority, Texas, U.S.A.

Executive Committee

(1973–1975)

Mr. Robert L. M. Vleugels	President
Mr. Howe Yoong Chong	Frist Vice-President
Mr. George W. Altvater	Second Vice-President
Mr. A. Lyle King	Immediate Past President, Director, Marine Terminals, The Port Authority of New York and New Jersey, U.S.A.
Y. M. Raja Azam	Chairman, Kelang Port Authority Malaysia
Mr. Robert Boeuf	General Manager, Port of Dunkirk Authority, France
Mr. W. E. Brotherson	President, The Maritime Services Board of N.S.W., Australia
Dr. Chujiro Haraguchi	President, Japan Port and Harbor Association, Japan
Mr. Stanley Johnson	Managing Director, British Transport Docks Board, U.K.
Mr. P. K. Kinyanjui	Chairman, East African Harbours Corporation, Kenya
Mr. Fumio Kohmura	Vice President, Nagoya Port Authority
Mr. J. McConnell	Chairman, Fremantle Port Authority, Australia
Dr. Fernando Moreira	President, Administracao dos Portos do Douro e Leixoes
Mr. Ben E. Nutter	Executive Director, Port of Oakland, U.S.A.
Mr. Bruce Procope	Chairman, Port Authority of Trinidad and Tobago
Mr. Thomas T. Soules	Port Director, Massachusetts Port Authority
Mr. D. E. Taylor	Chairman, National Harbours Board, Canada
Ir. J. den Toom	Managing Director, Port Management of Amsterdam, The Netherlands
Mr. R. K. Trimmer	Chairman, Northland Harbour Board, N.Z.
Mr. Gengo Tsuboi	Vice Chairman, The Japan Shipowners' Association

Dutch Farewell Party" which you have never experienced in your life.

Entering the first hall, you heard a band playing light music on the platform against the wall on the left. On your left near the entrance was a tiny cattle farm with a calf and a lamb grazing. Next to it on the corner was a sabot shop where sabots were being chiseled. Next to it was a Heineken beer stand.

On the other side was a flowerstand, a fruitshop and a delicatessen stand. At the other end of the long hall was a Bols and whiskey stand. Turning to the right and walking to the end, you found a dozen tables surrounded by people eating buffet food. Turning round, you saw stalls where craftsmen were weaving baskets, rolling cigars, cutting diamonds, carving wooden plaques, clipping silhouette portraits in black paper, or selling smoked eels, marinated herring, Delft Wares, icecream, handkerchiefs and linens. It was Holland in miniature, for all to see, taste, touch and enjoy. All foods and beer were free.

At a cheese stand, a big fat wheel of Gouda cheese was displayed for a "Weight Guessing Contest". The notice board invited you to write your guessed weight of the cheese on a slip and casting it in the box placed there. The person who guessed closest to the truth would be awarded the massive cheese free.

All the while, the band played hot music, and in between played to accompany the chansons sung by Miss Lenny Kuhr. Presently a live (not electronic) seven-man band entered the hall, all wearing clatterings sabots. They did not mount the platform but played in the center. People surrounded them, began to swing their heads, then shoulders, and before long a dancing circle was formed. The boisterous farmers' band seemed to cast a magic spell of hilarious mood. Red neckerchiefs and farmers' caps for men and farmers' wives' caps for ladies were handed out. The band marched in again, and the band leader, a typical farmer, apparently with his denture removed for the occasion, looked like—it, immensely to add to his character. Then again the march began — "When the Saints Go Marching In"—and the dancing ring grew thicker and larger.

All ate, drank, and danced to their hearts' content before they reluctantly headed for hotels.

Meetings of Four Special Committees

(by Kimiko Takeda)

On Monday, May 7, from 08:00 to 09:00, Meetings of the Special Committee on Containerization and Barge Carriers chaired by Mr. Ben E. Nutter, Executive Director of Port of Oakland, the Special Committee on Legal Protection of Navigable Waterways, chaired by Mr. Andre Pages, Inspection General, Ministry of Equipment, France, the Special Committee on Large Ships, chaired by Mr. Paul Bastard, General Manager, Port Autonome du Havre, who succeeded Mr. Stig Axelson upon his recent resigning from IAPH, were held simultaneously at the Rooms, VII, E-F, and IX of RAI Congress Center respectively.

Also in the evening from 19:00 to 20:00, Meeting of the Special Committee on International Development chaired by Mr. John Lunch, Director General of the Port of London Authority was held at Appolo Hotel in Amsterdam.

At the second plenary session scheduled on Thursday, May 10, from 13:30 to 14:30, Chairmen of the Special Committees made report to the delegates on the respective Committees. The Chairman of the Committee on Containerization presented his committee's report which was a survey report on container and barge carrying (LASH/Seabee) facilities at ports and terminals around the world, a reproduction of which is included in the addendum of this issue. Chairman of the Committee on Legal Protection of Navigable Waterways presented a report on his Committee, and also a report of the Committee on Large Ships was presented at the Conference through the good offices of Mr. Lyle King, New York who helped the Committee's printing and mailing the report.

Five Working Sessions

(Last-minute changes in the names of participants, if any, shall be reported later.)

FIRST WORKING SESSION

Tuesday, May 8—10. 30–12. 30

The functions of port undertakings

Chairman: Mr. STANLEY JOHNSON, C.B.E.
Managing Director British Transport Docks Board, London

Vice Chairman: Mr. D. E. Taylor, Chairman
National Harbours Board of Canada, Ottawa

Members: Mr. W. H. Brotherson
President, the maritime services Board of New South Wales

Mr. Denis Hegarty
General Manager of the Port of Dublin

Mr. Masaharu-Ikeda
Director-General, Port and Harbor Bureau, Kobe City Government.

SECOND WORKING SESSION

Tuesday, May 8—14. 00–16. 00

Preventive measures against air and water pollution in port areas

Chairman: Mr. ROBERT VLEUGELS, General Manager
the Port of Antwerp

Members: Capt. R. J. Ligtermoet
Assistant Port Manager, Port of Montreal

Mr. Tokuzo Hanzawa
Director-General, Port & Harbor Bureau
Kawasaki City, Japan

Mr. W. H. Brotherson, C.B.E.
President, the Association of Australian Port and Marine authorities
President, the Maritime Services Board of New South Wales

(Continued on Next Page)

Meeting of Editorial Collaborators

(by Kimiko Takeda)

On Sunday, May 6 from 11.30, the first meeting of the Editorial Collaborators of "Ports and Harbors" since their appointment by each member of the Executive Committee was held at the Room C, RAI Congress Center. Mr. Katsuya Yokoyama, IAPH Deputy Secretary General took the chair of the meeting which was attended by John N. Crisford, Public Relations Officer, of the British Transport Docks Board, U.K. and Mr. David Post,

(Continued from Last Page)

THIRD WORKING SESSION

Thursday, May 10—9. 30–12. 00

Problems of developing ports and their solution

Chairman: Mr. HOWE YOON CHONG, Chairman
General Manager, the Port of Singapore Authority

Members: Mr. Peter Kabibi Kinyanjui
Chairman, East African Harbours Corporation

Mr. John Lunch
Director General, Port of London Authority
Tan Sri Abdul Jamil bin Rais
Chairman, Penang Port Commission

Mr. A. J. Carmichael
IBRD Representative

Mr. J. N. Bathurst
UNCTAD Representative

Mr. E. E. Polluck
B.T.D.B. Representative

FOURTH WORKING SESSION

Thursday, May 10—15. 00–17. 30

Coordination in the planning of links between ports and the hinterland to facilitate movement of international transportation

Chairman: JOSEPH L. STANTON
Maryland Port Administrator
Maryland Port Administration
Baltimore, Maryland, U.S.A.

Members: Eric Schenker
Professor of Economics
The University of Wisconsin
U.S.A.

M. J. J. van Riel
Senior Economist
Port Management of Amsterdam

(Continued on Next Page)

English language writer for Port of Amsterdam. Also present were two IAPH under secretaries, Mr. Yoshio Hayashi, Editor of "Ports and Harbors" and Miss Kimiko Takeda, Assistant.

Mr. Yokoyama began with the report of contributions being received from public relations officers of many ports and friendly organizations including those newly appointed Editorial Collaborators, of which the Secretary General and the Editor are most appreciative.

Mr. Robert L. M. Vleugels, General Manager of Port of Antwerp, who himself is serving as one of Editorial Collaborators, did show up in the course of the meeting and joined the discussion. Very enthusiastic discussion continued until the meeting was adjourned at 13.30 about the editing of the magazine aiming at further improvement of its content.

Continued from Page 8

—Opening Address

and our seaports are of course vital to the whole system. Two of them, Amsterdam and Rotterdam, have become very large ports indeed. Needless to say, we are proud of them, but they are also a worry to us. I shall revert to this later.

The importance of our ports as industrial centres has become very much greater since the war. Seaports turned out to be attractive places in which to set up basic industries that are dependent on ocean transport for their supplies of raw materials; Holland has been able to benefit by this. The industries located around our seaports are major enterprises capable of strong growth with high productivity rates per worker. They have a powerful stimulating effect on all manner of undertakings far beyond the actual port areas. For this reason we regard encouraging the establishment of industries around seaports in economically backward areas as desirable, because it reinforces the structure of such areas and increases employment. Accordingly, the authorities decided to promote the establishment of industries around

(Continued from Last Page)

Dr. Boyer
Maryland Port Administration

Mr. F. De Vos
Economic Adviser
Canadian National Maritime Administration

Mr. Toshio Suganuma
Assistant Director
Port and Harbor Bureau
Tokyo Metropolitan Government
Japan

Mr. M. Morita
Director, Administrative Division
Port and Harbor Bureau
City of Osaka, Japan

FIFTH WORKING SESSION

Friday, May 11—8. 30–11. 00

Potential of cargo distribution by barge carrier

Chairman: Mr. BEN E. NUTTER
Executive Director Port of Oakland

Members: Miss Miriam E. Wolff
Director, Port of San Francisco

Captain A. Wepster
Planning Department, Holland America Line

Mr. Masatoshi Kinouchi
Director, Planning Division, Keihin (Tokyo Bay) Port Development Authority

Introduction To a panel discussion on the LASH and SEABEE barge carrying systems.

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seaports elsewhere in the Netherlands, particularly in the area around the Ems estuary and around the Scheldt basin in the south. This policy was adopted with a view to killing two birds with one stone, firstly, to relieve the intolerable congestion in the "Randstad" conurbation in the west of the country by channelling industrial growth to other regions and, secondly, to bring about a nationally more balanced economic growth and a more rational distribution of employment.

So far, I have only shown you the obverse of the medal; now let me show you the other side, the disadvantages such as water and air pollution and the space required for seaport development. We have to face up to such problems as congestion in transport and traffic, tightness in the labour market which sometimes tend to make seaports centres of inflation, encroachment on nature and recreational areas, spoiling the landscape, upsetting the ecological balance, and so on. No wonder, then, that seaport development is one of the leading topics in the Netherlands at the moment.

The essential problem is how to ensure that we shall be serving the best interests of coming generations.

People's views on the subject fall broadly into three categories.

To some it is continued economic growth that should take pride of place; they believe that there can be no well-being without prosperity. Consequently, they demand the continued expansion of the industrialized seaport areas. Others stress the need for balanced human development which involves making the environment in which we live and work as attractive as possible, providing the best possible social and cultural amenities and attuning employment to the labour potential. This view only allows of limited seaport development. The views in the third category are of those who regard the preservation of nature's balance and of the country's biological resources as being paramount. This view springs from concern at what they call man's careless treatment of his environment, which, so they contend, is prejudicial to his own survival. Continued expansion of the industrialized seaport areas would only aggravate their anxiety.

It is evident that entirely different ideas emerge, depending on the approach. Discussions are made still more difficult because people do not always realize what effect the adoption of a certain approach will have on the complex of factors that determine our well-being. It is therefore essential that we should consider the consequences very carefully to ensure that the policies we adopt are in all respects rational. The first tentative step in that direction has already been taken—it is a recently completed study of the development of south-west Holland, which is also called the "Golden Delta" region. Three alternative models have been worked out in the study; they are

Post Conference Tour

General Management of The Port of Antwerp

Note: the photos show participants during the reception in the Antwerp City Hall or on board during the visit to the Port of Antwerp.

May 28, 1973:—After the 8th I.A.P.H. Conference a post conference tour was organized by the General Management of the Port of Antwerp, in cooperation with the city and port authorities of Bruges-Zeebrugge and Ghent.

Some 75 participants visited ports and cultural places of interest.

The first day (Sunday, 13th May) the Delta works in the Netherlands were visited. The Delta project provides for the closure of several sea inlets by means of massive dams in order to protect the land from possible spring tides (like the one in 1953 when 1850 people lost their lives). An engineer of the Ministry of public works explained the main hydraulic engineering projects. In the evening the participants arrived at Bruges, a city of unrivalled beauty, the beloved place of the Flemish primitives (Memling, Van Eyck, ...).

The next day started with a tour of the historical sights, visits to the old cities Damme and Lissewege and to the port of Bruges-Zeebrugge (±10 million tons of cargo in 1972). In the afternoon there was a conducted tour of the medieval city and a visit to some of the remarkable buildings and museums while in the evening a splendid buffet-reception was offered by the city and port authorities in the Gothic Hall of the City Hall.

Tuesday was reserved for a visit to the city and the port of Ghent (some 10 million tons of cargo in 1972).

A lunch was offered by the city of Ghent in the medieval abbey of Bijloke.

During the sightseeing tour a special visit was made to the cathedral in order to see the "Adoration of the Mystic Lamb" (Van Eyck) one of the most famous masterpieces of painting of all times.

The last day the city of Antwerp

severally described as the economic model, the socio-cultural model and the environmental model. Objectives have been formulated for each model and the objectives pertaining to one model are taken as peripheral conditions for each of other models.

On filling the models in it became evident that there were certain gaps in our knowledge of various subjects. What the study has given us is a better understanding of the interrelationship between developments within the community. It is also helping us to see more clearly to what extent certain moves are compatible with each other.

Working with models gradually gives one a greater sense of security when deciding on matters of policy.

Structural diagrams are being prepared within the framework of national physical planning in this country; all manner of demands for space that are being made (for example, for traffic and transport purposes, for domestic water supplies and for seaports) are being charted, sector by sector.

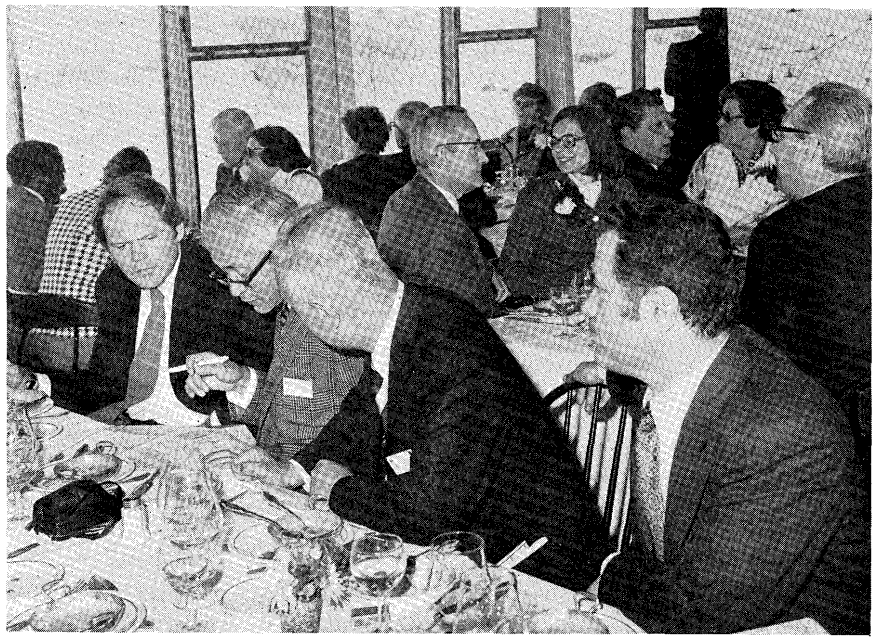
Demands for space will involve conflicts of interests in certain areas; the interests will have to be weighed against each other. In view of this, great importance is attached to the accurate formulation of the objectives pertaining to each sector.

welcomed the participants. In the morning there was a visit to the house of Rubens and to the Flemish Galleries of the Royal Fine Arts Museum (Rubens, Jordaens, Van Dijck. . .) and the cathedral.

The official reception in the City Hall preceded an excursion on the river and through the port by motor launch with launch on board offered by the city.

This was the final point of a 4 days' programme during which people of so many countries became close friends.

Ballet-minded participants still could continue the programme by attending, as special guests of the city of Antwerp, a ballet performance of the Festival of Flanders.



Structural diagrams of this kind are also being prepared for the seaports. Our policy is to achieve what I would describe in two words as 'rational development'. In fact, we are concerned as much with the socio-cultural and spatial as with the national-economic and industrial-economic aspects. In other words, the effects of seaport development on, say, the environment must be acceptable. Consequently, seaport development policy must be incorporated in general government policy.

Most of our seaports belong to municipalities. Their administration and operation are the responsibility of the municipal executives, who are democratically answerable to the municipal councils. In itself this is quite natural, at all events in the Dutch context. A seaport is an enterprise with its own balance sheet. Consequently, the operator should, up to a point, have a free hand. An enterprise of this sort can best be managed by the executive body that is most closely concerned with local affairs, and that is the municipality. A port must also be in a position to adapt itself in good time to new developments. This calls for quick decisions; they, too, are best taken locally. The administration of a port by a municipality also has its disadvantages, however.

The rapid expansion of the ports of both Amsterdam and Rotterdam have caused the administrative areas of the ports to spill over the municipal boundaries. Any adverse effects of expansion may be felt far beyond the limits of municipal jurisdiction; besides, several municipalities may be involved in the matter of deciding on the placing of residential areas and providing the proper infrastructure. All this calls for cooperation on a broader basis. We are studying the whole matter very carefully indeed but we have not solved all the problems yet.

Incorporating seaport policy in general government policy demands close cooperation between the municipalities and the central government. A special form of administration has been created for ports in areas in which the Government is encouraging seaport development to strengthen the regional structure; we have dubbed it "havenschap" or "harbour board". The central government, the provinces and the municipalities are represented on these boards. Operational deficits, which are almost unavoidable in the initial stages, are distributed pro rata over the three tiers. The object is, in fact, to enable each port to pay its way with the least possible delay. Every established port is also expected to be able to pay its way, since running a port is virtually a commercial undertaking. The policies of all the individual bodies administrating ports needed coordinating to form what could rightly be called a national seaport policy, so

Comments on the Eighth Conference

By John M. Fulton, President, Port of Portland

Any comment on the Eighth I.A.P.H. meeting would lack dimension and sensitivity if there were no mention of the warmth and friendliness, coupled with the effective, imaginative and painstaking detailed planning and execution of the entire program, by the Port authorities of Amsterdam and Rotterdam. Our hosts performed superbly, and those attending were profoundly grateful.

The sessions continue to reflect the practical benefits that result as port representatives meet biennially to exchange views, and to reap the benefits of the studies made by the Standing Committees.

Particularly noteworthy was the Working Session on "Port Undertakings," chaired by Mr. Stanley Johnson, C.B.E. The presentations were thorough, and the viewpoints of the panelists were exceptionally provocative. The discussion that followed—which was animated—served to emphasize the interest in this topic.

Unfortunately, time ran out before many of the ramifications could be adequately explored and viewpoints shared. It was evident, however, that many are groping for sound answers to the issues posed by port development programs, including such points as:

1. *What methods can be employed to measure social responsibility vs. commercial benefits?*
2. *When are subsidies justified, and to what extent?*
3. *To what degree should a port's activities reflect governmental policy, and to what extend do these, or should these policy positions, impinge on local decision making?*
4. *What guidelines are there to resolve the obvious contradiction in seeking to insure that port operations are profitable, yet advocating—as one panelist did—that the port is responsible for the profitable operation of the steamship lines that call?*
5. *With growing emphasis being placed on the problems of pollution, industrial concentration and population density, what criteria should be utilized in a workable and practical approach to socio-economic accounting to provide a reliable and accepted information base for decision-making?*

It is obvious that the issue of port undertakings is and will remain of critical importance to port management. The port director or port general manager must plan, propose, justify, seek and obtain approval, and then supervise all aspects of the undertaking.

The important words are, "seek and obtain approval."

I.A.P.H. is essentially a forum for professional port management. Its effectiveness to that extent is undeniable. What may prove of increasing significance in the future will be the views and the attitudes of those at the policy-making level—those who must, to varying degrees, provide guidance, approve direction, authorize capital and operating expenditures, and then answer publicly for what takes place.

One particularly impressive voice was heard—that of His Excellency, the Honorable B. J. Udink, Minister of Transport, Water Control and Public Works of The Netherlands. In his address, Mr. Udink identified critical policy questions which either currently apply or soon will apply to many member ports. He also touched on the initial steps established within the Benelux countries to provide channels of communication and information exchange as essential prerequisites to policy formulation.

The remarks of Mr. Udink and the observations of Mr. Johnson and his Panel paralleled but did not overlap. It is to be hoped that Mr. Johnson's Standing Committee will be continued, and that a second Standing Committee on policy formulation will be established which can provide the membership with the experience and insight of those who are already probing decision-making in a broader context.

in 1968 the Seaport Consultation Committee was set up for the purpose. The central government, port administrators and the industries concerned are represented on the committee. It not only serves as a forum for regular consultation but also makes recommendations. In the four-and-a-half years since it was seet up it has been very active indeed in a great variety of fields. Consultation within the committee has undoubtedly helped people to understand the other man's point of view. One of the matters tackled by the committee was to find out in what areas port administrators could cooperate to their mutual advantage. Cooperation would seem feasible for example in the matter of attracting business, in the harmonization of port dues and the cost of sites, and in the coordination of investments with a view to obviating over-investment.

I have used the term "national seaport policy" once or twice in my talk. This might lead you to suppose that we would be quite satisfied once we had achieved an integrated approach within our own frontiers. But I need hardly tell you that it is particularly in the seaport sector that the need for consultation and cooperation transcends national frontiers. For this reason, our Seaport Consultation Committee concerns itself with the international aspects of the subject as well as with purely domestic problems.

The most natural thing for us to do is try and reach agreement with our neighbour, Belgium, on the coordination of our port policies. With this in view, there have been consultations for some years now within the BENELUX economic union, both at official and ministerial levels, with the main object of aligning the seaport policies of Belgium and the Netherlands. A second major objective has been to foster cooperation between Belgian and Dutch port authorities. The assistance of port authorities is almost indispensable; after all, the people who run ports have their own very special competencies and responsibilities, not only in the Netherlands, as I explained to you, but also in Belgium. The spheres of influence of the big seaports in the BENELUX countries overlap to such an extent that consultation between these countries become a sine qua non.

The shared responsibilities of port executives have been accorded inter-

(Continued on Page 32)

Sirs,

Re: Rotterdam/Europoort

Has it ever occurred to you that Europe's markets ought to buy your products? Or, if you're already selling in Europe, that you ought to sell more? Yes? You need a distribution point. One of the best is Rotterdam. There are many good reasons why. Here are a few:

Rotterdam reaches Europe's richest markets. Within a 300-mile radius surrounding Rotterdam are 160 million consumers. They live in Germany's Rhine and Ruhr areas, Southern Scandinavia, London and Manchester, all Holland, Belgium and France's industrial north. All are urban-industrial markets. Together they form what may be one of the richest areas of its kind in the world.

Rotterdam is at the hub of transport routes to and through this market. It fronts on the North Sea, with short connections to England. It straddles the mouth of the Rhine, over which 200,000 barges carry cargo to Germany, France and Switzerland every year.
It stands on several of Europe's international highways.
It sends off rail cargoes direct to every point in Europe.
(Not surprisingly, half Rhine shipping is Dutch-owned. And 40% of Common Market road haulage is Dutch.)

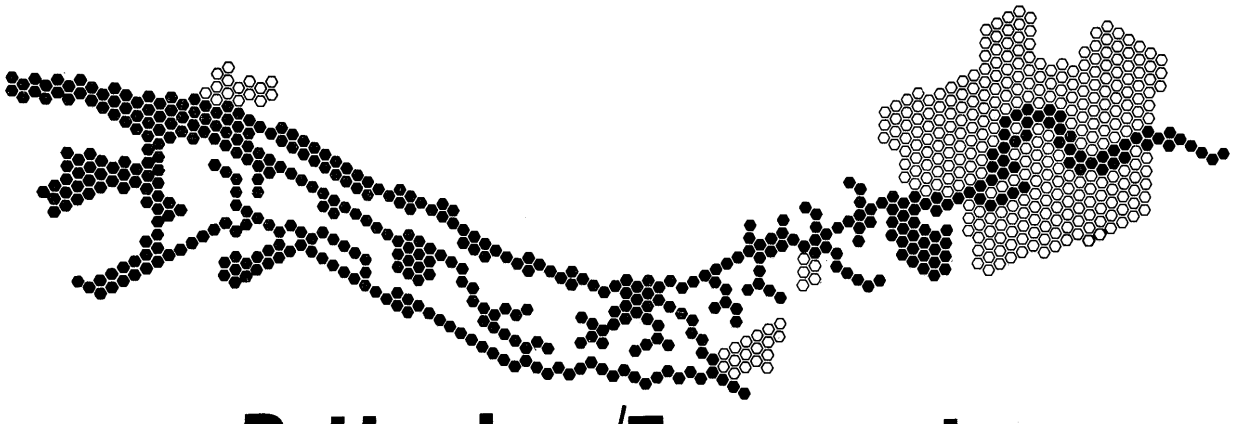
Rotterdam's harbour can already berth tankers of 250,000 dwt. Equipped to handle any type of cargo - including all manner of containers, LASH, Seabee and roll-on/roll-off transport.

Rotterdam's industrial activity is reflected, among others, in five refineries and the imposing petro-chemical industry they have fostered.

Dutch customs regulations may be the supplest anywhere. There is no red tape and goods in warehouses may be manipulated in virtually any way. The smooth movement of shipments in and out of Holland is the proud policy of Dutch customs officers.
Another pluspoint: Rotterdam's port area boasts ample storage space, indoors and out.

Distribution through Rotterdam, or from Rotterdam, makes good sense. Don't you agree?

If you're not yet certain, or need to know more, contact us.



Rotterdam/Europoort

Havenbedrijf
der Gemeente Rotterdam
(Rotterdam Municipal Port Management)

Poortgebouw - Stieltjesstraat 27
Rotterdam - P.O.B. 5211
Tel. (010) 84 91 33

HOUSE OF REPRESENTATIVES
WASHINGTON, D. C. 20515

LINDY (MRS. HALE) BOGGS
SECOND DISTRICT, LOUISIANA

June 19, 1973

Dear Mr. Sato:

It was such a pleasure to receive the beautiful resolution adopted by the International Association of Ports and Harbors in honor of Hale's memory.

Hale was proud of his membership in the IAPH, and I am deeply moved by the tribute to him which was so thoughtfully expressed by your membership in this resolution.

I am sure you know how much this means to me and our children, and they share my gratitude for your appreciation of Hale's worth. I hope you will advise the Association of our appreciation and tell them how much we are sustained by such tributes to Hale from those who admired and respected him.

My warmest best wishes.

Sincerely,

Lindy Boggs

Lindy (Mrs. Hale)Boggs, M.C.

Honorable Hajime Sato
Secretary General
International Association of Ports and Harbors
Kotohira-Kaikan Building
1, Kotohira-cho, Minato-ku
Tokyo 105. Japan

Mrs. Hale Boggs: In reference to Resolution No. 5 of Condolence upon the passing of the Honorable Hale Boggs, introduced above, we take liberty to reproduce here Mrs. Hale Boggs' letter to our Secretary General.

national recognition in what is known as the BENELUX Seaports Conference between the relevant ministers and port authorities of the two countries, which meets annually. I took the chair myself at the Conference in October 1972; I have come to realize that the discussions made a very positive contribution towards international cooperation in seaport matters. The BENELUX consultations are still at what I might call the "exchange-of-information" stage. For example, an information-exchange system is now operating in respect of infrastructure investments which is already bringing us very much closer to the ultimate coordination of investment policy generally. In fact, we shall soon have to change over in every area from our present consultation to coordination.

The desirability of adopting a common seaport policy is also being felt in the broader, international context; just consider the European Communities. In April last year the European Parliament expressed the view that a common policy would be desirable. I believe that the BENELUX countries can play an important part within this larger international framework, because possible ways and means of engineering a common seaport policy have been studied within BENELUX for some considerable time.

As in BENELUX, cooperation in this sphere might commence with the exchange of information. I therefore wholeheartedly applaud the European Commission's initiative in consulting port administrators in member states.

The outcome of the European Commission's investigations might be taken as the basis for efforts gradually to harmonize the port policies of member states; I can see as the ultimate objective (though only in the longer term) harmonization of the rules on competition, which is also the purpose underlying the provisions of the Treaty of Rome.

If the seaport policies of the governments of member states are to be prevented from degenerating into instruments for obtaining ever higher subsidies and if, on the other hand, a yield on investments is to be secured that is reasonable by national economic standards, a European seaport policy safeguarding the rules of free competition will be indispensable.

A European seaport policy would complement a transport policy that would be neutral in respect of the seaports. This would be the case, provided the European transport policy did not alter the ports' mutual competitive position within the EEC.

Mr. Chairman, Ladies and Gentlemen; I have tried to give you some idea of what we have been doing in the Netherlands in the last few years to solve seaport problems. Some of the points are exclusive to this country, others will have struck a familiar note. I have glanced through your programme and I can see that you will be dealing with every single aspect of ports and port activities. I am sure you will all learn a very great deal by listening to the other man's experiences and views. It is high time we all did so. The problems with which we are confronted in this area are perplexing enough to warrant our joining forces to solve them. I hope your efforts will be crowned with success.

I now declare your congress open.

Thank you.

Elizabeth/Port Newark

America's 2,000 Acre Container Capital has turned the corner to greater and better container facilities

Now we stand ready to handle more new containerships with the necessary land and equipment. Also special and supporting facilities... coordinated into a great new intermodal complex for tenant use.

We welcome the two new container terminals of Maher Terminals, Inc. and Sea-Land Service which will be operating soon in this great new complex. One will have 2,400 feet of berthing space supported by more than 150 acres of terminal space. The other 4,519 feet supported by 232 acres.

And we salute the five major containership terminals of Sea-Land Service, International Terminal Operating Co., Universal Maritime Service, Atlantic Container Line and Pittston Stevedoring. These firms have been efficiently handling more than 6 million tons of cargo every year for the last several years.

The Port Authority of New York and New Jersey

Marine Terminal Department,
111 Eighth Avenue, New York, N.Y. 10011.

Orbiter Probe

IAPH News :

Membership Notes

Regular Member

1. Dienst Haven en Loodswezen (Curacao Harbour Authorities)
   Handelskade 7ª Curacao, Netherlands Antilles
   (Capt. Jan Oenes, General Manager)
2. Port of Ghent
   Vliegtuiglaan, 1, B 9000, Gent, Belgium
   (Mr. Clement Charlier, General Manager)
3. Port Autonome de Paris
   2, Quai de Grenelle, Paris (15eme), 75 732 Paris Cadex 15, France
   (Mr. D. Dreyfous Ducas, Director)
4. Office National des Ports du Cameroun (Cameroon National Ports Authority)
   5, Boulevard Leclerc B.P. 4020 Douala, Cameroun
   (Mr. S. Ngann Yonn, Directeur General)
5. Ministre de l'Amenagement du Territoire, de l'Equipment, du Logement et du Tourisme—Direction des Ports Maritimes et des Voies Navigables
   246, Boulevard Saint Germain, 75007 Paris, France
   (Le Directeur des Ports Maritimes el des Voices Navigables —Delegate: Mr. Andre Pages, Ingenieur General des Ponts et Chaussees 104 rue de Saint Gens, 33, Bordeaux)
6. Napier Harbour Board
   P.O. Box 166, Napier, New Zealand
   (Mr. N. de V. Lawrence, Chief Executive Officer)
7. Australian National Line
   69-75, Riverside Avenue, South Melbourne, Australia
   (Mr. R. D. Robin, General Manager)
   (Note: Status changed from Associate Membership)
8. Mina Zayed, Abu Dhabi
   Ministry of Communications, Ports Department, P.O. Box 422, Abu Dhabi
   (Mr. Zakaria El-Sadr, Port Manager)

Associate Members

Class A:

1. AGA Navigation Aids
   77, High Street, Brentford, Middlesex, England TW8 OAB, U.K.
   (Mr. Stig Ehnbom, General Manager)
2. Fudo Construction Co., Ltd.
   5-30, Hirano-machi, Higashi-ku, Osaka 541, Japan
   (Mr. Mitsuo Ogawa, General Manager, Central Laboratory)
3. Shimizu Construction Co., Ltd.
   No. 1, 2-chome, Takara-cho, Chuo-ku, Tokyo Japan
   (Mr. Kenichi Fujimori, Senior Managing Director)
4. Rendel, Palmer & Tritton
   61, Southwark Street, London, SE1 1SA, England, U.K.
   (Mr. J. E. G. Palmer, CBE, FICE., FASCE., Consultant)
5. Mr. Jerrold P. Turner
   #3 Greenway Plaza East—Suite 236, Houston, Texas 77047, U.S.A.
6. Liversey & Handerson, Consulting Engineers
   Albury House, Albury, Near Guildford, Surrey, England, U.K.
   (Mr. A. B. Henderson, Partner)

Class D:

1. Mr. Dudley Perkins
   63 Netherhall Gardens, Hampstead, London NW3 5RE, U.K.
2. Mr. J. G. Th. Linssen
   Duinweg 21, The Hague 2011, Netherlands

Class E:

1. Mr. A. S. Harding, Partner
   Livesey & Henderson, Consulting Engineers
   Albury House, Albury, Near Guildford, Surrey, England, U.K.

Change of Name:

1. Former Monrovia Port Management Co., Ltd. has changed its name to National Port Authority of Liberia

Travelers

• PORT OF STOCKTON: A reception was held at Hotel Okura, Asuka Room, in Tokyo on Wednesday, May 9, 1973 from 6:00 to 8:00 p.m. by Port of Stockton Chairman of Commissioners Mr. Leonard W. Pores, its new commissioner Mr. Robert W. Foy, Port Director Mr. Richard A. Andersen and Assistant Port Director Mr. Fred D. Bergold, Jr.

• MR. K. S. CALDER, CHAIRMAN, BAY OF PLENTY HARBOUR BOARD, NEW ZEALAND, on his return journey from the Eighth Conference in Amsterdam, visited the IAPH Head Office in Tokyo on June 8 morning and enjoyed reunion with Secretary General Dr. H. Sato and Deputy Secretary Mr. K. Yokoyama.

• From MELBOURNE, AUSTRALIA, hailed Mr. A. S. Mayne, Melbourne Harbor Trust Chairman, accompanied by Mrs. Mayne, on Tuesday, June 12. Before departing from Osaka for Hong Kong on June 19, the couple visited the IAPH Head Office on June 13 and attended a dinner in their honor on June 15 evening at the tempura house "Ippoh" where Mr. Toru Akiyama, Secretary General Emeritus, Mr. Katsuya Yokoyama, Deputy Secretary General and others were present. Between times, Mr. Mayne was astir, inspecting Port of Tokyo on June 13, Yokohama the next day, Port of Osaka on June 18 and Kobe the next day.

• From SAN DIEGO, CALIFORNIA, Mr. Robert Mercer, Port of San Diego's director of Trade Development, came to Japan again to sell his port and tell shippers about the new container crane to be shipped from Japan very soon. Mr. Mercer called at the IAPH Head Office on Thursday, June 21 morning and exchanged views with Mr. Kotatsuya Yokoyama, Deputy

Affix stamp here

The International Association of
Ports and Harbors

Kotohira Kaikan Building,
No. 1, Kotohira-cho, Minato-ku,
Tokyo 105, JAPAN

Secretary General.

• From WELLINGTON, NEW ZEALAND, arrived at Tokyo Airport on Friday, June 22, 1973 Mr. O'Regan, Chairman, and Mr. R. R. Reeves, General Manager, of Wellington Harbour Board on their return jaunt from the Eighth Conference in Amsterdam. They called at the IAPH Head Office Saturday morning. Secretary General Dr. H. Sato and Deputy Secretary General Mr. K. Yokoyama invited them to a lunch at the Mitsui Club, Toranomon. The two gentlemen spent Monday and Tuesday visiting Japanese shipping companies. On Wednesday Mr. O'Regan flew from Tokyo to Hong Kong. Mr. Reeves stayed on to visit the Port of Osaka on Thursday and travel further on to Taipei.

IAPH—IMCO Cemented by BPA

(Reported by Katsuya Yokoyama, Deputy Secretary General of IAPH)

A brief note on a visit to London, United Kingdom, from 14th to 16th May, by me during which wide ranging discussions on matters of mutual interest were held with officials of the British Ports Association and the Intergovernmental Maritime Consultative Organization with which I.A.P.H. has enjoyed Consultative Status as a Non-Governmental Organization since 1966.

The British Ports Association (formerly the Dock and Harbour Authorities' Association) is, of course, a long-time member of I.A.P.H. The ties between the bodies are even closer however, because the B.P.A., at the request of the Rt. Hon. Viscount Simon, a past President and founder member of I.A.P.H. has acted in the capacity of I.A.P.H. Liaison Office with I.M.C.O., and also as a convenient and effective medium through which I.A.P.H. can disseminate information and receive views from U.K. Members.

Visit to B.P.A.

I was welcomed at the offices of the British Ports Association by Mr. Eric Bainbridge, Director, and Mr. Alex J. Smith, Secretary, to whom he expressed grateful appreciation for the services they had given in the past to I.A.P.H. with the wish that these would long continue.

From left to right, Messrs. Alex J. Smith, Secretary, BPA, Katsuya Yokoyama, Deputy Secretary General IAPH, Eric Bainbridge, Director, BPA.

The links between I.A.P.H. and I.M.C.O. were emphasized during discussions; mention, in particular, was made of the need to continue the practice of submitting reports on the work I.M.C.O., of interest to members, for inclusion in this magazine.

Note was taken of the fact that whilst B.P.A. observers can and do attend meetings of I.M.C.O., they have not, as yet, been able to speak authoritatively behalf of I.A.P.H. at these meetings. This problem will be examined in detail by the appropriate Committee of I.A.P.H.

Discussions also touched upon the advantages which might result from placing a certain emphasis on regional consideration of mutual problems.

Visit to I.M.C.O.

Accompanied by Mr. Smith, I was received at the offices of the Intergovernmental Maritime Consultative Organization by Captain Alexander Saveliev, Secretary Maritime Safety Committee, Mr. Y. Sasamura, Head of Marine Science and Technology Division, Captain Z. Sdovgas, Head of Maritime Safety Division and was able to express to them his appreciation of the continuing cooperation between I.M.C.O. and I.A.P.H.

A detailed explanation was given of the work and recent activities of both I.A.P.H. and the B.P.A. Liaison Office.

Discussion of matters of mutual interest took place; the topics included the issue of I.M.C.O. documentation and attendance at meetings.

The continuous nature of the work on which I.M.C.O. is engaged and of the problems which it has under consideration, provides an opportunity for I.A.P.H. members to study, in depth, those aspects which are relevant to them. The possibility exists of presenting the collated views members on matters of importance before I.M.C.O. through the B.P.A. Liaison Office.

Continuing issues of relevance to ports, mention of which was made in discussions are Tonnage Measurement, Maritime Safety—including Collision Regulations and Carriage of Dangerous Goods and Marine Pollution.

All-time Tonnage Records

OTTAWA, May 25, 1973:—All-time tonnage records are highlighted in the 1972 St. Lawrence Seaway Authority Annual Report, released to-day in the House of Commons by Federal Transport Minister Jean Marchand. The year market the celebration of the 40th anniversary of the fourth Welland Canal which, since 1932, has handled more than one billion tons of cargo.

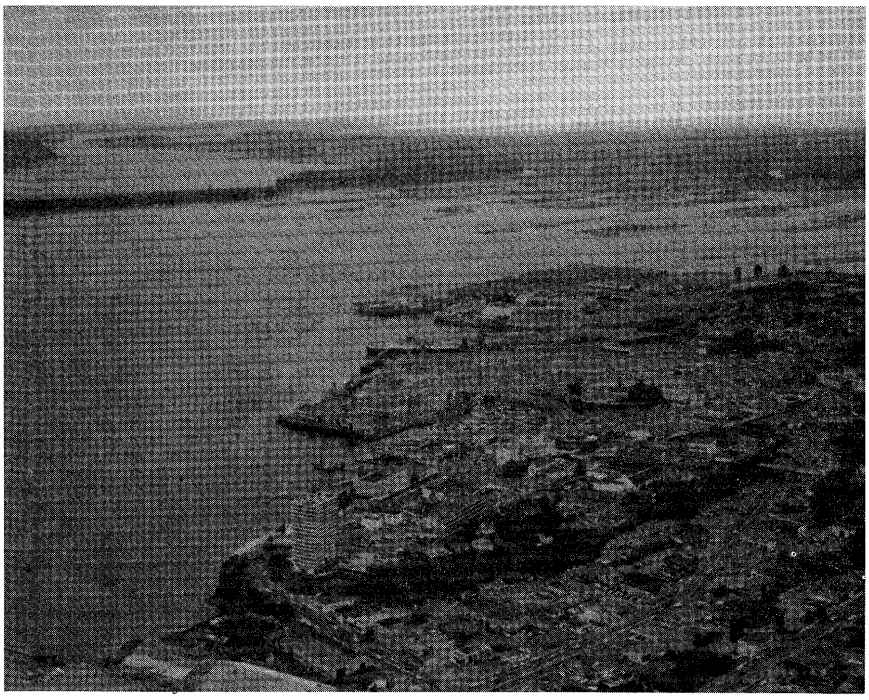
For the third consecutive year, new tonnage levels were recorded in both sections of the Seaway, with 53.7 million tons in the Montreal-Lake Ontario and 64.2 in the Welland, compared to 53.0 and 63.1 for the previous year. Total bulk cargo registered an increase of 3 to 4% over 1971, a new record for the Montreal-Lake Ontario section, with overseas tonnage reaching an all-time high of 20.5 million tons.

Navigation on the Welland Canal ended on December 15 in order to allow the $188 million By-Pass Project to be completed in time for the start of the 1973 navigation season. The new channel, now open since March 28, 1973, replaces the narrow section of the canal which winds through the City of Welland. Built with two turnnels underneath

it, its construction was intended to optimize safety, speed and efficiency for land and water traffic in the area.

Because of the large number of vessels remaining in the system, the Montreal-Lake Ontario section was kept open until December 23, the latest closing date ever recorded, to enable all vessels to clear the system. In spite of unusually poor navigation conditions, no vessel was trapped in the system.

The report also mentions the establishment of the Great Lakes Pilotage Authority, Ltd., on February 1, 1972 as a subsidiary of the St. Lawrence Seaway Authority. The Pilotage Authority is responsible for pilotage standards and regulations and for providing pilotage service in Canadian waters upstream from St. Lambert in the Province of Quebec and in the Provinces of Ontario and Manitoba. (The St. Lawrence Seaway Authority)



The latest aerial photo of the Port of Nanaimo, British Columbia, Canada—Courtesy Nanaimo Harbour Commission.

Record Container Pace Continues

Baltimore, Md., May 11:—For the fourth consecutive month, Baltimore's Dundalk Marine Terminal set new records in two container handling areas in March 1973, the Maryland Port Administration announced today.

New monthly highs in both the total number of containers handled and in the total container tonnage were registered at the terminal for that month, according to figures just compiled.

In addition, the 550-acre terminal also set new quarterly records in the same two container categories.

Total containers handled during the month reached a mark of 15,173, surpassing the old record of 12,196 that had just been established in February 1973 and bettering the same figure of a year earlier by 7,042 boxes or 86.6 per cent.

Total container tonnage for March rose to a new monthly high of 172,074 short tons, a 35,660-ton increase over the old mark, also set in February 1973, and a jump of 79.1 per cent over the totals of a year earlier.

The record-breaking month brought Dundalk's total container figures through the first quarter of 1973 to 38,572 boxes handled and 438,070 tons of containerized freight, increases of 14,105 and 139,539, respectively, over the former record totals set last year.

Dundalk, Baltimore's center for container activity, led the port to the greatest container year in its history in 1972, handling a total of 1.23 million tons of container cargo out of a portwide figure of about 1.8 million tons.

The terminal is owned and operated by the MPA, an agency of the Maryland Department of Transportation. (News from Maryland Port Administration)

New Container Center Dedicated

Baltimore, Md., May 18: — The port of Baltimore enters a new era in containerization today with the dedication of additional container facilities at Berths 11 and 12, Dundalk Marine Terminal.

The new facilities, consisting of two marginal berths, four 40-ton container cranes, two consolidation sheds totaling 127,500 square feet of storage space and 23.56 acres of backup area, bring to a climax work on a $21.7 million extension to container accommodations at the 550-acre terminal, Baltimore's center for container activity.

Over 500 guests, including maritime industry executives, business representatives and civic and government leaders, were invited to attend ceremonies at Dundalk dedicating the new facilities. Highlighting events will be an address by Harry R. Hughes, Maryland Secretary of Transportation.

Dundalk's two new berths are located on the south side of the terminal and have a combined total area of 42.8 acres. Each berth is 750 feet long and 62.5 feet wide with the total bulkhead measuring 1,911 feet.

One consolidation shed is featured at each new berth. Shed 11 is 650 feet long and has an area of 65,000 square feet while Shed 12 is 625 feet long and has an area of 62,500 square feet. Both sheds are 100 feet wide and have a clear height of 18.5 feet.

The most impressive features of the 11-12 site, the four container cranes, were manufactured by Ishikawajima-Harima Heavy Industries, Ltd., of Tokyo Japan. Valued at a total of about $4.3 million, the

cranes each have a waterside reach of 103 feet from the edge of the berth, a landside reach of 100 feet from the edge of the deck rail and a rail gauge of 50 feet.

The new berths now swing into action following the recent completion of a $3.34 million dredging job which provided deep-water slips, a new access channel from the terminal to the port's main shipping channel and a turning basin adequate to accommodate the largest container ships in service.

The southeast access is 250 feet wide, extending to a turning basin with a 1,000 foot diameter, which leads to a 350-foot wide side channel alongside each of the new berths. Water depths in the slips are 34 feet below mlw.

With the additions of Berths 11 and 12 as container handling areas, Dundalk now offers what many contend to be the finest integrated facilities for handling the shipping boxes on the U.S. Atlantic Coast.

The terminal now offers five oversized ship berths for containers, supported by a total of seven specialized container cranes and four supplemental gantry cranes; three consolidation buildings totaling 192,500 square feet of storage space; over 120 acres of heavy duty paved open storage; a roll-on/roll-off platform; five straddle carriers and TOFC/COFC service.

The new berths are expected to contribute heavily to the already tremendous container tonnages moving annually through Dundalk. Last year, the terminal handled the highest container totals in its history—over 106,000 boxes registering 1.23 million tons.

Through the first quarter of 1973, the modern terminal increased the pace by setting new records for container activity, handling 38,572 boxes and 438,070 tons of containerized freight, increases of 14,105 and 139,539, respectively, over the former record set in 1972.

The dedication of Berths 11 and 12 represents a milestone in major container handling development at Dundalk. Planned for the future is the construction of two more berths for container ships and another roll-on/roll-off platform, and possibly one more container crane.

Dundalk terminal is owned and operated by the Maryland Port Administration, an agnecy of the State Department of Transportation. (News from Maryland Port Administration)

Heavy-Duty Container Lift

Beaumont, Texas, May 10:—The Port of Beaumont's container-handling capability jumped dramatically with the acquisition by the port in early April of a heavy-duty lift machine capable of handling loaded or empty sea-going containers 20, 30, or 40 feet in length.

It is the only unit of its kind in the Sabine-Neches port area.

Availability of the new equipment will facilitate the efficient handling of containers between the port's container storage yard and the wharves, making the port more attractive to steamship lines and shippers for the movement of containerized freight.

The unit is expected to be used most frequently in transferring containers to or from over-the-road chassis or "bogies," allowing stored containers to be stacked to conserve ground space, and reducing the number of "bogies" required for movement of containers between storage area and shipside. The machine can also load or unload containers to or from railroad cars or motor trucks .

When equipped with the telescoping container-handling overhead "spreader" the machine can handle gross weights of up to 67,200 pounds and stack containers three high. It can shift forward, backward right or left, tilt a total of 24 degrees from front to rear, and handle an off-level container with one end of the container as much as 30 inches higher than ths other.

When equipped with conventional blades for operation as fork lift, the machine has a lifting capacity of 80,000 pounds. Conversion from container spreader to fork lift blades can be a accomplished by one man in approximately one hour.

The machine and all its attachments were manufactured by Taylor Machine Works, Louisville, Mississippi. (Port of Beaumont)

Trade Development Director Named

Charleston, South Carolina, April 30:—Charles A. Marsh has been named trade development director of the South Carolina State Ports Authority.

In his new post, which he assumed April 1, Marsh directs all activities of the Traffic, Sales and Public Relations departments of the ports authority.

SPA Executive Director W. Don Welch said, in announcing the appointment, "The South Carolina State Ports Authority is fortunate to obtain the services of a person with Mr. Marsh's extensive background in port promotion and steamship sales and operations."

Marsh, 43, came to SPA from American Mail Line, headquartered in Seattle. Joining the company in 1964, he served as Midwest manager and later regional manager of Central states, operating from Chicago with responsibility for the St. Louis and Cleveland offices. American Mail provides break-bulk and container cargo services between the U.S. Pacific Coast and Far East. (South Carolina State Ports Authority)

Promoted to Director

Charleston, S.C., May 1:—The South Carolina State Ports Authority has promoted Joseph P. D'Amaral to director of the operations division. He had been acting director since last November 2.

SPA Executive Director W. Don Welch said, "Mr. D'Amaral has demonstrated that he can provide the effective leadership and supervision required for efficient operation of our terminal facilities." He is responsible for three Authority terminals in Charleston and one each in Georgetown and Port Royal. (South Carolina State News)

Chicago Manager Named

Charleston, South Carolina, May 30:—Walter H. Swanson has been named Chicago regional manager for the South Carolina State Ports Authority.

In the newly created post, effective May 21, he assumes management of the Chicago office and re-

sponsibility for sales in the Midwestern states.

In announcing the appointment, SPA trade development director Charles A. Marsh noted, "We are fortunate to have Mr. Swanson joining us at this time. His experience in transportation management and sales activities in the Midwest coincides with our current expansion program."

Chicago marks the third out-of-state office location for South Carolina, Marsh said. The Ports Authority and the South Carolina Development Board jointly opened offices Jan. 1, 1973, in New York City and Tokyo.

The regional office managers solicit cargo and seek improved shipping services for the Ports Authority. For the Development Board, they provide close liaison with industrialists, traders, investors and governmental leaders, Marsh explained. (South Carolina State Ports Authority)

Port Everglades Annual Report

Hollywood-Fort Lauderdale, Fla., May 24:—The Port Everglades Annual Report for 1972, a 28-page booklet, is off the press and now being distributed. Copies may be obtained by writing to Captain N. R. Bacon, Port Director, Port Everglades Authority, Port Everglades, Florida 33316.

A new summer cruise guide, listing all sailings from the harbor through September, is also available. (Port Everglades News)

1972 Trade Analyzed

Houston, Texas: — Japan again was the Port of Houston's chief trading partner in 1972, accounting for more than half a billion dollars in exports and imports, or 15.5 per cent of the Port's record-breaking $3.3 billion of foreign trade.

West Germany retained its second place among the Port's ten leading traders with nearly $250 million, accounting for 7.5 per cent of Houston's overseas total.

In both cases, the Port's imports from these countries far overshadowed its exports, which was largely due to the heavy dominance of inbound products such as iron and steel, and all types of motor vehicles, from automobiles and trucks to tractors and motorcycles.

With most of the remaining ten trade leaders, whose total commerce with the Port accounted for 51 per cent of the $3.3 billion total, Houston's exports were either far greater than its imports or in fairly close balance.

Following Japan and West Germany as Houston trade leaders were the United Kingdom, with $188 million, accounting for 5.7 per cent of the Port's foreign tonnage. Brazil, with $165 million, ranked fourth with $62 million in imports, largely coffee.

Other 1972 leaders in the Port of Houston's foreign trade included The Netherlands, with $124 million, all but $11 million of it exports from Houston, which were largely chemical products, wheat and soybeans. In sixth place was Venezuela, with $102 million, dominated by U.S. exports of chemical products; wheat, sorghums and vegetable oils, and machinery equipment.

France, with $91 million; and Italy and Belgium-Luxembourg with $83 million each, were next, all with a favorable balance of trade. The Republic of Korea ranked tenth with $77 million in goods traded, of which $68 million was in U.S. exports, principally rice, wheat and cotton.

An interesting note was Russia. While it only began trading with the U.S. in mid-August, by the end of December nearly $65 million of Russian bound cargo had been shipped out of Houston, nearly all of it wheat and corn. Imports from the Soviets were negligible, but at the present heavy rate of shipments under the U.S.-Soviet grain pact, Russia seems certain to figure high among the Port's trade leaders in 1973. (Port of Houston News Release)

Growing Traffic

Houston, Texas:—Cargo through the Port of Houston is running nearly thirty per cent over 1972 according to figures for the first quarter of 1973 just released, with 21 million tons moved during the three month period as opposed to just over 16 million tons in the same period a year ago.

March set a new Port record in cargo handled with more than 7.5 million tons, which was 37 per cent higher than March of last year and 8 per cent greater than February of this year.

Heavy bulk grain shipments, most of it wheat for Russia under the Soviet-U.S. grain agreement, accounted for much of the gain, with 1.8 million tons exported in March, alone. To date, the port has shipped more than 6.4 million tons of bulk foreign cargo, most of it grain, which is more than double the bulk foreign shipments for the first quarter of 1972. Bulk imports for the first quarter were just under one million tons.

General cargo foreign trade showed a marked rise, also, in the first quarter with nearly 1.6 million tons handled as against one million tons for the first three months of 1972. Both imports and exports were up for the quarter in about equal proportions to the overall total gain of foreign general cargo.

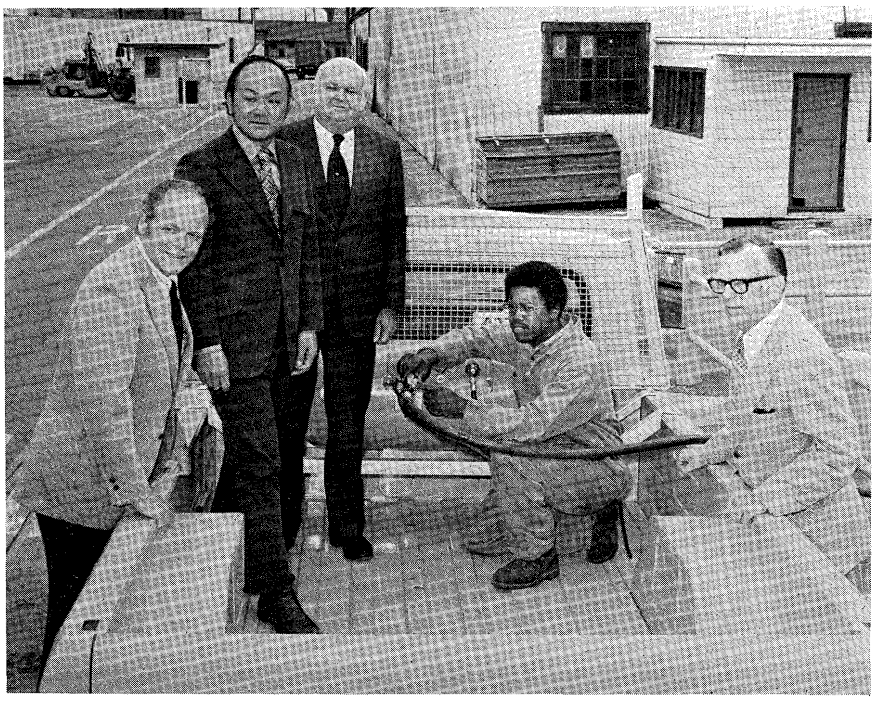
Coastwise deepsea movements were stronger, also, with 6 million tons moving as compared to 5 million a year ago. Of this, all but 800,000 tons was in outbound movements. Inland barge cargo showed a slight drop to 5.5 million tons as against 6.3 million during the first quarter of 1972. (Port of Houston News Release)

U.S. Lines Moving to New Terminal

Long Beach, Calif.: — United States Lines, Inc., this week moved into its permanent new $6-million container terminal at Berth 230 in Port of Long Beach.

The 23-acre terminal at the north end of Pier G in the Southeast Basin provides parking stalls for 774 U.S. Lines' 40-foot containers on chassis. The 800-foot long wharf is serviced by two of Paceco's latest 30 long ton capacity container cranes, whose 100-foot span permits up to seven lanes of trucks to deliver and pick up containers shipside simultaneously.

United States Lines' headquarters office and container freight



Los Angeles, Calif:—Proponents of a pilot program utilizing propane gas in Port of Los Angeles vehicles were on hand to observe refueling operations at the Harbor Department's supply yard. John Y. Chu, second from left, vice president of the Board Harbor Commissioners, represented the commission. Others were Harbor Department General Manager Bernard J. Caughlin, next to garage attendent Mike Donerson, filling the tank; Lawrence L. Whiteneck, right chief harbor engineer; and Fred B. Crawford, left, assistant general manager.

station at 980 Windham Avenue is adjacent to the new facility and covers nearly four acres.

William J. Klauberg, vice president Western division for the shipline, noted that the first vessels worked at Berth 230 will be the American Astronaut eastbound May 7 and the American Lynx west' ound on May 8.

U.S. Lines inaugurated its Tri-Continent container service linking Europe and the Far East via Long Beach two years ago, utilizing a fleet of eight Leader and eight Lancer class containerships over one of the world's longest cargo routes.

Captain William McManus, Master of the American Astronaut, is holder of U.S. Lines' transatlantic, East to West coast and transpacific speed records. Ship scheduling put him in line to establish another company first by being the first vessel to berth at the new United States Lines container terminal in Long Beach. (Port of Long Beach News)

Clean-Burning Trucks

Los Angeles, Calif., April 25:—Conversion of 10 Harbor Department maintenance trucks to clean-burning propane gas in a pilot program has been completed, it was reported today (April 25) to the Los Angeles Board of Harbor Commissioners.

Both hydrocarbons and carbon monoxide pollutants from the converted trucks are expected to decrease about 88% from that produced by a standard gasoline-burning engine. Nitrogen oxide exhausts are anticipated to be about 27% with propane fuel emission when compared to gasoline.

If expected emission levels are produced, the converted Harbor Department maintenance vehicles will successfully meet 1974 standards set by the California Air Resources Board.

"While the use of propane gas presented some problems in conversion of trucks, refueling and safety, the Department was able to overcome them," noted John Y. Chu, vice president of the Board of Harbor Commissioners. "We felt that this conversion was a positive act we could make towards further improving the ecology in the Los Angeles area."

Three new and seven low-mileage used pickup trucks were altered from gasoline to propane fuel systems earlier this month at a total cost of approximately $2,800.00.

A propane fueling station was installed on a lease basis at the Harbor Department's maintenance yard last January by the Crossman Company of Wilmington under a competitive bidding contract.

The propane fuel, at about 15 cents a gallon on an "as needed" basis, will be 2-3 cents per gallon cheaper than low lead and premium ethyl gasoline.

The Harbor Department expects other cost savings from less lube oil and filter changes, along with longer spark plug and muffler life. The maintenance records for the test vehicles will be separated from other Department trucks for comparisons during the test period. (Port of Los Angeles)

Crawford Resigning

Los Angeles, Calif., April 25:—Los Angeles Harbor Department General Manager Bernard J. Caughlin today (4/25) announced the resignation of Fred B. Crawford, who has served as an assistant general manager since December 1968. His resignation is effective June 15.

Crawford had come to Los Angeles from the Port of Seattle, where he had held a similar position the previous four years.

John B. Kilroy, president of the Los Angeles Board of Harbor Commissioners, and other members of the Board expressed their regrets upon learning of Crawford's resignation. Kilroy said he had "the utmost respect and admiration" for him, while others added that he had done "an admirable job" for the Department, lending integrity to his assignment.

Caughlin also spoke for the Department and the staff, not only voicing their regrets, but wishing Crawford well in his new endeavors.

Crawford had said earlier that he has purchased a family business from his parents, the operation of which he will assume June 18. The business, a greenhouse and wholesale-retail garden store, is located outside Seattle. Crawford said he also plans to work in real estate in that area.

He said the choice had been a difficult one, referring to the challenges of his post here, but that his final decision was in favor of ownership of the family business.

As assistant general manager of the Port of Los Angeles, Crawford had supervised the Property Management, Planning and Research, and Public Relations divisions of the Harbor Department. No announcement was made of a replacement to the vacated position.

Crawford and his wife, Sally, have three daughters and a son. (Port of Los Angeles)

New Film "Keyway for Cargo"

Los Angeles, Calif., April 26:—The Port of Los Angeles has offered for public showing a new film on the Harbor, "Keyway for Cargo."

The 16mm, color and sound motion picture replaces the previously-released "Changing Angel," which was widely distributed to television stations, service and civic groups and other interested organizations throughout the country.

The new 28-minute film, produced for the Harbor Department by Jack Brady Productions of Los Angeles, updates the Harbor story and covers the many facets of Port operation, from cargo handling to recreational facilities along the waterfront. The role of the Port in the wide area it serves and its prominence in world-wide commerce is also presented in the new film.

At a preview showing, "Keyway for Cargo" was rated "excellent." Other comments consider it "the best port film ever made."

Copies of the film for showing to groups may be obtained by contacting the Public Relations Division at the Port of Los Angeles, P.O. Box 151, San Pedro, CA 90733, or calling (213) 775-3231, Ext. 285. (Port of Los Angeles)

Record Exports in 1972

New Orleans, March 27:—Exports through the Port of New Orleans during calendar 1972 reached an all time high, amounting to 17,268,822 short tons, according to figures compiled by the U.S. Department of Commerce.

The same exports were valued by the U.S. Department of Commerce at more than $2 billion, also an all time high.

Japan remained the port's number one customer. A total of 2,541,726 tons, valued at $208,898,508 was exported by the Port of New Orleans to Japan during calendar 1972.

Also for the first time in history, the U.S.S.R. appeared among the top ten customer nations (third), having received 1,758,678 tons. Mainland China ranked ninth, receiving 296,565 tons via New Orleans.

Of the total tons exported, 11,138,935 tons were grain and soybeans, and amounted to 64.5 per cent of the total. New Orleans is the number one grain export port in the world.

U.S. exports via New Orleans during 1972 compared with 14,201,751 tons during 1971, for a 22 per cent increase.

U.S. exports via New Orleans in dollars amounted to $2,073 billion as compared with $2,032 billion in 1971 for a two per cent increase.

There has been a U.S. Department of Commerce delay in the issuance of figures covering 1972 imports. Latest such figures only cover January through October, 1972. (Port of New Orleans News Release)

New Trade Promoter

New Orleans, La., April 26: — The Port of New Orleans has appointed a top-level administrator with international experience as Deputy Port Director for Trade Development. He is Denis B. Grace, who has served for the past two years as Chief of the Port's Planning Division.

In his new post, Grace replaces James W. Martin, who left New Orleans in April to become Director of the Port of Beaumont, Texas. Grace will be responsible for the port's worldwide trade promotion activities, as well as its public relations functions. He will direct the affairs of trade development agents in port offices in New Orleans, St. Louis, Chicago, New York, London, Brussels, Panama, Tokyo, Hong Kong and Melbourne.

A native of Plaquemine, Louisiana, Grace earned degrees at West Point and the University of California. A retired colonel formely with the U.S. Corps of Engineers, he has held a variety of positions involving public administration, waterways, conservation, environmental planning, pollution control and foreign government liaison in France, Italy, the Philippines, Korea, Japan, and Vietnam. He is proficient in French and Italian.

"We feel that Grace's diversified international experience in management, and his thorough knowledge of this port's facilities and services make him uniquely fitted for the position of Deputy Port Director for Trade Development," said Executive Port Director Reed. (Port of New Orleans News Release)

3rd Busiest Port in the World

New Orleans, May 23:—The Port of New Orleans ranks as the third busiest port in the world, according to a recent study made by the U.S. Department of Commerce Maritime Administration.

Based on total volume of all types of waterborne cargo handled at 30 selected world ports in 1970, New Orleans ranked third, with 123.7 million short tons of cargo. Rotterdam ranked first, with 241.6 million tons, and New York was second, with 174 million tons. The Port of Baton Rouge, Louisiana, was eighteenth, with 45.5 million tons.

The Maritime Administration used various world port directories as sources, the principal one being "Port of the World," published by Benn Brothers Ltd. of the United Kingdom. The Benn publication lists tonnage and facility information concerning more than 200 deep water ports.

Following New Orleans in fourth

June 1, 1973:—NEW YORK CITY: If the first 100 years are supposed to be the hardest, the newly elected officers of the Maritime Association of the Port of New York give no indication that the second 100 years will be anything less than enjoyable. Commorating 100 years of continuous service to the shipping and navigation industry are (left to right): vice president Charles di Maria (general manager, French Line); president John D. Kerr (vice president, Calmar Steamship Corporation); searetary Albert E. Bowen, Jr (president, A. E. Bowen, Inc.); treasurer Thomas M. Torrey (American Institute of Marine Underwriters); and past-president Edward J. Barber (president, Barber Steamship Lines, Inc.). (The Maritime Association of the Port of New York)

place was Kawasaki, Japan, with 91.4 million tons of cargo. Four Japanese ports were named among the top 30, and there were 14 United States ports in the group.

The top ten listed were Rotterdam, New York, New Orleans, Kawasaki, Antwerp, Marseilles, Nagoya, London, Yokohama and Houston.

The Port of New Orleans is the number one grain export port in the world. Iron and steel are the principal imports in tonnage, and coffee is the principal import in dollar value per pound. The port is Louisiana's largest industry, generating more than $2 billion ($2,000,000,000) a year in wages and taxes for the state's economy. (Port of New Orleans News Release)

2 Mammoth Container Cranes

Philadelphia, Pa., May 14:—Approval has been granted for the purchase of two mammoth container cranes, each costing $1.683 million and towering more than 20-stories high, the Phila-Port Corporation announced today (Monday).

The new cranes—one at Tioga Marine Terminal and the other for Packer Avenue Marine Terminal, will augment the container cranes already in operation at both sites.

When constructed, the new cranes will help fulfill the need created during the past year by the increase in containerized cargo coming in and out of the Port of Philadelphia.

The Kocks Crane Company of Bremen, Germany, the successful bidder was among four bidders for the 182-foot-high Gantry lift which is capable of hoisting containers holding up to 45 tons of cargo.

Frederic A. Potts, President and Chairman of the Philadelphia Port Corporation said the new cranes were needed to accommodate the increased use of container imports and exports at both terminals.

"This is another major step in bringing our port facilities up to modern standards. The new cranes will ultimately lead to more business which, in turn, will provide economic benefits to the City of Philadelphia and the general Southeastern Pennsylvania area." Mr. Potts said.

Port Corporation officials said the new cranes, situated on rails that are set 90 feet apart, will be equivalent in height to a 20-story-building. They can load and unload approximately 30 containers an hour and have a capacity of hoisting a full 45 ton container load at 100 feet per minute.

Port Corporation officials who will supervise the construction of the cranes predicted that the first crane constructed at Packer Avenue Marine Terminal near the Walt Whitman Bridge will be operational in early summer of 1974 while the second crane at Tioga Marine Terminal near the Tacony-Palmyra Bridge is expected to be operational in late 1974.

The original existing cranes at both terminals were purchased for approximately $1 million each in 1968 but inflation and devaluation of the dollar has increased this cost, according to Port Corporation officials. Kocks also constructed the two cranes at both Packer Avenue and Tioga.

Mr. Potts said that the construction of the crane will be undertaken by the Diamond Manufacturing Company, a steel fabricating firm located in Savannah, Georgia, Kocks Company will supervise the entire construction.

Mr. Potts said that most of the components including diesel equipment, electrical equipment and steel will be purchased from U.S. manufacturers while Germany will supply the winch and gear equipment.

The two new cranes will be leased to the tenants at the terminals. (Philadelphia Port Corporation News)

Mayor's Committee on World Trade

Philadelphia, Pa., May 15: — A key member of the United States Department of Transportation will be the featured speaker at the National Maritime Day Luncheon, May 22nd at the Benjamin Franklin Hotel, it was announced today.

Robert Binder, Deputy Assistant Secretary of Transportation for Policy Planning and International Affairs, will address the luncheon which is a highlight of World Trade Week.

The designation of World Trade Week is intended to focus attention on the significance and value of international commerce and to acknowledge the accomplishments of those in the port and business community who contribute to the advancement of international trade. (Philadelphia Port Corporation News)

San Diego Newsletter—May

Preliminary Port Budget: — UPD's preliminary budget calls for expenditures of $11,228,558 during fiscal year 1973 . . . this amount increases by 12.2% last year's budget figure of $10,004,329 . . . major expense area included $6,479,825 for operations, including District force capitalized work; $139,635 for equipment outlays; $1,318,000 for capital outlay and $3,291,098 debt service payments . . . revenues from Lindbergh Field, Property Management and Marine Operations this year are estimated at $11,332,000, a 17.9% increase over last year's figure of $9,612,000.

Port Directors Hear Ensenada Ferry Proposal: — Board of Port Commissioners recently heard a proposal for ferry boat service to Ensenada . . . Fiesta Cruises, operators of the ferry, plan to make the 3½ hour cruise from San Diego six days a week leaving in the morning and returning in the afternoon . . . cost of the round trip would be $25 . . . Fiesta asked for the use of "B" Street Pier, but commissioners suggested possible use of Broadway Pier as an alternative . . . the ferry . . . a motor ship . . . can handle approximately 300-400 customers per trip . . . costs, changes, lease agreements all must be resolved before chance of approval and opening service.

Congressmen to Feast on California Delicacies: — The California Marine and Navigation Conference, made up of small-craft marina owners, ports, terminal operators and harbor construction companies, will sponsor the annual Golden State Luncheon in Washington, D.C. May 22 . . . C-MANC will serve as hosts for the California Congressional delegation and other members of Congress and their immediate assistants . . . the luncheon menu includes food items produced in California . . . crab and shrimp from northern California, wines from Napa Valley . . . citrus fruits, avocados, almonds, dates and special pack tuna all will come from the San Diego area . . . on the preceeding day, the conference will go before the Senate and House Sub-Committees on Appropriations . . . C-MANC is concerned with federal assistance for the construction of harbors and ports . . . and the all-important dredging projects . . . statements before both groups will be made by Congressman Bob Wilson and Lionel Van Deerlin and UPD's Director of Government Affairs, William L. Dick.

NAVIGATION EXPEDITOR HONORED Crescent City, California. A longtime friend of Golden State ports and harbors was recently honored at ceremonies in California's northernmost port city. Frank C. Boerger (second from right), former district Army Engineer and current consultant to Solano and Contra Costa counties, received a commendation for "outstanding service" to the state's and nation's waterborne commerce. Making the presentation was Kenneth Sampson, (left), president of the California Marine Affairs and Navigation Conference. Carl Brower (second from left), Crescent City H'rbor Commissioner, was one of the hosts for the meeting of 70 California port, public works and small craft officials. Robert H. Langner, C-MANC executive director, participated. Boerger also reported to the Conference membership on progress of the Bay Region dredging committee formed by C-MANC, which is tackling thorny new problems created by Federal and state restrictions and regulations. Plans for the fifteenth annual appearance before Congress were also laid at the session, to seek increased funding of California coastal and inland harbor and channel projects. (May 10, 1973)

Waterfront Crime Virtually Non-Existent: — Pleasant items to report . . . crime on the waterfront in San Diego is considered rare . . . losses by thievery are almost non-existent here in comparison with other ports . . . one official estimated the loss as being from $2,000 to $10,000 a year . . . at the Port of San Francisco, losses by theft amounted from $200,000 to well over $1 million . . . small things are stolen such as a shirt, coat, portable radio or occasionally a TV set . . . there is more loss through damage than through theft.

City Supports Industrial Exclusion:—San Diego City Council has sent an application to San Diego's Coastal Regional Commission for exclusion from the permit area of certain industrial areas upon San Diego Bay tidelands . . . area includes eastern shore of San Diego Bay, southerly of Eighth Avenue and north of Chollas Creek . . . the resolution also informs the Commission that UPD will represent the city by preparing and presenting to the Commission the facts and arguments supporting the application.

Fireboat Near Completion: — UPD's new 30-foot patrol fireboat is near completion . . . the boat is now in the water undergoing tests . . . fire pump trials are scheduled for week of May 14 by San Diego Fire Department . . . cost of the Kettenburg Marine boat is $58,000 . . . launching is set for mid-June.

EUROPORT '73

Rotterdam:—So heavy has been the demand for stand-space at EUROPORT '73 that by the 15th of June only a few stands will be left in the 50,000 sq.m. RAI Complex at Amsterdam. It is expected that late applications from companies will be referred to EUROPORT '74.

EUROPORT, the greatest of the World's maritime shows, will again enhance its reputation by the organization and presentation of the 1973 event. On present indications some 550 stands will represent more than 1750 companies from 45 of the World's nations. This year some of the largest marine diesel engines ever shown at an exhibition will provide one of the main features.

This year's exhibition, will include national presentations from West-Germany, Belgium, Canada, Czechoslovakia, Denmark, D.D.R., Japan, Poland and the U.K. Largest national exhibit is the mammoth West-German presentation occupying 4,500 sq.m., and representing about 40 companies. Included are many leading German Shipyards. EUROPORT is again at the RAI Exhibition Complex in Amsterdam, wherein the total area of 50,000 sq.m. will be occupied between 13th and 17th November.

For further details write to:
EUROPORT Tentoonstellingen B.V.
Organisatiekantoor:
Waalhaven Z.Z. 44
Rotterdam
The Netherlands

Exhibitors Invited

Hamburg:—HAMBURG MESSE invites you to exhibit at the Ship and Machinery 1974, 24–28 September 1974.

For further details, refer to Hamburg Messe, 2000 Hamburg 36, Jungiusstrasse, Messehaus, Germany (Tel: 35 69 1, Telex: 02 12609).

Permanent Representative of Antwerp in Japan

Antwerp, 29/3/1973: — Within the frame of the Port of Antwerp Promotion Association a few years ago a "Japan Committee" was set up, presided over by Mr. A. Scheirs, the members of which are representatives of the Belgian Foreign Trade Office, of the Economic Council for the Province of Antwerp, of the City of Antwerp (General Management of the Port) and of the Associations grouping the four main activities of Antwerp: port, industry, commerce and finance.

In a relatively short space of time the Committee has succeeded in developing a very prolific activity to develop the relations with Japanese industrial, commercial and transport circles. In this connection are to be mentioned the organization of two Economic Missions to Japan (1970 and 1972), the creation of an information service about and to Japan, the printing and distribution (2,500 ex.) of a bimonthly news bulletin about Antwerp in Japanese, the invitation to Antwerp of Japanese delegations, the organization of a "Japan Day" in the Port, etc.

In order to valorize to the largest possible extent the results obtained up till now and to stimulate the in-depth working in Japan itself, with effect as from 1st April 1973, a permanent Antwerp representative in Tokyo has been appointed.

It is Mr. Etienne de Guchteneëre, holding certificates of Belgian and Japanese universities and who has been active in Japan since 1956 (the last 3 years of which as Manager for General Affairs of SABENA in Tokyo, charged with contacts with Japanese enterprises and administrations).

Consequently, Mr. de Guchteneëre speaks fluently Japanese, as well as English, Dutch and French. He combines his function of permanent Antwerp representative with that of Manager of the agency in Tokyo of the Belgian enterprise Cosimex. His address is: Bima Kojimachi Bldg. 401, Ichi-Bancho, 10, Chiyoda-ku, Tokyo (Tel. 263–3959).

The way in which Mr. de Guchteneëre's function of permanent representative has been conceived will enable him to contribute actively to the realization of the future programme of the "Japan Committee." He will establish contacts with Japanese business and transport circles, and assist in the spreading of information (releases, brochures, bulletins etc.) about Antwerp. He will also act as an intermediary for contacts with Japanese enterprises or Associations having projects under study in connection with the sending of Missions to Europe, the import/export of goods to and from Europe, the formation of joint ventures, etc.

When performing his activities in behalf of Antwerp Mr. de Guchteneëre will keep up close contacts with the Belgian diplomatic and consular posts in Japan. (Assiport Press Release)

(Continued on Page 46)

Seiko... a timely choice.

Seiko watches.
A choice of designs for every moment.
And for every mood.
But today a watch has to have more than a pretty face.
And in some cases it must do more than just give the correct time.
If you're the type of individual who expects more than time from the timepiece you wear, Seiko is the watch for you.
Because Seiko has a watch for you that will go 70 meters beneath the sea.
A watch that has an alarm to keep you on time.
A woman's bracelet watch that's pure elegant jewelry.
We even have a watch so you can measure distance.
Seiko watches. A timely choice.

SEIKO

Seiko Watch—K. Hattori & Co., Ltd., Tokyo, Japan.

British President for ICHCA

Felixstowe, May 22:—At the biennial general assembly of the International Cargo Handling Coordination Association held in Hamburg on May 14 Mr. Stanley Turner, group managing director of the Felixstowe Dock & Railway Company, was elected President.

Mr. Turner has been the honorary treasurer and vice chairman of the international executive committee since 1964 and he was the chairman of the UK National Committee from 1964 to 1972.

ICHCA has members in over 80 countries, 23 of which have their own national committees. (News from Port of Felixstowe)

John Lunch Speaks

London, 3rd May: — Mr. John Lunch, PLA Director-General, today (May 3rd) completed his year of Presidency of the Institute of Freight Forwarders and at their Annual General Meeting, following luncheon, at Great Eastern Hotel he installed Mr. Richard Marsh, Chairman of British Rail, into the Presidential Office.

Recalling his 1972 Presidential message Mr. Lunch repeated his words "We in Britain have no more than our share of the world's problems and we have successes and opportunities that are respected and envied across the globe." Re-emphasising his confidence in Britain's future, he called on Institute members to share his optimism. "Don't sell Britain short," he said.

Reviewing his own Presidential term Mr. Lunch said the time had "rushed by" in what had been a very busy year of great national significance because of Britain's entry into EEC. "Few other professions will be more directly affected by this momentous event than your's," Said Mr. Lunch, and he called on the Institute's membership to maintain their professionalism and high quality of service to customers within the framework of new regulations and legislation and in the context of wider competition.

Turning to Britain's domestic scene Mr. Lunch considered the effects on the transport industry of the industrial relations problems encountered during the year, These he saw as of two different kinds: those arising from the rapid revolution in cargo handling methods; and the skirmishes which followed the introduction of the Government's pay and prices freeze.

Accepting the variety of reasons behind industrial action, including outside influences, Mr. Lunch restated his conviction that the finding of solutions to industrial problems lay primarily with management who must exercise understanding, foresight, and initiative. He suggested two guiding principles for a high standard of leadership and effective management. The first was to understand and foresee the aspirations and motivations of employees and develop good communications resulting in effective negotiations making industrial unnecessary. The second is to translate this understanding and foresight into management initiative and action in good time to achieve solutions.

Mr. Lunch said what a privilege it had been to serve the Institute and that in the past year he had learned much, and gained a better understanding of the work done and problems faced by members. He said "I leave this office with strong impressions of the maturity of leadership of the Institute, of your sound professionalism, and the significant—and often underrated—contribution which you make to the trade of the nation." He remained confident that through the growing stature of the Institute its members will develop this contribution everywhere Britain trades in Europe and throughout the world.

Welcoming his successor Mr. Lunch spoke of Richard Marsh as "a man with an outstanding record in transport and elsewhere who will surely be one of the most distinguished Presidents of the Institute." (News from PLA)

Developments of Fish Docks at Fleetwood

London, 1 June (B.T.D.B.): — A £¾ million scheme to redevelop the fish dock facilities at Fleetwood has been agreed between the British Transport Docks Board, the Fleetwood Fishing Vessel Owners' Association and the Fleetwood Fish Merchants' Association, and a Government grant towards the cost of the works has been approved in principle.

The project involves the reconstruction of the quay wall on the south side of the Fish Dock and rebuilding of the fish market. The front section of the new market will be for the display and sale of fish, while in the rear section processing halls will be provided for the fish merchants. Land at the rear of the market will be paved and roads resurfaced and re-aligned. The work will be carried out in two phases so that the normal business of the fishing industry can continue.

The scheme also includes the reconstruction of the East Jetty at the entrance to the docks to aid navigation and access.

Work is expected to start at the end of the year and to take about two years to complete.

The reconstruction of the two slipways in the Fish Docks is also planned.

Mr. R. Ward, President of the Fleetwood Fishing Vessel Owners' Association, said that he was delighted that the Docks Board had shown their faith in the future of Fleetwood as a fishing port by providing these new facilities, while Mr. R. Buckton, President of the Fleetwood Fish Merchants' Association commented that he was pleased and satisfied at the news. "In my opinion the modernization scheme is yet another step forward in Fleetwood's progress," he said.

Modernising Hull Fish Dock

London, 4 May (B.T.D.B.):—A scheme to move the Hull fishing industry from its present base in St. Andrew's Dock to more modern premises in the Albert and Wm. Wright Docks has been agreed by representatives of the British Transport Docks Board, the Hull Fishing Vessel Owners' Association, and the Hull Fish Merchants' Protection Association.

Implementation of the plans depends on the formal approval of

(Continued on Page 48)

the proposals by the Docks Board and the agreement of the Government to make a 60 per cent grant towards the cost under the Fish Dock Modernization Scheme announced in May last year.

The scheme envisages the provision of special berths for discharging all types of trawlers by mechanical handling equipment and facilities for processing, marketing and distributing fish landings as well as for servicing trawlers.

Use of Albert and Wm. Wright Docks for commercial traffic terminated in October 1972. They are larger and more modern than St. Andrew's, capable of accommodating the largest trawlers now under construction and would provide better conditions for those working in the fish docks.

It is not yet known when the transfer of the fishing industry will take place, but, if the scheme is approved, work is expected to begin before the end of this year. St. Andrew's Dock will be closed when the fishing industry moves to the Albert and Wm. Wright Docks.

Cargo Handling Show

Paris:—The 15th International Exhibition of Cargo Handling is scheduled to be held November 30 through December 7, 1973 at Palais de la Defense (C.N.I.T.), Paris/Puteaux, France.

For further information write to:
Salon de la Manutention
40, rue du Colisee
75008 Paris
France

Container-Terminal Study Available

Bremen: — With the first container-crossing of the Atlantic in the middle of the '60 ies—scarcely noticed then among the many novelties—began the industrialisation of the last sector of modern economics: the traffic.

Now, a few years later, a network of container shipping lines already circles the globe; three hundred containerships serve the most important ports,—with Eastern Europe and Latin America also now coming into the swim. All the experts are agreed in the expectation of a considerable multiplication in the volume of cargo; which tomorrow and the day after tomorrow will be carried in the large standardised metal boxes: five times—ten times that of today.

A new limitation is to hand: it is true that the container terminals have been effectively assisted by their highly modern equipment, and the considerably shortened port lay-days (as compared with conventional traffic) in coping with the rapid increase in cargo handling—but will space extension and additional technical equipment suffice in dealing with the demands of the future?

The general view is—No. There is no lack of counsellors and thought-models to advise in this situation, but they all have one fault—they are not acceptable; mainly because they ignore the high investments which have already been made and do not take into consideration the utilisation of the terminal construction; so that the new prerequisites are technically, as well as financially, unfulfillable.

At this point a noteworthy system-study has been introduced which is based on rich practical experience and a realistic assessment of the possibilities of the terminals and their capacity—and which will enable the growing container stream to be handled. It has been worked out and just now presented by Messers. Friedrich Kocks GmbH, Bremen. In conjunction with Messrs. Allgemeinen Elektrticitats-Gesellschaft AEG Telefunken of Frankfurt.

This study aims at the maximum utilisation of absolutely all the equipment which has already proved itself in the container terminal throughout the many years of practical experience. This thought-model correctly sees the greatest problem link in the long transportation chain as being in the reception, storage and dispatch of the containers in the terminal, and comes up with the following recipe; Maximum utilisation of the present lay-out, installations and equipment through optimum organisation: optimum organisation by the extension through from industrialisation to automation: automation by guiding all procedural movements in the terminal with a centralised process calculator.

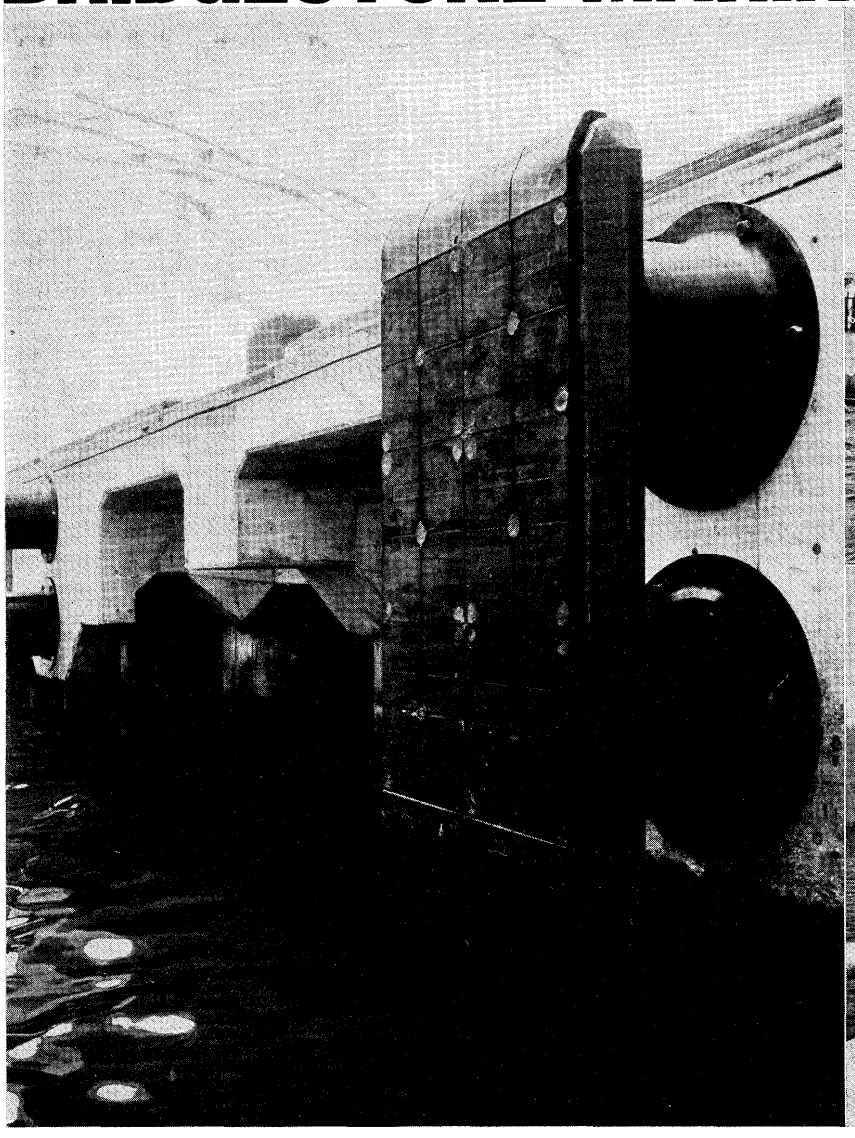
The Kocks-study elucidates in detail, by text and sketch, the computerised steering of the transportation processes from the arrival in the terminal through to the on-transportation; the registration, automative passing on of the information, the steering of the loading and discharge—with or without intermediate storage; transit storage; warehousing-type storage; the calculation of most favourable stowage plan for the ocean vessel, rail and road wagons; with mirror-like reflection for the storage area; the storage with revision possibilities e.g., in subsequent delivery of containers whilst vessel in process of loading; the issuance of lists for the subsequent handling of discharged containers; the constant issuance of latest inventory.

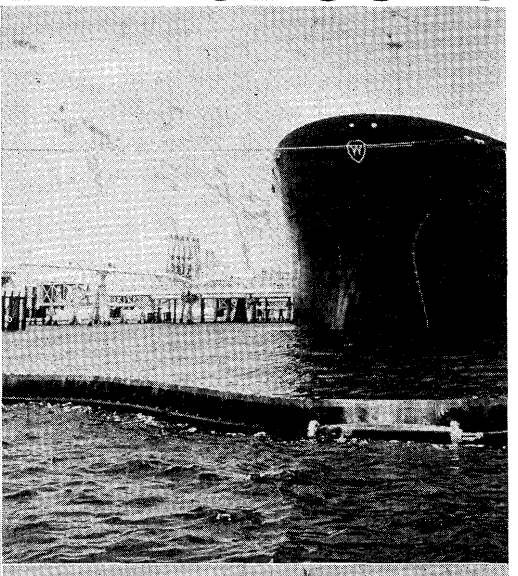
The advantages are self-evident: highest efficiency of an uninterrupted engagement of container bridges, localised bridges, loading bridges (whereby the necessary auxiliary equipment for the automation can be subsequently installed without difficulty); still better utilisation of the available capacity of the terminals and their plant; relief for personnel; lower personnel costs; constant 1st-class surveillance; total transparency of operational processes. That which also increases the flexibility of the terminal considerably; the container assembly areas no longer need, by any means, to commence immediately behind the quay. With the chief attraction: introduction of the system by stages into the present terminals and ports without undue hindrance to the current cargo handling activities.

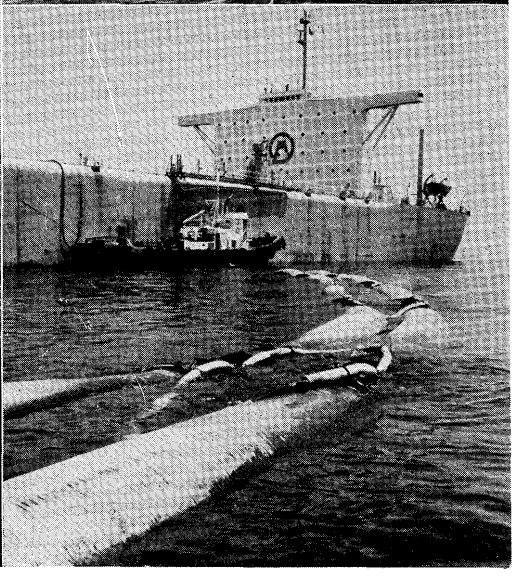
Professional circles reckon with a lively interest for this proposal. Initially this study is only available in the German language; an English edition is in process of being produced. Those interested should apply to Messrs. Friedrich Kocks GmbH., Sales Department, D-28 Bremen 1, Postbox 1, or telex: 244863 Kocks. (Bremen International 5-1973)

(Continued on Page 50)

BRIDGESTONE MARINE PRODUCTS







Your bridge and stepping stone to better quality and performance.

DOCK FENDERS

Take your pick of the world's greatest range of dock fenders. If your needs are giant-sized, try the Bridgestone cell model C3,000H—the world's largest. Its shear-proof solid rubber isotropic construction provides super-efficient shock dispersion and minimum surface pressure. Ideal for everything up to million ton class ships.

There are many others, too, for every type of vessel, and each Bridgestone dock fender has been tested for every performance situation and is guaranteed to do its job with trouble-free dependability.

OIL FENCES

Bridgestone technology has resulted in the world's only floating-sinking type oil fence. It can be stored on the sea bed, then inflated to rise to the surface and quickly surround an oil spill, protecting coastlines and making the cleaning job much easier. The fence skirt is pleated to reduce wave spillover and provide flexibility in heavy seas. Easily set up, even in rough weather, this Bridgestone breakthrough is designed for years-long durability in any climate.

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Bridgestone has the marine hose to do the job in every offshore heavy oil loading and unloading operation. Boasting outstanding flexibility and pressure resistance, these hoses are available in submarine, floating-submerging and floating ever-float and bead—soon to be available in the world's largest diameter types.

BS BRIDGESTONE
Tokyo, Japan

66 Container Services

Bremen:—Over the last 6 years the Free Hanseatic City of Bremen has invested more than DM 300 millions in constructing the container terminals in Bremen and Bremerhaven. The "Container-Crossroads of Bremerhaven," with its areal extending over 750,000 square metres, is the most liberal construction of its type in Europe. Two-thirds of the container traffic passing through the Federal German ports are handled in Bremen/Bremerhaven- was the information stated by the Bremen economics senator, Jantzen, at a reception given during the Leipzig Spring Fair 1973 at which 150 guests were present from East-European economic circles, 16 full-container lines and 50 container services operated with conventional freighters, were serving the Bremen ports. The latest full-container service was started at the end of March 1973 by the Polish Ocean Lines—operating a weekly service between Bremerhaven and Gdynia. (Bremen International 5-1973)

Port Manager Designate

Mombasa, Kenya, April 28:—The Board of the East African Harbours Corporation Port Authority has appointed Mr. Jonathan D. Mturi 33, (photo attached) as Port Manager (Designate) Mombasa Port with effect from 1st April 1972, and he will assume the full responsibilities of Port Manager on 1st June 1973 when Mr. Shatry, the current Port Manager's retirement becomes effective.

The East African Harbours Corporation is a member of the International Association of Ports and Harbours.

Mr. Mturi is a B.A. Hons (London) graduate in Geography and Economics which he obtained at the then Makerere University College (now Makerere University) Kampala, Uganda in July 1960.

Following his graduation, the young executive joined the Port Department of the former East African Railways and Harbours Administration as a Cadet Administrative Assistant on 7th August 1965 and became a substantive

Mr. J. D. Mturi

Administrative Assistant at the Ports of Dar es Salaam (Tanzania) and Mombasa (Kenya). He became Port Manager, Tanga (Tanzania) in February 1968, a post which he held until later that year when he was transferred, on promotion, to the Headquarters of the newly formed East African Harbours Corporation at Dar es Salaam to the post of Commercial Officer in the Traffic and Commercial Branch of the Corporation. He was transferred in January 1970 to Mombasa to take the post of Deputy Port Manager which he has held until his present appointment as Port Manager (Designate). On two previous occasions he has also acted as Port Manager.

He has lean in the port industry for eight years, during which period Mr. Mturi received extensive training both locally and abroad. In 1906 he attended a course on Ports and Harbours Administration in Australia which lasted from April to August and covered all the major aspects of port administration and operations. The course also entailed visits and attachments to the major Australian Ports of Melbourne, Sydney, Freemantle, Geelong, New Castle and Port Kemble. In April/May 1971 and July/September 1972 Mr. Mturi attended two senior courses on port Management in Holland and Sweden respectively. These courses were geared to port Management, operations, and planning and involved visits to several European and United Kingdom Ports, namely Rotterdam, Amsterdam, Levre, Southampton, London Gothernburg, Stockholm, Gdynia and Gdansk.

Mr. Mturi is also an Associate Member of the Kenya Institute of Management (A.M.K.I.M.) and is married with two children, '(East African Harbours Corporation News Release)

Trade of N.S.W. Ports

Sydney, 13th April:—Figures released in Sydney today by Mr. W. H. Brotherson, President of the Maritime Services Board of N.S.W. indicate that there has been a substantial decrease in the volume of trade handled by three of the four major N.S.W. ports in the first nine months of this financial year compared with the same period in the last financial year.

Mr. Brotherson said that, for the nine months period ended 31st March, 1973, total imports and exports at the Port of Sydney amounted to 11.7 million tons compared with 13.2 million tons during the same period last year.

The comparative figures for Newcastle were 10.1 million tons for the nine months ending 31st March, 1973, compared with 11 million tons during the same nine months in the previous period.

He said that trade at Botany Bay is down by only 300,000 tons and amounted to 5.3 million tons during the nine months ended 31st March, 1973.

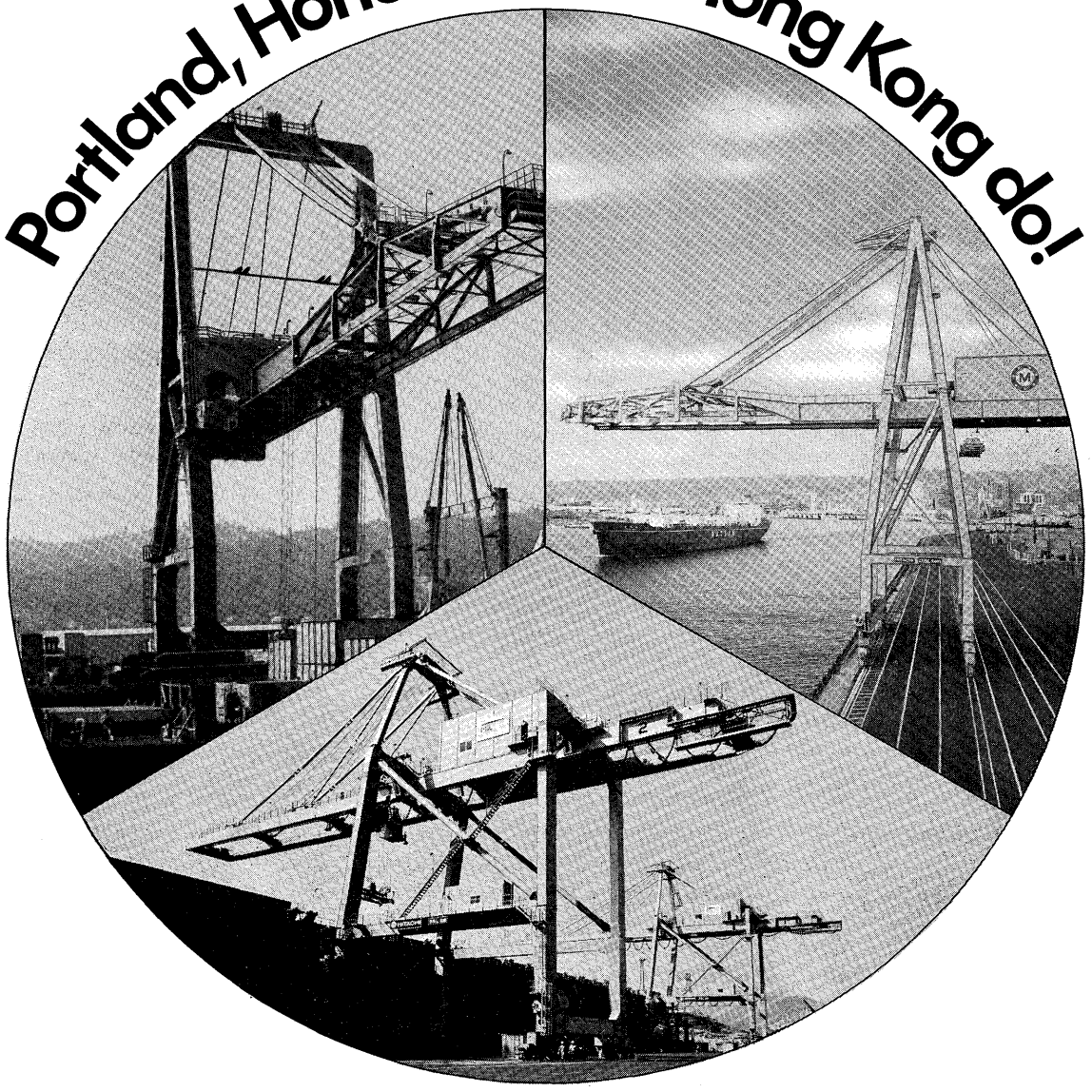
In making these observations, Mr. Brotherson said that many of the commodities handled through the Port of Sydney were well below the tonnages handled last year but this applied particularly to such items as imports of motor vehicles and motor vehicle parts, paper, gypsum, salt and sugar. Coal and wheat were the major commodities registering a fall in the export trade. Mr. Brotherson pointed out that, in the first nine months of last year, 1.6 million tons of wheat had been exported compared with 535,-000 tons this year.

The reduction in trade at

(Continued on Page 52)

Boom with us?

Portland, Honolulu and Hong Kong do!



Container cranes supplied to the Port of Portland, U.S.A.

Two container cranes now in operation at the Port of Hong Kong.

28-long ton Container Gantry Crane supplied to Honolulu Terminal, Hawaii, U.S.A.

Profits go up. Costs go down.
In Portland, Seattle and Yokohama.
And in Port Swettenham (Malaysia), Hong Kong, Singapore and other Japanese ports, too.
Worldwide.
Via over 15,000 Hitachi cranes.

Container and otherwise.
And a word to the wise.
Check out our patented "semi-rope" trolley gantry cranes.
They reduce shock and sway of cargo.
We have also provided high speed container cranes which employ our recently developed sway stop system.
Put both in your port and see for yourself.
You will be busy . . . but happy.

HITACHI

6-2, 2-chome, Otemachi, Chiyoda-ku, Tokyo 100

Newcastle compared with the previous financial year could be attributed to a falling off in the imports of petroleum products and a reduction in the exports of sorghum and coal. Coal exported this year amounted to 4.4 million tons whereas in the same period last year 5.6 million tons had been shipped out of the Port.

Mr. Brotherson said that, in contrast with Sydney and Newcastle, total imports and exports at Port Kembla had reached 10 million tons for the nine months ending 31st March, 1973, and this represented the highest figure ever recorded for any similar period in the port's history.

He said the buoyancy of trade at Port Kembla could be attributed generally to the imports of raw materials for the expanding steel industry and the increased tonnages of coal, coke and steel finished products being exported. (The Maritime Services Board of N.S.W.)

Port of Penang Handled Higher Volume of Cargo in '72

Penang:—3.32 million tons of cargo moved through the Port of Penang in 1972 compared to 3.21 million tons in 1971. Out of this figure, imports totalled 2.10 million tons while the export figure was 1.22 million tons. Although the increase in the total volume of cargo has not been spectacular, the 1972 statistics showed a gradual change in the type of cargo moving through the Port of Penang in line with the industrial and agricultural development now being undertaken in the north.

The increase in the import figure was largely due to the higher tonnage of pertoleum discharged at this port (0.80 million tons) compared to the previous year (0.63 tons). On the other hand, import of coke dropped from 70,000 tons in 1971 to 29,000 tons in 1972, while the general cargo imports which form 50% of total imports dropped slightly from the previous year's figure. The drop in the general cargo tonnage is a reflection of the industrial development now being undertaken in Malaysia in which local production of consumer and light industrial goods are replacing imports. In its place raw materials for industries such as steel, plastics, fibre, thread and chemicals are now imported for the industries established in the hinterland. Although the 1972 figures for these commodities are not substantial the figures however, indicate the trend in the types of commodities that are expected to be imported through the port in the coming years. The export figure of 1.21 million tons tops last year's figure by 61,000 tons. This increase has been registered in spite of the complete cessation of iron ore exports through Penang in 1972. Iron ore exports have gradually reduced from an all-time peak of 1.2 million tons in 1961 to nothing in 1972.

Traditional exports of primary produce continued to increase as in the previous years. The figure for palm oil was 56,000 tons compared to 44,000 tons in 1971. Timber exports rose from 42,000 tons in 1971 to 69,000 tons in 1972, while ilmenite ore increased from 140,000 tons to 151,000 tons in 1972.

The Penang Port Commission continued to increase its share of General Cargo handled in the Port of Penang from 52% in 1971 to 56% in 1972. (Penang Port News, April)

Construction Work on Ferry Expansion Project Commences

Penang:—Construction work on the new ferry terminals is to commence in April 1973 with the recent award of the tender. The contract for the construction of the three new ferry vessels was awarded in February 1973 and construction work has commenced. The whole project, costing $22 million, is expected to be completed by the end of 1974.

The project provides for the construction of an additional terminal on the mainland and another on the island together with initial purchase of three new ferries. The terminals have a capacity for eight ferry vessels and more would be added as the traffic grows. When the terminals operate to full capacity, there would be a total of 16 ferries operating between the island and the mainland, made up of eight new ferries and eight existing ferries. The new ferries are designed exclusively for vehicular traffic and each of them would have a vehicular carrying capacity of twice the present ferry vessel. When the three new ferries are in operation in 1975, their vehicular carrying capacity would in fact be equivalent to six of the existing ferries. When the full scheme of additional eight ferries has been implemented, the 16 old and new ferries would be equal to the vehicular carrying capacity of 24 of the present ferries.

With the addition of the three new ferries, the frequency of service between the island and the mainland would be increased and the Penang Port Commission would be able to provide a service at four-minute interval instead of the present seven-minute. (Penang Port News, April)

Channel Widened for Container Ships

Hong Kong, May 8:—The shipping channel between the wreck of the Seawise University and Tsing Yi Island is being widened to give container ships easier access to the Kwai Chung terminal.

The channel will be widened to 1,000 feet and dredged to a depth of 40 feet to accommodate ships weighing up to 59,000 tons and 950 feet long.

Dredging work on the channel began a few days ago and is expected to be completed by mid-October. (The Week in Hong Kong)

"Sea-Land Commerce" in Kobe

Kobe:—M.S. "SEA-LAND COMMERCE" (Captain: Mrs. F. Worthy. Gross tonnage: 41,555, Maximum speed: 33 knot, Capacity: 1,100 containers of 35–40 ft.) has entered the Port of Kobe (No. 1 Container Berth of the Port-Island) on May 28 evening, as the first Sea-Land's SL-7 type full-container vessel that has visited Japan.

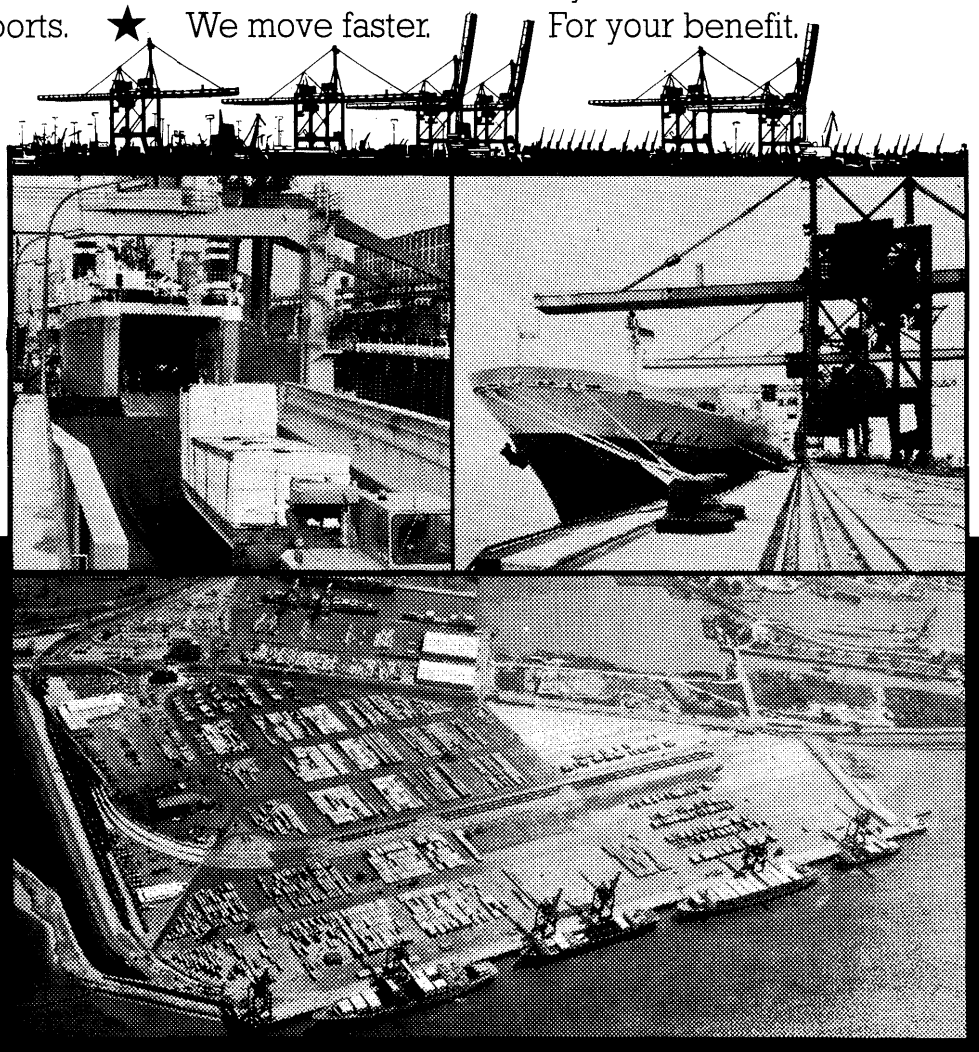
Also, she is the first vessel calling at Japanese port, of the three SL-7 type ones that have been placed in the PNW+PSW Route.

It is reported that their quick weekly service will connect Kobe and Yokohama of Japan with U.S. west-coast ports of Seattle, Long

(Continued on Page 54)

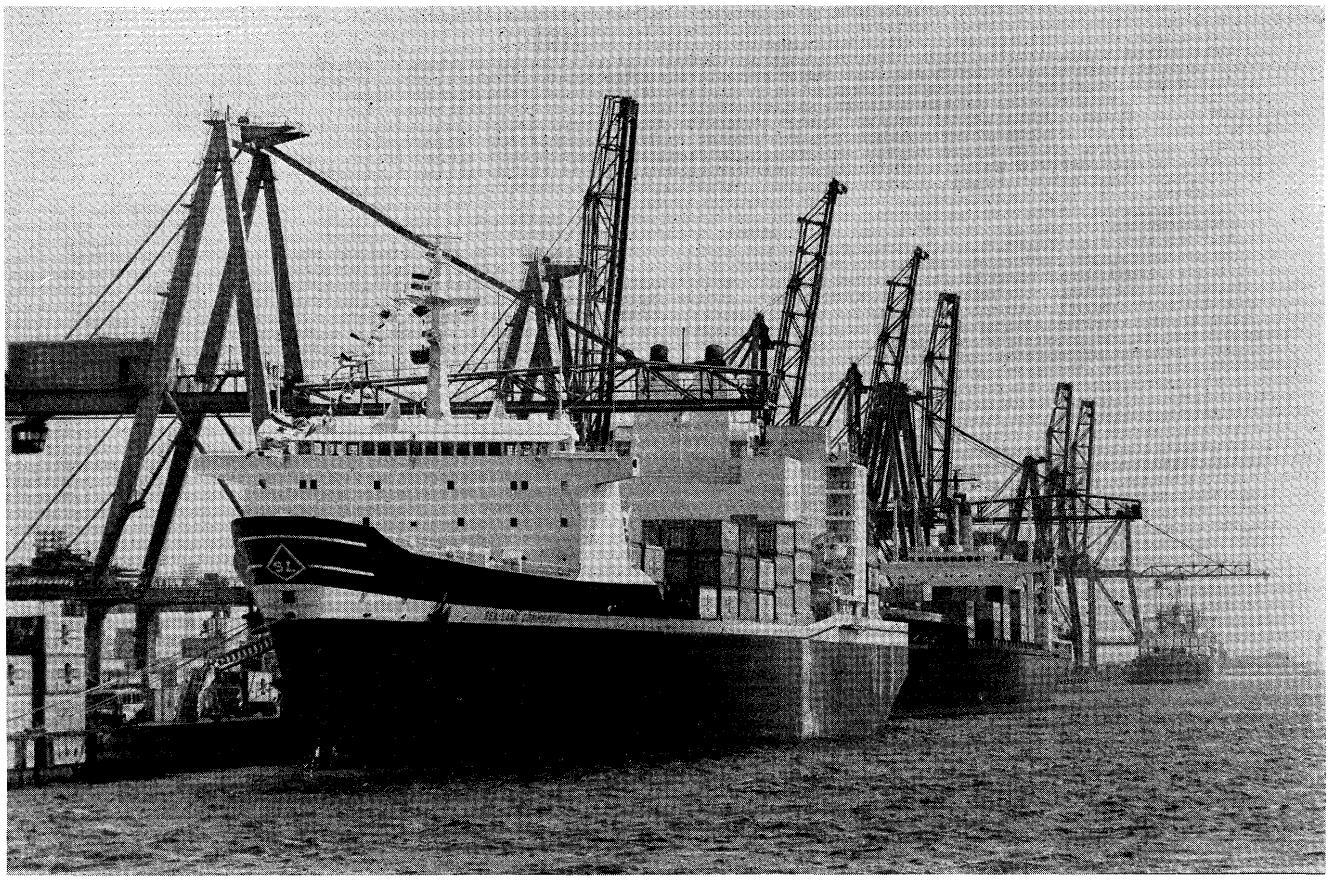
Container Ro/ro·Lash

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-Gessellschaft, 285 Bremerhaven, Steubenstr., Phone 48 41, Telex 02-38722



M.S. "SEA-LAND COMMERCE" berthed at Kobe.

Beach and Oakland, within as short as about five days one way for crossing the Pacific.

"SEA-LAND COMMERCE" discharges and loads about 380 and 290 container-units respectively, at this Port. (Port and Harbor Bureau, Kobe City)

Cellular Container Ships at Wellington

Wellington, N.Z.:—During May 1973, eleven cellular container ships worked 2,300 containers at the Thorndon Container Wharf. (Port of Wellington Overseas Shipping Schedule, June)

Port of Singapore, Review of 1972

(A Comment on the Year—pages 1-2 of The Port of Singapore Authority's Annual Report 1972)

The year 1972 was in many ways an eventful year for the Port of Singapore Authority.

During the year, the Port's revised Scale of Rates was finally implemented to take cognisance of prevailing cost conditions, to relieve congestion at the wharves due to overstaying by certain vessels, to reduce queueing and waiting, to ensure faster turnround time and, last but not least, to obtain more revenue to enable the Authority to provide more and better facilities to meet the demands of the future. The increased traffic in the Port during the last few years had greatly taxed existing facilities. The old tariff made no distinction between the efficient and the inefficient port-user and hence did not encourage him to improve his operation. The new tariff structure, introduced at the beginning of 1972, carefully rationalised certain rates and charges to bring about the desired response of the port-user to make better use of the Port's facilities and services.

Expectedly, the introduction of the new tariff in the initial period brought forth a strong protest from some sections of the shipping community who felt that their interests were adversely affected. This difficulty was compounded by several external factors, viz the United States' stevedores' strikes which overspilled into February 1972; the 3-month long Japanese seamen's strike from mid-April to mid-July; industrial action in United Kingdom in the early part of the year; industrial recession in Japan in the first quarter of 1972 and a series of freight hikes that unsettled the local shipping scene. The tonnage of general cargo handled at the Port, as a result, registered a decline of nearly 4% in the first seven months of the year as compared to the corresponding period in the previous year.

Fortunately, the downturn was arrested in August and the remaining months of the year showed some improvement ending with a rise of 8%.

The revised tariff was promulgated with the following objectives in mind:—

1 to prevent misuse of the Au-

(Continued on Page 56)

THE SHOWA LINE OPERATES-

-WORLDWIDE

Taking the lead among Japanese shipping companies in August, 1968 in using fully containerized ships on the Japan/Pacific South West Route (P.S.W. Line), the Showa Shipping Co. has exerted its utmost during the past year in the rationalization of container transportation by evolving a transport system for "faster, safer and cheaper transport" of cargoes on a large scale, which is now the motto of transportation revolution. The Showa Line has thus contributed a great deal to the expantion of trade between Japan and the U.S.A. Making active use of the abundant experience and fine record achieved during the past year in the operation of container service, the Showa Line opened in May 1970 a container service on the Japan/ Pasific North Route (P.N.W. Line) with a view to responding to the expectation of our shippers. **Rely on the Showa Line for container transportation of your cargoes of the Japan /P.N.W. Route.**

SHOWA LINE

1, 4 Chome, Nihonbashi-Muromachi, Chuo-ku, Tokyo 103, Japan. SHOWA SHIPPING CO., LTD.

thority's expensive wharves and terminal facilities at Keppel Harbour by requiring users of these facilities to pay a slightly higher "premium" in return for a reduction in delay and waiting time, increased productivity and quicker turnround time;

2 to divert high-volume low-value cargo to Sembawang Port where simpler, inexpensive basic facilities were made available at lower rates;

3 to give local coastal shipping a period of adjustment by continuing to work at the Telok Ayer Basin without any changes to the rates and charges payable at this gateway;

4 to divert cargo that does not require wharf and terminal facilities to be worked at the Roads; and

5 to accelerate the development of Jurong Port as the bulk cargo port of the Republic.

The revised tariff has in the last 12 months of operation clearly achieved these objectives.

Waiting time of ships for berths at the Keppel Harbour was reduced from an average of 4.5 hours in 1971 to only 1.7 hours in 1972; the turnround time of vessels in Port improved 18% from 50 hours to 41 hours.

Sembawang Port was highly attractive to timber shipments. Nearly 60% of the port traffic at Sembawang consisted of timber.

Jurong Port gained importance as a bulk cargo port when the throughput of bulk cargo increased 28%.

The Authority's faith in containerisation was amply justified when, on 23rd June 1972, the first fully-cellular container vessel worked at the Container Port at East Lagoon.

The Authority's efforts spent at drawing programmes for environmental control paid off when the supertanker "Myrtea" was grounded in June and the emergency plan for such an eventuality was put into operation to result in swift action which had the effect of limiting and controlling the spread of pollution that would have been much more disastrous on Singapore's waters and beaches.

During the year, great emphasis was placed on the development of human resources. More members of the staff were trained than at any other time in the history of the Port of Singapore Authority.

The Port of Singapore Authority completed its 9th year of operation with a note of confidence. By the end of the year, the net surplus of the Authority increased by 33% over the previous year.

A more comprehensive account of the Port's activities and performances for the year is given in the following paragraphs.

First Cellular Container Vessel

Vladivostok, U.S.S.R., May 31:—The ALEXANDER FADEEV, the first cellular container vessel owned by FAR EASTERN SHIPPING COMPANY (FESCO) VLADIVOSTOK, will arrive on her maiden voyage at the Port of Oakland late today.

The M/V ALEXANDER FADEEV, built in the U.S.S.R. and operated by Far Eastern Shipping Company (FESCO PACIFIC LINE) in Vladivostok, will be used in container operations between Oakland and other West Coast ports to Tokyo and Kobe.

Sisterships of the ALEXANDER FADEEV will be placed into this service pattern in the near future; the next vessel in July or August and a third vessel the end of this year, according to a recent announcement by Mr. Valentin P. Biankin, President of Far Eastern Shipping Company, Vladivostok.

The ALEXANDER FADEEV will carry 368 containers, mostly 40 foot vans, and will also provide refrigerated container capability.

Fesco Pacific Line currently operates an independent service from the Pacific Coast to Japan and Hongkong with 16 converted containerships and also general cargo vessels between West Coast ports and the Far East. Fesco Officials stated that when trade between the United States and the U.S.S.R. is sufficient to require direct shipping service to Vladivostok and Nakhodka, FESCO PACIFIC LINE will be ready to provide that service.

Ceremonies will be held aboard the vessel at noon Friday, June 1, commemorating the maiden voyage to Oakland. (Fesco Pacific Line News Release)

昭和44年11月15日第三種郵便物認可　昭和48年7月20日発行　第18巻第7.8号附録

Report by Special Committee on Containerization And Barge Carriers

Presented at Eighth Biennial Conference

May 1973

Amsterdam, The Netherlands

foreword

The I.A.P.H. Special Committee on Containerization and Barge Carriers has prepared this comprehensive report on container and barge carrying (LASH/Seabee) facilities at ports and terminals around the world.

Compiling this information and disseminating it on an international basis we feel will substantially aid in the development of modern, efficient terminal facilities throughout the world.

Some 96 I.A.P.H. member port and terminal operators responded to the survey, using a questionnaire directed to them earlier this year. The form was designed to enable member ports to respond on a standardized basis.

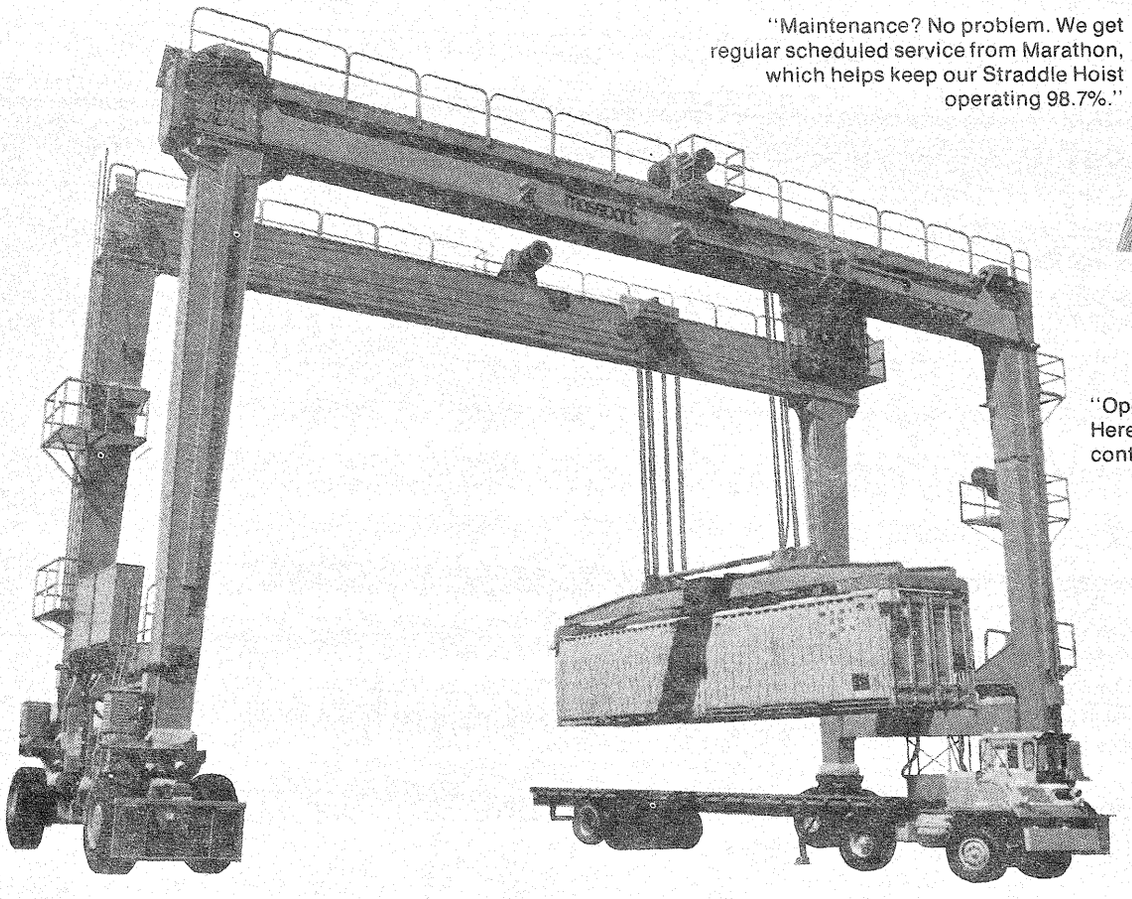
Container terminal data was supplied and compiled on the basis of questions listed on the following page. Container terminal information makes up the initial portion of this report. Information regarding LASH/Seabee facilities was given in response to the questions detailed at the beginning of the LASH/Seabee section, the second major portion of the report.

Ben E. Nutter, Chairman
Special Committee on
Containerization and
Barge Carriers

"Our Marathon Straddle Hoist makes the Big Difference in our handling time and capacity."

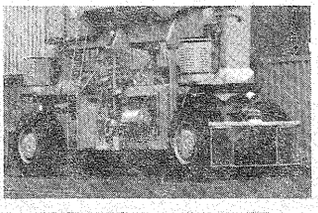
Frank X. Johnston, Supt., Mystic Terminal Pier, Massport

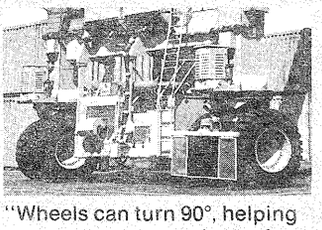
"Maintenance? No problem. We get regular scheduled service from Marathon, which helps keep our Straddle Hoist operating 98.7%."



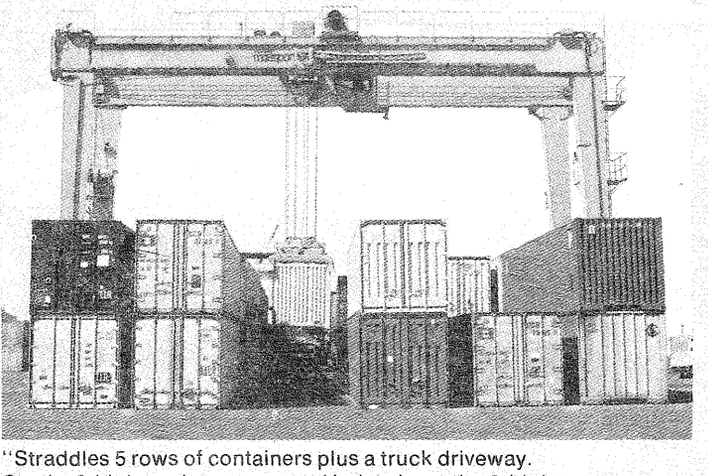
"Operates in tight spots. Here it's putting a 40-foot container on trailer."

"Operator is on top of the action, watching the whole operation from his cab riding on the trolley with the hoist."

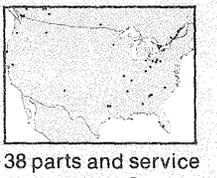




"Wheels can turn 90°, helping us use almost every inch of our 45-acre storage."



"Straddles 5 rows of containers plus a truck driveway. Stacks 3-high, and can move and hoist above the 3-high stack with another container."



38 parts and service centers in U.S. and Canada.

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P.O. BOX 2307, LONGVIEW, TEXAS 75601
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Any questions? Let us send you complete specs, and, incidentally, we'll also send you two drawings of Leonardo da Vinci's. Framed, they will look handsome in your den or office. Just write us.

The Big Difference Machines

Respondents to the survey (port and terminal operators) were asked to complete the following questions regarding each of their container terminal facilities:

1. Terminal Designation
2. Status (In Operation, Under Construction, Planning Stage)
3. Name of Terminal Operator
4. Type of Terminal Management (D, E, F, X)
5. Mode of Operations (G, H, I, J, K)
6. Number of Berths
7. Length of Berths (meters), Listing Each Berth Separately
8. Water Depth at Berths (meters)
9. Container Freight Station (CFS) — Yes/No
10. If Yes for CFS Show Covered (C) and Uncovered (UC) Area Separately (square meters)
11. Land Area of Terminal Excluding CFS (square meters)
12. Railroad Service — Yes/No
13. Number of Container Cranes Within Terminal
14. Rated Lifting Capacity of Each Crane (metric tons) — Show Each Crane Separately
15. Reach on Water Side from Front Edge of Berth (meters)
16. Reach on Land Side from Front Edge of Berth (meters)
17. Width of Container Crane Rails (meters) — (If Crane Is Not on Rails List as "Mobile")
18. Crane Bridge Height Above High Water (meters)
19. Number of Container Spaces — Show Number Separately for Each Size Container
20. Number of Container Spaces With Electrical Refrigerated Outlets

Container Facilities—Europe

PORT OF AMSTERDAM (Europe)

CONTAINER TERMINAL "AMSTERDAM"

Status—In operation
Operator—Royal Netherland Steamship Co.
Mode of Ops.—G, H, I, J
Type of Mgmnt.—D
No. Berths—2
Berth Length—283 (Total)
Depth at Berth—Each 12.0
CFS—Yes
CFS Space Covered—3,000
Uncovered—9,000
Term. Area—250
RR Services—Yes
No. Cranes—2
Crane Lift Capt.—Each 50.8
Reach on Water Side—Each 36.0
Reach on Land Side—Each 44.00
Crane Rail Width—Each 20
Crane Bridge Hght.—Each 25
No. Container Spaces—2,000 (20 ft.)
No. Spaces with Elect. Outlets—20

PORT OF ANTWERP (Europe)

CHURCHILL DOCK

Status—In operation
Operator—Hessenatie-Neptunus, Ltd.
Type of Mgmnt.—E
Mode of Ops.—H, I, J
No. Berths—4
Berth Length—1025 (Total)
Depth at Berth—Each 15.25
CFS—Yes
CFS Space Covered—8,200
Uncovered—14,200
Term. Area—162.600
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 40.6
Reach on Water Side—Each 32.5
Reach on Land Side—Each 52.5
Crane Rail Width—Each 15
Crane Bridge Hght.—Each 25
No. Container Spaces—3,600 (20 ft.)
No. Spaces with Elect. Outlets—24

CHURCHILL DOCK

Status—In operation
Operator—Westerlund Corporation, Ltd.
Type of Mgmnt.—E
Mode of Ops.—H, I
No. Berths—1
Berth Length—200
Depth at Berth—15.25
CFS—Yes
CFS Space Covered—22,000
Uncovered—8,000
Term. Area—44,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—40.6
Reach on Water Side—32.5
Reach on Land Side—52.5
Crane Rail Width—15
Crane Bridge Hght.—24.75
No. Container Spaces—1,500, 20 ft.
No. Spaces with Elect. Outlets—

CHURCHILL DOCK

Status—In operation
Operator—Nocrd Natie Ltd.
Type of Mgmt.—E
Mode of Ops.—H, I
No. Berths—2
Berth Length—359 Total
Depth at Berth—Each 15.25
CFS—Yes
CFS Space Covered—6,500
Uncovered—6,500
Term. Area—119,500
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—53.8
Reach on Water Side—32.5
Reach on Land Side—42.5
Crane Rail Width—15
Crane Bridge Hght.—26.8
No. Container Spaces—4,000 (20 ft.)
No. Spaces with Elect. Outlets—50

CHURCHILL DOCK

Status—In operatcn
Operator—Glysen Stevedoring Co., Ltd.
Type of Mgmnt.—E
Mode of Ops.—G, H, I, J
No. Berths—3
Berth Length—790 (Total)
Depth at Berth—Each 15.25
CFS—Yes
CFS Space Covered—22,500
Uncovered—
Term. Area—245,620
RR Service—Yes
No Cranes—2
Crane Lift Capt.—Each 45.7
Reach on Water Side—Each 37.5
Reach on Land Side—Each 48.5
Crane Rail Width—Each 16
Crane Bridge Hght.—Each 32
No. Container Spaces—2,500 (20 ft.)
No. Spaces with Elect. Outlets—10

CHURCHILL DOCK

Status—In operation
Operator—Antwerps Havenbedrijf
Type of Mgmnt.—E
Mode of Ops.—H. I, J
No. Berths—3
Berth Length—754 (Total)
Depth at Berth—Each 15.25
CFS—Yes
CFS Space Covered—20,000
Uncovered—7,500
Term. Area—58,500
RR Servicee—Yes
No. Cranes—1
Crane Lift Capt.—45.7
Reach on Water Side—32.5
Reach on Land Side—25.25
Crane Rail Width—11
Crane Bridge Hght.—31.5
No. Container Spaces—940 (20 ft.), 150 (40 ft.)
No. Spaces with Elect. Outlets—52

CHURCHILL DOCK

Status—In operation
Operator—Seaport Terminals Ltd.
Type of Mgmnt.—E
Mode of Ops.—H, I
No. Berths—3
Berth Length—750 (total)
Depth at Berth—Each 15.25
CFS—Yes
CFS Space Covered—18,500
Uncovereed—
Term. Area—56,500
RR Service—No
No. Cranes—None
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—500 (20 ft.)
No. Spaces with Elect. Outlets—5

CHURCHILL DOCK

Status—In operation, planning stage
Operator—The National Belgian Railway Company
Type of Mgmnt.—F
Mode of Ops.—I
No. Berths—
Berth Length—
Depth at Berth—
CFS—
CFS Space Covered—
Uncovered—
Term. Area—23,200 (additional 22,500 planned)
RR Servicee—Yes
No Cranes—2
Crane Lift Capt.—1) 30, 2) 35
Reach on Water Side—
Reach on Land Side—Each 22
Crane Rail Width—1) 22, 2) 20
Crane Bridge Hght.—
No. Container Spaces—250 (20 ft.)
No. Spaces with Elect. Outlets—

PORT OF ARHUS (Europe)

ARHUS HAVN

Status—In operation
Operator—Arhus Stevedore Kompagni
Type of Mgmnt.—F
Mode of Ops.—I, J, K (forklift trucks)
No. Berths—3
Berth Length—1) 80, 2) 100, 3) 300
Depth at Berth—1) 7.5, 2) 7.5, 3) 10.0
CFS—Yes
CFS Space Covered—5,000
Uncovered—
Term. Area—64,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—1) 32, 2) 35
Reach on Water Side—1) 31, 2) 23,
Reach on Land Side—1) 32, 2) 37
Crane Rail Width—1) 33, 2) 9.7
Crane Bridge Hght.—Each 27
No. Container Spaces—Not Available
No. Spaces with Elect. Outlets—25

ARHUS HAVN

Status—Under construction
Operator—
Type of Mgmnt.—F
Mode of Ops.—I, J, K (Forklift Trucks)
No. Berths—3
Berth Length—1) 120, 2) 185 3) 185
Depth at Berth—1) 10.0, 2) 11.0, 3) 11.0
CFS—
CFS Space Covered—
Uncovered—
Term. Area—78,000
RR Service—Yes
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No.Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF BELFAST (Europe)

HERDMAN CHANNEL 2

Status—In operation
Operator—Cawoods Containers Ltd.
Type of Mgmnt.—E
Mode of Ops.—H
No. Berths—1
Berth Length—133
Depth at Berth—5.5
CFS—Yes
CFS Space Covered—
Uncovered—2,020
Term. Area—23,500
RR Service—No
No. Cranes—1
Crane Lift Capt.—30
Reach on Water Side—13.7
Reach on Land Side—15.2
Crane Rail Width—12.8
Crane Bridge Hght.—12.2
No. Container Spaces—800 (20 ft.)
No. Spaces with Elect. Outlets—

HERDMAN CHANNEL 1

Status—In operation
Operator—Transport Ferry Service, Ltd.
Type of Mgmnt.—E
Mode of Ops.—G, J
No. Berths—1
Berth Length—133
Depth at Berth—5.5
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—25,500
RR Service—No
No. Cranes—1
Crane Lift Capt.—30
Reach on Water Side—17.1
Reach on Land Side—48.8
Crane Rail Width—36.0
Crane Bridge Hght.—20.4
No. Container Spaces—500 (20 ft.)
No. Spaces with Elect. Outlets—

GOTTO WHARFS 2 & 3

Status—In operation
Operator—British Rail
Type of Mgmnt.—E
Mode of Ops.—G
No. Berths—2
Berth Length—1) 101, 2) 121
Depth at Berth—Each 6.4
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—29,900

KEY

D—Exclusive lease for specified users
E—Preferential use
F—Common user terminal (open to all users)
X—If other type management, please specify
G—Transtainer operation
H—Straddle carrier operation
I—Chassis operation
J—Roll on/Roll off operation
K—Other than above—specify
(If mixed operation, list above letters that apply)

RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 30
Reach on Water Side—1) 16.0, 2) 16.6
Reach on Land Side—1) 25.5, 2) 25.7
Crane Rail Width—Each 11.3
Crane Bridge Hght.—1) 13.7, 2) 14.5
No. Container Spaces—600 (20 ft.)
No. Spaces with Elect. Outlets—

YORK DOCK 1

Status—In operation
Operator—G. Heyn & Sons, Ltd.
Type of Mgmnt.—E
Mode of Ops.—K (Side loader)
No. Berths—1
Berth Length—130
Depth at Berth—7.3
CFS—Yes
CFS Space Covered—2,600
Uncovered—
Term. Area—4,500
RR Service—No
No. Cranes—1 (Fixed derrick)
Crane Lift Capt.—30
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—50 (20 ft.)
No. Spaces with Elect. Outlets—

YORK DOCK A

Status—In operation
Operator—Belfast Steamship Co., Ltd. & British Rail
Type of Mgmnt.—E
Mode of Ops.—J
No. Berths—1
Berth Length—200
Depth of Berth—7.3
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—9,700
RR Service—No
No. Cranes—None
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—150 (20 ft.)
No. Spaces with Elect. Outlets—

BELFAST QUAY

Status—In operation
Operator—Belfast Steamship Co., Ltd.
Type of Mgmnt.—E
Mode of Ops.—I
No. Berths—1
Berth Length—123
Depth at Berth—5.5
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—21,200
RR Service—No
No. Cranes—2 (Fixed derrick)
Crane Lift Capt.—Each 25
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—150 (20 ft.)
No. Spaces with Elect. Outlets—

DONEGALL QUAY 2

Status—In operation
Operator—Transport Ferry Service, Ltd.
Type of Mgmnt.—E
Mode of Ops.—H
No. Berths—1
Berth Length—122
Depth at Berth—4.27
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—9,900
RR Service—No
No. Cranes—1 (Fixed derrick)
Crane Lift Capt.—25
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—200 (20 ft.)
No. Spaces with Elect. Outlets—

DONEGALL QUAY 4

Status—In operation
Operator—Belfast Steamship Co., Ltd.
Type of Mgmnt.—E
Mode of Ops.—J, K (Fork lift)
No. Berths—1
Berth Length—119
Depth at Berth—4.27
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—8,900
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—150 (20 ft.)
No. Spaces with Elect. Outlets—

DONEGALL QUAY 5

Status—In operation
Operator—Belfast Steamship Co., Ltd. (Burns and Laird Lines, Ltd.)
Type of Mgmnt.—E
Mode of Ops.—I, J
No. Berths—1
Berth Length—121
Depth at Berth—4.27
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—11,600
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—150 (20 ft.)
No. Spaces with Elect. Outlets—

DONEGALL QUAY 6

Status—In operation
Operator—British Rail
Type of Mgmnt.—E
Mode of Ops.—J
No. Berths—1
Berth Length—165
Depth at Berth—4.27
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—12,100
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—150 (20 ft.)
No. Spaces with Elect. Outlets—

PORT OF BREMEN (Europe)

BREMEN CONTAINER TERMINAL

Status—In operation
Operator—Bremen Lagerhaus Gesell Schaft
Type of Mgmnt.—F
Mode of Ops.—H, I
No. Berths—3
Berth Length—1) 200, 2) 300, 3) 200
Depth at Berth—Each 9
CFS—Yes
CFS Space Covered—76,000
Uncovered—117,000
Term. Area—
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—1) 45, 2) 37
Reach on Water Side—1) 28, 2) 30
Reach on Land Side—1) 42.4, 2) 29
Crane Rail Width—Each 15.2
Crane Bridge Hght.—Each 23
No. Container Spaces—
No. Spaces with Elect. Outlets—21

PORT OF BREMERHAVEN (Europe)

BREMERHAVEN CONTAINER TERMINAL

Status—In operation
Operator—Bremer Lagerhaus Gesell Schaft
Type of Mgmnt.—F
Mode of Ops.—H, I, J
No. Berths—7
Berth Length—1) 330, 2) 330, 3) 330, 4) 200 5) 200, 6) 200, 7) 140
Depth at Berth—1) 14, 2) 14, 3) 14, 4) 12, 5) 12, 6) 12, 7) 12
CFS—Yes
CFS Space Covered—13,000
Uncovered—741,200
Term. Area—
RR Service—Yes
No. Cranes—9
Crane Lift Capt.—1) 54, 2) 54, 3) 54, 4) 54 5) 54, 6) 48, 7) 45, 8) 45, 9) 42
Reach on Water Side—1) 37.5, 2) 37.5, 3) 37.5, 4) 37.5, 5) 37.5, 6) 37.5, 7) 32.5, 8) 32.5 9) 38
Reach on Land Side—1) 37.7, 2) 39.7, 3) 39.7, 4) 39.7, 5) 39.7, 6) 39.7, 7) 39.7, 8) 39.7, 9) 38.4
Crane Rail Width—Each 15.2
Crane Bridge Hght.—1) 22.5, 2) 25.9, 3) 25.9, 4) 25.9, 5) 25.9, 6) 25.9, 7) 26.5, 8) 26.5, 9) 29.4
No. Container Spaces—
No. Spaces with Elect. Outlets—318

PORT OF BRISTOL (Europe)

BERTH N

Status—In operation
Operator—Bristol Steam Navigation Co.
Type of Mgmnt.—D
Mode of Ops.—G, I
No. Berths—1
Berth Length—198
Depth at Berth—7.9
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—9,030
RR Service—Yes
No. Cranes—2 (2nd crane works in back of crane on berth
Crane Lift Capt.—Each 30.4
Reach on Water Side—1) 11.1
Reach on Land Side—1) 26.1
Crane Rail Width—1) 15.2
Crane Bridge Hght.—1) 16.8
No. Container Spaces—280 (20 ft.)
No. Spaces with Elect. Outlets—3

BERTH T

Status—In operation
Operator—Port of Bristol
Type of Mgmnt.—F
Mode of Ops.—I
No. Berths—1
Berth Length—201
Depth at Berth—11.9
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—18,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—30.4
Reach on Water Side—25.6
Reach on Land Side—29.3
Crane Rail Width—15.2
Crane Bridge Hght.—28
No. Container Spaces—1,200 (20 ft.)
No. Spaces with Elect. Outlets—

CLYDE PORT AUTHORITY (Europe)

CLYDEPORT CONTAINER TERMINAL, GREENOCK

Status—In operation
Operator—Clyde Port Authority
Type of Mgmnt.—F
Mode of Ops.—H
No. Berths—1
Berth Length—368
Depth at Berth—12.8
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—113,312
RR Service—Yes
No. Cranes—3
Crane Lift Capt.—1) 35.6, 2) 35.6, 3) 40.6
Reach on Water Side—Each 35.1
Reach on Land Side—1) 24.4, 2) 24.4, 3) 32.0
Crane Rail Width—Each 16.8
Crane Bridge Hght.—1) 23.8, 2) 23.8, 3) 28.5
No. Container Spaces—1,590 (20 ft.)
No. Spaces with Elect. Outlets—16

PORT OF COPENHAGEN (Europe)

PORT OF COPENHAGEN CONTAINER TERMINAL

Status—In operation
Operator—The Free Port of Copenhagen Co., Ltd.
Type of Mgmnt.—F
Mode of Ops.—G, H, I, J
No. Berths—2
Berth Length—1) 165, 2) 500
Depth at Berth—1) 7, 2) 10
CFS—Yes

CFS Space Covered—4,600
Uncovered—
Term. Area—115,400
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 32
Reach on Water Side—1) 30.0, 2) 36.5
Reach on Land Side—Each 31
Crane Rail Width—Each 30
Crane Bridge Hght.—1) 24, 2)26.6
No.Container Spaces—700 (40 ft.)
No. Spaces with Elect. Outlets—20

THE CAR-FERRY TERMINAL, LTD.

Status—In operation
Operator—The Car Ferry Terminal, Ltd.
Type of Mgmnt.—E
Mode of Ops.—G, I, J
No. Berths—1
Berth Length—230
Depth at Berth—6.7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—36,618
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—25
Reach on Water Side—22
Reach on Land Side—16
Crane Rail Width—15
Crane Bridge Hght.—18
No. Container Spaces—
No. Spaces with Elect. Outlets—

HOLGER JORGENSEN

Status—In operation
Operator—Holger Jorgensen
Type of Mgmnt.—E
Mode of Ops.—I
No. Berths—1
Berth Length—300
Depth at Berth—6.3
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—18,800
RR Service—No
No. Cranes—1 (Mobile crane)
Crane Lift Capt.—100
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF DUBLIN (Europe)

BRITISH RAIL

Status—In operation
Operator—British Railways
Type of Mgmnt.—D
Mode of Ops.—G
No. Berths—1
Berth Length—114.8
Depth at Berth—6.1
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—29,947
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 30.5
Reach on Water Side—Each 17.7
Reach on Land Side—Each 23.6
Crane Rail Width—Each 22.8
Crane Bridge Hght.—Each 12.5
No. Container Spaces—350 (20 ft.), 200 (30 ft.), 40 (40 ft.)
No. Spaces with Elect. Outlets—

SOUTH SIDE

Status—Under construction
Operator—Dublin Port and Docks Board
Type of Mgmnt.—F
Mode of Ops.—H, I
No. Berths—1
Berth Length—243.9
Depth at Berth—7.6
CFS—Not at present
CFS Space Covered—
Uncovered—
Term. Area—32,400
RR Service—No
No. Cranes—1
Crane Lift Capt.—30.5
Reach on Water Side—19.8
Reach on Land Side—38.9
Crane Rail Width—29.8
Crane Bridge Hght.—20.1
No. Container Spaces—Not yet decided
No. Spaces with Elect. Outlets—Not yet decided

A.S.N.

Status—In operation
Operator—Roche Shipping Co.
Type of Mgmnt.—D
Mode of Ops—H, I
No. Berths—1
Berth Length—111.25
Depth at Berth—9.7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—22,175
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—30.5
Reach on Water Side—13.8
Reach on Land Side—57.9
Crane Rail Width—46.6
Crane Bridge Hght.—14.6
No. Container Spaces—(14,400 sq. meters of space for containers)
No. Spaces with Elect. Outlets—

BRISTOL SEAWAYS

Status—In operation
Operator—Bristol Seaways, Ltd.
Type of Mgmnt.—D
Mode of Ops.—G
No. Berths—1
Berth Length—167.7
Depth at Berth—7.6
CFS—Yes
CFS Space Covered—3,646
Uncovered—
Term. Area—11,689 (4,000 sq. meter extension being added)
RR Service—No
No. Cranes—1
Crane Lift Capt.—30.5
Reach on Water Side—10.9
Reach on Land Side—30.3
Crane Rail Width—18.9
Crane Bridge Hght.—12.8
No. Container Spaces—(7,200 sq. meters of space for containers)
No. Spaces with Elect. Outlets—3

B & I FREIGHT TERMINAL

Status—In operation
Operator—British & Irish Steampacket Co.
Type of Mgmnt.—D
Mode of Ops.—H, I, J
No. Berths—3
Berth Length—1) 106.1, 2) 114.3, 3) 114.3
Depth at Berth—Each 6.1
CFS—Yes
CFS Space Covered—6,019
Uncovered—5,360
Term. Area—99,121
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—1) 30.5, 2) 28.5 (Derrick)
Reach on Water Side—1) 18.3
Reach on Land Side—1) 47.5
Crane Rail Width—1) 18.6
Crane Bridge Hght.—1) 17.1
No. Container Spaces—(25,000 sq. meters of space for containers)
No. Spaces with Elect. Outlets—12

OCEAN PIER SOUTH

Status—In operation
Operator—Port Services, Ltd.
Type of Mgmnt.—D
Mode of Ops.—H, I
No. Berths—1
Berth Length—142.4
Depth at Berth—9.75
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—10,000
RR Service—Yes
No. Cranes—1 (Derrick)
Crane Lift Capt.—32.5
Reach on Water Side—22
Reach on Land Side—30
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—Not allocated.
No. Spaces with Elect. Outlets—

NORTH WALL

Status—In operation
Operator—British and Irish Steampacket Co.
Type of Mgmnt.—E
Mode of Ops.—I
No. Berths—2
Berth Length—Each 123.5
Depth at Berth—Each 6.7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 28.45 (Derricks)
Reach on Water Side—Each 22
Reach on Land Side—Each 30
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

OCEAN PIER WEST

Status—In operation
Operator—Dublin Port and Docks Board
Type of Mgmnt.—F
Mode of Ops.—I
No. Berths—1
Berth Length—200
Depth at Berth—9.75
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—2,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—35.5
Reach on Water Side—23.9
Reach on Land Side—55.9
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF DUNKIRK (Europe)

QUAI DE DOUVRES

Status—In operation
Operator—A.L.A.
Type of Mgmnt.—D
Mode of Ops.—J
No. Berths—1
Berth Length—172.2
Depth at Berth—8.5
CFS—None
CFS Space Covered—
Uncovered—
Term. Area—20,000
RR Service—Yes
No. Cranes—0
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

FREYCINET 8

Status—In operation
Operator—S.N.C.F.
Type of Mgmnt.—D, F (Storage area leased to French Railways)
Mode of Ops.—G, H, I, J
Berth Length—336 (Total)
No. Berths—2
Depth at Berth—13.00
CFS—Yes
CFS Space Covered—
Uncovered—
Term. Area—80,000
RR Services—Yes
No. Cranes—2
Crane Lift Capt.—Each 45
Reach on Water Side—Each 30
Reach on Land Side—Each 15.6
Crane Rail Width—Each 16.1
Crane Bridge Hght.—Each 20
No. Container Spaces—Not available
No. Spaces with Elect. Outlets—20

FREYCINET 7

Status—In operation
Operator—Transbaltique and other operators
Type of Mgmnt.—E, F
Mode of Ops.—J
No. Berths—1
Berth Length—170
Depth at Berth—8.0
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—3,500
RR Service—Yes

KEY

D—Exclusive lease for specified users
E—Preferential use
F—Common user terminal (open to all users)
X—If other type management, please specify
G—Transtainer operation
H—Straddle carrier operation
I—Chassis operation
J—Roll on/Roll off operation
K—Other than above—specify
(If mixed operation, list above letters that apply)

No. Cranes—0
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridgee Hght.—
No. Container Spaces—Not available
No. Spaces with Elect. Outlets—

EXTREMITE QUEST DU BASSIN MARITIME

Status—In operation
Operator—Scanaustral and other operators
Type of Mgmnt.—E, F
Mode of Ops.—I, J
No. Berths—1
Berth Length—230
Depth at Berth—14.0
CFS—Yes
CFS Space Covered—4,000
Uncovered—
Term. Area—17,000
RR Service—Yes
No. Cranes—0
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—Not available
No. Spaces with Elect. Outlets—32

PORT RAPIDE NOUVREL AVANTPORT

Status—Planning stage
Operator—
Type of Mgmnt.—
Mode of Ops.—G, H, I, J
No. Berths—3
Berth Length—1,000 (Total)
Depth at Berth—Each 13.0
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—560,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 45
Reach on Water Side—Each 30
Reach on Land Side—Each 15.6
Crane Rail Width—Each 16.1
Crane Bridge Hght.—Each 20
No. Container Spaces—Not available
No. Spaces with Elect. Outlets—

PORT OF ESBJERG (Europe)

PUBLIC CONTAINER TERMINAL

Status—In operation, under construction
Operator—
Type of Mgmnt.—F
Mode of Ops.—J, K (Lift on/Lift off)
No. Berths—1
Berth Length—192
Depth at Berth—8
CFS—Yes
CFS Space Covered—
Uncovered—20,000
Term. Area—
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—32
Reach on Water Side—28
Reach on Land Side—35
Crane Rail Width—33
Crane Bridge Hght.—26
No. Container Spaces—
No. Spaces with Elect. Outlets—36

DFDS CONTAINER TERMINAL

Status—In operation
Operator—DFDS
Type of Mgmnt.—E
Mode of Ops.—J
No. Berths—2
Berth Length—1) 94, 2) 230
Depth at Berth—Each 6.7
CFS—Yes
CFS Space Covered—15,833
Uncovered—95,167
Term. Area—
RR Service—Yes
No. Cranes—3
Crane Lift Capt.—1) 36, 2) 40, 3) 40
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—1) 25, 2) Fixed, 3) Fixed
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—302

DFDS PASSENGER TERMINAL

Status—In operation
Operator—DFDS
Type of Mgmnt.—E
Mode of Ops.—J
No. Berths—1
Berth Length—140
Depth at Berth—6.7
CFS—Yes
CFS Space Covered—2,000
Uncovered—18,000
Term. Area—
RR Service—No
No. Cranes—0
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—36

PORT OF FELIXSTOWE (Europe)

PORT OF FELIXSTOWE CONTAINER TERMINAL

Status—In operation
Operator—Felixstowe Dock and Railway Co.
Type of Mgmnt.—F
Mode of Ops.—H, I, J
No. Berths—(Depends on length of ships)
Berth Length—630
Depth at Berth—13.7
CFS—Yes
CFS Space Covered—13,956
Uncovered—21,000
Term. Area—168,000
RR Service—Yes
No. Cranes—3
Crane Lift Capt.—1) 32.5, 2) 32.5, 3) 40.0
Reach on Water Side—1) 21.74, 2) 31.39, 3) 33.37
Reach on Land Side—1) 28.04, 2) 28.04, 3) 34.14
Crane Rail Width—Each 15.24
Crane Bridge Hght.—1) 25.5, 2) 25.5, 3) 29.29
No. Container Spaces—6,000
No. Spaces with Elect. Outlets—112

PORT OF GARSTON (Europe)

STALBRIDGE DOCK CONTAINER BERTH

Status—In operation
Operator—Cawoods Containers, Ltd.
Type of Mgmnt.—D
Mode of Ops.—H
No. Berths—1
Berth Length—147
Depth at Berth—7.9
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—12,140
RR Service—No
No. Cranes—1
Crane Lift Capt.—32.5
Reach on Water Side—15.5
Reach on Land Side—13.1
Crane Rail Width—12.8
Crane Bridge Hght.—16.5
No. Container Spaces—Not available
No. Spaces with Elect. Outlets—

NORTH DOCK CONTAINER BERTH

Status—In operation
Operator—Irish Sea Ferries, Ltd.
Type of Mgmnt.—D
Mode of Ops.—I
No. Berths—1
Berth Length—80.9
Depth at Berth—6.1
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—5,261
RR Service—No
No. Cranes—1
Crane Lift Capt.—32.5
Reach on Water Side—26.4
Reach on Land Side—14.5
Crane Rail Width—(Derrick crane)
Crane Bridge Hght.—(Derrick crane)
No. Container Spaces—Not available
No. Spaces with Elect. Outlets—

PORT OF GOOLE (Europe)

SCOTCH DERRICK

Status—In operation
Operator—British Transport Docks Board
Type of Mgmnt.—F
Mode of Ops.—K (Lift on/Lift off)
No. Berths—1
Berth Length—134
Depth at Berth—6
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—510
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—32.5
Reach on Water Side—29
Reach on Land Side—43
Crane Rail Width—(Derrick crane)
Crane Bridge Hght.—(Derrick crane)
No. Container Spaces—53 (20 ft.)
No. Spaces with Elect. Outlets—

PORT OF GOTHENBURG (Europe)

SKANDIATERMINALEN

Status—In operation, Planning stage
Operator—Skandiaterminalen AB (STA)
Type of Mgmnt.—F
Mode of Ops.—G, H, I, J
No. Berths—11
Berth Length—1) 100, 2) 130, 3) 180, 4) 180, 5) 180, 6) 180, 7) 180, 8) 180, 9) 225, 10) 215, 11) 375
Depth at Berth—1) 7, 2) 7, 3) 9, 4) 10, 5) 10, 6) 10, 7) 10, 8) 10, 9) 10, 10) 11, 11) 12
CFS—Yes
CFS Space Covered—12,000
Uncovered—25,000
Term. Area—590,000 (40,000 planned)
RR Service—Yes
No. Cranes—4 (1 in planning stage)
Crane Lift Capt.—1) 27, 2) 35, 3) 35
Reach on Water Side—Each 32.5
Reach on Land Side—1) 26, 2) 43, 3) 43
Crane Rail Width—1) 15.5, 2) 20.0, 3 20.0
Crane Bridge Hght.—Each 26.5
No. Container Spaces—
No. Spaces with Elect. Outlets—54 (50 additional outlets planned)

(Europe)

HULL LONDON TERMINALEN

Status—In operation, Planning stage
Operator—Goteborgs Stuveri AB
Type of Mgmnt.—D, H
Mode of Ops.—J
No. Berths—2
Berth Length—1) 140, 2) 150
Depth at Berth—Each 7.0
CFS—Yes
CFS Space Covered—9,000
Uncovered—
Term. Area—85,000 (35,000 planned addition)
RR Service—Yes
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—10

TOR TERMINALEN

Status—In operation, Planning stage
Operator—Tor-Line AB
Type of Mgmnt.—D
Mode of Ops.—J
No. Berths—2
Berth Length—1) 150, 2) 185 (Planned)
Depth at Berth—Each 8.0
CFS—Yes
CFS Space Covered—5,000
Uncovered—
Term. Area—95,000 (70,000 Planned addition)
RR Service—Yes
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—6

PORT OF GRIMSBY/ IMMINGHAM (Europe)

TOR LINE, IMMINGHAM

Status—In operation
Operator—Tor Line Limited
Type of Mgmnt.—D
Mode of Ops.—J
No. Berths—3
Berth Length—454.5 (Total)
Depth at Berth—Each 8.2

CFS—No
CFS Space Covered—
Uncovered—
Term. Area—95,000
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

B LINE IMMINGHAM

Status—In operation
Operator—Brit-Den Unit Service, Ltd.
Type of Mgmnt.—E
Mode of Ops.—K (Scotch derrick)
No. Berths—1
Berth Length—91.4
Depth at Berth—10.9
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—5,072
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

DANISH BACON, GRIMSBY

Status—In operation
Operator—D.F.D.S. A/S (Local agents J. Sutcliffe & Son (Gy) Ltd.)
Type of Mgmnt.—E
Mode of Ops.—J, K (Ship portainers)
No. Berths—1
Berth Length—219.5
Depth at Berth—6.2
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—25,000
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF HAMBURG (Europe)

EURO-KAI TERMINAL

Status—In operation
Operator—Euro-kai KG&A
Type of Mgmnt.—F
Mode of Ops.—J, H
No. Berths—3
Berth Length—1) 120,2) 160, 3) 307,
Depth at Berth—1) 11.0, 2) 11.0,3) 13.0
CFS—Yes
CFS Space Covered—13,000
Uncovered—14,000
Term. Area—45,000
RR Service—Yes
No. Cranes—4 (Cargotainers), 2 (Gantry cranes)
Crane Lift Capt.—4 Cargotainers. each 25.4, 2 Gantry cranes, each 45.7
Reach on Water Side—4 Cargotainers, each 28; 1) Gantry, 32.5, 2) Gantry, 35.5
Reach on Land Side—4 Cargotainers, each 42, 2 Gantry, each 40.2
Crane Rail Width—Each 18
Crane Bridge Hght.—4 Cargotainers, each 28.0; 1) Gantry, 25.7, 2) Gantry, 28.7
No. Container Spaces—3,000 (20 ft.)
No. Spaces with Elect. Outlets—100

EURO-KAI TERMINAL

Status—Under construction
Operator—Euro-Kai KG & A
Type of Mgmnt.—
Mode of Ops.—G
No. Berths—1
Berth Length—188
Depth at Berth—11
CFS—Yes
CFS Space Covered—6,000
Uncovered—
Term. Area—25,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—45.7
Reach on Water Side—35.5
Reach on Land Side—40.2
Crane Rail Width—18
Crane Bridge Hght.—28.7
No. Container Spaces—5,000 (20 ft.)
No. Spaces with Elect. Outlets—

CONTAINER TERMINAL BURCHARDKAI

Status—In operation
Operator—Hamburger Hafen-und Lagerhaus-AG
Type of Mgmnt.—F
Mode of Ops.—H, J
No. Berths—7
Berth Length—1) 190, 2) 190, 3) 245, 4) 245, 5) 300, 6) 300, 7) 380
Depth at Berth—1) 10, 2) 10, 3) 10, 4) 11, 5) 13, 6) 14, 7) 14
CFS—Yes
CFS Space Covered—84,000
Uncovered—
Term. Area—700,000
RR Service—Yes
No. Cranes—7
Crane Lift Capt.—1) 42.7, 2) 38.6, 3) 39.1, 4) 39.1, 5) 42.7, 6) 42.7, 7) 42.7
Reach on Water Side—1) 36, 2) 36, 3) 36, 4) 36, 5) 39.1, 6) 39.1, 7) 39.1
Reach on Land Side—1) 28, 2) 28, 3) 33, 4) 33, 5) 37.25, 6) 37.25, 7) 37.25
Crane Rail Width—Each 18
Crane Bridge Hght.—1) 23.2, 2) 23.2, 3) 25.05, 4) 25.05, 5) 29.2, 6) 29.2, 7) 29.2
No. Container Spaces—
No. Spaces with Elect. Outlets—136

AFRIKA TERMINAL

Status—In operation
Operator—Hafenbetrieb Der Afrika-Linien GMBH
Type of Mgmnt.—F
Mode of Ops.—K (Trailer)
No. Berths—3
Berth Length—1) 165, 2) 165, 3) 226
Depth at Berth—Each 11
CFS—Yes
CFS Space Covered—28,000
Uncovered—72,000
Term. Area—10,000
RR Service—Yes
No. Cranes—7
Crane Lift Capt.—33.5 (max. lifting capacity)
Reach on Water Side—30
Reach on Land Side—42
Crane Rail Width—6.0
Crane Bridge Hght.—
No. Container Spaces—750 (20 ft.)
No. Spaces with Elect. Outlets—32

TERMINAL HAMBURG-SUD-B DDG HANSA

Status—In operation
Operator—Hanseatische Hafenbetriebsge Sellschaft, Eggert & Amsinck and Hafenbetrieb der DDG Hansa
Type of Mgmnt.—D
Mode of Ops.—K (Trailer)
No. Berths—2
Berth Length—1) 190, 2) 175
Depth at Berth—Each 12
CFS—Yes
CFS Space Covered—10,000
Uncovered—20,000
Term. Area—120,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 25
Reach on Water Side—Each 20
Reach on Land Side—Each 20
Crane Rail Width—Each 6
Crane Bridge Hght.—
No. Container Spaces—1,000 (20 ft.)
No. Spaces with Elect. Outlets—20

TOLLERORT TERMINAL

Status—In operation
Operator—Lager u Speditions Gesellschaft MB H
Type of Mgmnt.—F
Mode of Ops.—H, J, K
No. Berths—6 or 7 (depending on length of ships)
Berth Length—1,050 (Total)
Depth at Berth—Each 11
CFS—Yes
CFS Space Covered—20,000
Uncovered—65,000
Term. Area—30,000
RR Service—Yes
No. Cranes—3
Crane Lift Capt.—1) 48, 2) 25, 3) 25
Reach on Water Side—1 N/A, 2) 32.5, 3) 36.0
Reach on Land Side—1) N/A, 2) 40.2, 3) 36.0
Crane Rail Width—1) N/A, 2) 18.0, 3) 18.0
Crane Bridge Hght.—1) N/A, 2) 28.7, 3) 28.7
No. Container Spaces—7,000 (20 ft.)
No. Spaces with Elect. Outlets—80

PORT OF HELSINGBORG (Europe)

PUBLIC CONTAINER TERMINAL

Status—In operation
Operator—Skaneterminalen AB
Type of Mgmnt.—F
Mode of Ops.—G, J
No. Berths—6
Berth Length—1) 92, 2) 100, 3) 85, 4) 100, 5) 100, 6) 100
Depth at Berth—1) 8.0, 2) 8.0, 3) 11.0, 4) 11.5, 5) 11.5, 6) 11.5
CFS—Yes
CFS Space Covered—5,000
Uncovered—120,000
Term. Area—5,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—45
Reach on Water Side—22
Reach on Land Side—30
Crane Rail Width—18
Crane Bridge Hght.—29
No. Container Spaces—2,000 (20 ft.) or 1,000 (40 ft.)
No. Spaces with Elect. Outlets—6

PORT OF HULL (Europe)

QUEEN ELIZABETH DOCK

Status—In operation
Operator—British Transport Docks Board
Type of Mgmnt.—E
Mode of Ops.—J
No. Berths—1
Berth Length—192
Depth at Berth—10
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—
RR Service—No
No. Cranes—1
Crane Lift Capt.—40
Reach on Water Side—25.9
Reach on Land Side—21.3
Crane Rail Width—15.2
Crane Bridge Hght.—24.4
No. Container Spaces—730 (20 ft.)
No. Spaces with Elect. Outlets—9

QUEEN ELIZABETH DOCK

Status—In operation
Operator—John Good & Sons Ltd. & Finhumber
Type of Mgmnt.—E
Mode of Ops.—J
No. Berths—1
Berth Length—140
Depth at Berth—10
CFS—
CFS Space Covered—
Uncovered—
Term. Area—
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght—
No. Container Spaces—665 (20 ft.)
No. Spaces with Elect. Outlets—

QUEEN ELIZABETH DOCK

Status—In operation
Operator—Transport Division of Ellerman Lines, Ltd. and D.F.D.S./A/S
Type of Mgmnt.—E
Mode of Ops.—J
No. Berths—1
Berth Length—115
Depth at Berth—10
CFS—

KEY

D—Exclusive lease for specified users
E—Preferential use
F—Common user terminal (open to all users)
X—If other type management, please specify
G—Transtainer operation
H—Straddle carrier operation
I—Chassis operation
J—Roll on/Roll off operation
K—Other than above—specify
(If mixed operation, list above letters that apply)

CFS Space Covered—
Uncovered—
Term. Area—
RR Services—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—400 (20 ft.)
No. Spaces with Elect. Outlets—30

KING GEORGE DOCK

Status—In operation
Operator—North Sea Ferries Ltd., Transport Division of Ellerman Lines Ltd. and Svea Line
Type of Mgmnt.—E
Mode of Ops.—J
No. Berths—2
Berth Length—153 (Total)
Depth at Berth—Each 10
CFS—Yes
CFS Space Covered—5,073
Uncovered—
Term. Area—
RR Services—
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—740 (20 ft.)
No. Spaces with Elect. Outlets—10

KING GEORGE DOCK

Status—In operation
Operator—Transport Division of Ellerman Lines, Ltd. and D.F.D.S.A./S
Type of Mgmnt.—E
Mode of Ops.—J
No. Berths—1
Berth Length—110
Depth at Berth—10
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—64 (20 ft.)
No. Spaces with Elect. Outlets—

ALEXANDRA DOCK

Status—In operation
Operator—Holland Steamship Co. Ltd., Argo Line and John Good & Sons Ltd.
Type of Mgmnt.—E
Mode of Ops.—J
No. Berths—2
Berth Length—148 (Total)
Depth at Berth—Each 8
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—
RR Services—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—270 (20 ft.)
No. Spaces with Elect. Outlets—

PORT OF KING'S LYNN (Europe)

RO/RO CONTAINER BERTH

Status—In operation
Operator—British Transport Docks Board
Type of Mgmnt.—F
Mode of Ops.—I, J
No. Berths—1
Berth Length—91.5
Depth at Berth—Between 5.2 and 6.1
CFS—Yes
CFS Space Covered—1,756
Uncovered—
Term. Area—19,490
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—32
Reach on Water Side—36.6
Reach on Land Side—36.6
Crane Rail Width—N/A (Scotch derrick)
Crane Bridge Hght.—N/A (Scotch derrick)
No. Container Spaces—650 (20 ft.)
No. Spaces with Elect. Outlets—

PORT OF LE HAVRE (Europe)

QUAI DE L'ATLANTIQUE

Status—In operation
Operator—Port Autonome du Havre
Type of Mgmnt.—E, F
Mode of Ops.—H, I, J
No. Berths—3
Berth Length—Each 265
Depth at Berth—Each 12
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—147,000
RR Service—Yes
No. Cranes—4
Crane Lift Capt.—Each 40
Reach on Water Side—Each 32.9
Reach on Land Side—Each 25.3
Crane Rail Width—Each 15.0
Crane Bridge Hght.—Each 44.0
No. Container Spaces—500 (35 ft.), 3,000 (20 ft.)
No. Spaces with Elect. Outlets—28

QUAI DE L'EUROPE

Status—In operation
Operator—Port Autonome du Havre
Type of Mgmnt.—E, F
Mode of Ops.—H, I, J
No. Berths—3
Berth Length—1) 300, 2) 300, 3) 245
Depth at Berth—1) 15.3, 2) 15.3, 3) 10.3
CFS—Yes
CFS Space Covered—16,800
Uncovered—
Term. Area—433,000
RR Service—Yes
No. Cranes—4
Crane Lift Capt.—Each 40
Reach on Water Side—Each 37.7
Reach on Land Side—Each 32.3
Crane Rail Width—Each 15
Crane Bridge Hght.—Each 47
No. Container Spaces—8,500 (20 ft.)
No. Spaces with Elect. Outlets—80

PORT OF LENINGRAD (Europe)

TERMINAL OF THE SECOND CARGO AREA OF THE PORT

Status—In operation
Operator—Sea Commercial Port of Leningrad
Type of Mgmnt.—F
Mode of Ops.—I, H, K (Portal crane)
No. Berths—1
Berth Length—175
Depth at Berth—10.5
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—11,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 32
Reach on Water Side—Each 16
Reach on Land Side—Each 16
Crane Rail Width—Each 10.5
Crane Bridge Hght.—Each 20
No. Container Spaces—600 (20 ft.), 300 (40 ft.)
No. Spaces with Elect. Outlets—

TERMINAL OF THE THIRD CARGO AREA OF THE PORT

Status—Under construction
Operator—Sea Commercial Port of Leningrad
Type of Mgmnt.—F
Mode of Ops.—G, H
No. Berths—2
Berth Length—Each 175
Depth at Berth—Each 10.5
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—100,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 30.5
Reach on Water Side—Each 34.3
Reach on Land Side—Each 25.5
Crane Rail Width—Each 15.3
Crane Bridge Hght.—Each 27
No. Container Spaces—1,200 (20 ft.), 600 (40 ft.)
No. Spaces with Elect. Outlets—

PORT OF LISBON (Europe)

TERMINAL DE SANTA APOLONIA

Status—In operation
Operator—Administracao Geral do Porto de Lisbon
Type of Mgmnt.—F
Mode of Ops.—K (side loaders)
No. Berths—2
Berth Length—Each 175
Depth at Berth—Each 9
CFS—Yes
CFS Space Covered—16,500
Uncovered—30,600
Term. Area—30,300
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 30
Reach on Water Side—1) 18.3, 2) 23.5
Reach on Land Side—1) 33.5, 2) 22.0
Crane Rail Width—1) 31, 2) 14
Crane Bridge Hght.—1) 24.25, 2) 24.50
No. Container Spaces—900 (20 ft.) or 420 (40 ft.)
No. Spaces with Elect. Outlets—8

PORT OF LONDON (Europe)

OCL TERMINAL BERTH 39, TILBURY DOCKS

Status—In operation
Operator—Overseas Containers Limited
Type of Mgmnt.—D
Mode of Ops.—H, K (Portainer Quay cranes)
No. Berths—1
Berth Length—259
Depth at Berth—12.2
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—77,000
RR Service—Yes
No. Cranes—4 (includes 2 Portainer cranes)
Crane Lift Capt.—Each 45.7
Reach on Water Side—2 Portainer cranes 1) 35, 2) 36.2
Reach on Land Side—2 Portainer cranes each 30.1
Crane Rail Width—2 Portainer cranes each 15.2
Crane Bridge Hght.—2 Portainer cranes 1) 32.9, 2) 24.9
No. Container Spaces—2530 (20 ft.)
No. Spaces with Elect. Outlers—360

SWEDISH LLOYD TERMINAL

Status—In operation
Operator—Swedish Lloyd Ltd.
Type of Mgmnt.—D
Mode of Ops.—J, K (fork lift, Bolnass trucks)
No. Berths—1
Berth Length—143.3
Depth at Berth—11.6
CFS—Yes
CFS Space Covered—6,689
Uncovered—
Term. Area—26,565
RR Service—Yes
No Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—280 (20 ft.)
No. Spaces with Elect. Outlets—4

BERTH 40, TILBURY DOCKS

Status—In operation
Operator—Port of London Authority
Type of Mgmnt.—F
Mode of Ops.—H, K (Portainer cranes)
No. Berths—1
Berth Length—213
Depth at Berth—12.2
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—56,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 30.5
Reach on Water Side—Each 35
Reach on Land Side—Each 26.2
Crane Rail Width—Each 15.2
Crane Bridge Hght.—Each 24.6
No. Container Spaces—787 (20 ft.)
No. Spaces with Elect. Outlets—

BERTHS 41-45, TILBURY DOCKS

Status—In operation
Operator—Port of London Authority
Type of Mgmnt.—F
Mode of Ops.—H, K (Portainer cranes)
No. Berths—3
Berth Length—Each 259
Depth at Berth—Each 12.2
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—147,000
RR Service—Yes
No. Cranes—3
Crane Lift Capt.—1) 45.7, 2) 30.5, 3) 30.5
Reach on Water Side—Each 35
Reach on Land Side—1) 30.1, 2) 26.2, 3) 26.2
Crane Rail Width—Each 15.2
Crane Bridge Hght.—1) 32.9, 2) 24.6, 3) 24.6
No. Container Spaces—2312 (20 ft.)
No. Spaces with Elect. Outlets—

BERTH 45A, TILBURY DOCKS

Status—In operation
Operator—ACT Services Ltd.
Type of Mgmnt.—D
Mode of Ops.—H, I
No. Berths—1 (berth used for storage purposes only, Berthing facilities available at adjoining pier)
Depth at Berth—
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—49292
RR Service—Yes
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—594 (20 ft.)
No. Spaces with Elect. Outlets—294

TILBURY LANDING STAGE

Status—Under construction
Operator—Port of London Authority
Type of Mgmnt.—F
Mode of Ops.—J
No. Berths—1
Berth Length—257
Depth at Berth—6.7
CFS—
CFS Space Covered—
Uncovered—
Term. Area—11,300
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—112 (20 ft.)
No. Spaces with Elect. Outlets—

VICTORIA DEEP WATER TERMINAL

Status—In operation, under construction
Operator—Victoria Deep Water Terminal Limited
Type of Mgmnt.—F, G
Mode of Ops.—I, K (side loader)
No. Berths—1
Berth Length—144.8 (115 to be added)
Depth at Berth—6.7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—58,670
RR Services—No
No. Cranes—1
Crane Lift Capt.—32
Reach on Water Side—18.6
Reach on Land Side—24.1
Crane Rail Width—5.2
Crane Bridge Hght.—10.6
No. Container Spaces—1,700 (20 ft.)
No. Spaces with Elect. Outlets—20

PORT OF MALMO (Europe)

MALMO FREE PORT

Status—In operation
Operator—Malmo Free Port
Type of Mgmnt.—F
Mode of Ops.—I, J
No. Berths—2
Berth Length—200 (Total)
Depth at Berth—Each 9.2
CFS—Yes
CFS—Space Covered—1,580
Uncovered—8,000
Term. Area—5,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 40
Reach on Water Side—1) 24.5, 2) 10.0
Reach on Land Side—1) 38.5, 2) 22.0
Crane Rail Width—Each 11
Crane Bridge Hght.—1) 34.5. 2) 23.0
No. Container Spaces—600 (20 ft.)
No. Spaces with Elect. Outlets—25

MALMO FREE PORT

Status—Planning stage
Operator—Malmo Free Port
Type of Mgmnt.—F
Mode of Ops.—I, J.
No. Berths—2
Berth Length—250 (Total)
Depth at Berth—9.2
CFS—Yes
CFS Space Covered—
Uncovered—80,000
Term. Area—20,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 40
Reach on Water Side—Each 24.5
Reach on Land Side—Each 38.5
Crane Rail Width—Each 11
Crane Bridge Hght.—Each 34.5
No. Container Spaces—2,500 (20 ft.)
No. Spaces with Elect. Outlets—

PORT OF MANCHESTER (Europe)

9 DOCK CONTAINER TERMINAL

Status—In operation
Operator—Manchester Ship Canal Co.
Type of Mgmnt.—D
Mode of Ops.—H
No. Berths—2
Berth Length—1) 167, 2) 107
Depth at Berth—Each 8.5
CFS—Yes
CFS Space Covered—
Uncovered—40,460
Term. Area—8,092
RR Service—No
No. Cranes—2
Crane Lift Capt.—1) 35.6, 2) 25.4
Reach on Water Side—Each 18.1
Reach on Land Side—Each 26.85
Crane Rail Width—Each 18.29
Crane Bridge Hght.—Each 21.3
No. Container Spaces—987 (20 ft.)
No. Spaces with Elect. Outlets—30

CAWOOD TERMINAL ELLESMERE PORT DOCKS

Status—In operation
Operator—Cawood Containers Ltd.
Type of Mgmnt.—D
Mode of Ops.—G
No. Berths—1
Berth Length—107
Depth at Berth—9.15
CFS—Yes
CFS Space Covered—
Uncovered—12,000
Term. Area—40,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—35.6
Reach on Water Side—21.3
Reach on Land Side—44
Crane Rail Width—30
Crane Bridge Hght.—24
No. Container Spaces—370 (20 ft.)
No. Spaces with Elect. Outlets—

ACTON GRANGE DISTRIBUTION CENTRE

Status—In operation
Operator—Du Pont (U.K.) Ltd.
Type of Mgmnt.—D
Mode of Ops.—G
No. Berths—1
Berth Length—136
Depth at Berth—8.5
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—
RR Service—No
No. Cranes—1
Crane Lift Capt.—30.5
Reach on Water Side—12.8
Reach on Land Side—30.17
Crane Rail Width—19.2
Crane Bridge Hght.—29.2
No. Container Spaces—162 (20 ft.)
No. Spaces with Elect. Outlets—

PORT OF MARSEILLES (Europe)

CONTAINER TERMINAL, FOS DOCK NO. 1

Status—In operation
Operator—Port Authority of Marseilles
Type of Mgmnt.—F
Mode of Ops.—G, H, I
No. Berths—1
Berth Length—250
Depth at Berth—15
CFS—Yes
CFS Space Covered—3,840
Uncovered—28,200
Term. Area—30,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—1) 45, 2) 20 (mobile crane)
Reach on Water Side—1) 37
Reach on Land Side—1) 50
Crane Rail Width—1) 15
Crane Bridge Hght.—1) 28
No. Container Spaces—750 (20 ft.)
No. Spaces with Elect. Outlets—24

CONTAINER TERMINAL, FOS DOCK NO. 2

Status—Under construction
Operator—Port Authority of Marseilles
Type of Mgmnt.—D, F
Mode of Ops.—G, H, I
No. Berths—3
Berth Length—560 (Total)
Depth at Berth—Each 15
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—254,800
RR Service—Yes
No. Cranes—1) 45, 2) 40, 3) 20
Reach on Water Side—1) 32, 2) 32, 3) mobile
Reach on Land Side—1) 28, 2) 55, 3) mobile
Crane Rail Width—1) 15, 2) 15, 3) mobile
Crane Bridge Hght.—1) 28, 2) 30, 3) mobile
No. Container Spaces—5,641 (20 ft.)
No. Spaces with)Elect. Outlets—197

PORT OF NEWPORT (Europe)

WEST SIDE SOUTH DOCK NEWPORT

Status—In operation
Operator—British Transport Docks Board
Type of Mgmnt.—F
Mode of Ops.—G
No. Berths—1
Berth Length—503
Depth at Berth—10.67
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—17,800
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—35
Reach on Water Side—35.1
Reach on Land Side—34.1
Crane Rail Width—15.86
Crane Bridge Hght.—21.35
No. Container Spaces—500 (20 ft.)
No. Spaces with Elect. Outlets—

EAST LOCK NEWPORT

Status—In operation
Operator—British & Irish Steam Packet Co. Ltd.
Type of Mgmnt.—E
Mode of Ops.—G
No. Berths—1
Berth Length—138
Depth at Berth—7.01
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—7,900
RR Services—No
No. Cranes—1
Crane Lift Capt.—32 (Scotch derrick)
Reach on Water Side—27.45 radius
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—100 (20 ft.)
No. Spaces with Elect. Outlets—

PORT OF OSLO (Europe)

KNEPPESKJAER

Status—In operation
Operator—
Type of Mgmnt.—F
Mode of Ops.—I, J, K (truck)
No. Berths—2
Berth Length—Each 150
Depth at Berth—Each 7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—8,000
RR Service—Yes
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—550 (20 ft.)
No. Spaces with Elect. Outlets—

KEY

D—Exclusive lease for specified users
E—Preferential use
F—Common user terminal (open to all users)
X—If other type management, please specify
G—Transtainer operation
H—Straddle carrier operation
I—Chassis operation
J—Roll on/Roll off operation
K—Other than above—specify
(If mixed operation, list above letters that apply)

NORDRE SJURSOYA
Status—In operation
Operator—
Type of Mgmnt.—F
Mode of Ops.—I, J, K (trucks)
No. Berths—2
Berth Length—1) 130, 2) 200
Depth at Berth—Each 10
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—8,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—30
Reach on Water Side—19.5
Reach on Land Side—28
Crane Rail Width—30.4
Crane Bridge Hght.—19
No. Container Spaces—550 (20 ft.)
No. Spaces with Elect. Outlets—15

SORENA PIER
Status—Under construction
Operator—Fred Olsen & Co.
Type of Mgmnt.—D
Mode of Ops.—I, J, K (trucks)
No. Berths—1
Berth Length—150
Depth at Berth—8
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—10,000
RR Service—Yes
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—650 (20 ft.)
No. Spaces with Elect. Outlets—

FILIPSTAD
Status—In operation
Operator—W. Wilhelmsen
Type of Mgmnt.—D
Mode of Ops.—I, J. K (trucks)
No. Berths—1
Berth Length—220
Depth at Berth—11
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—5,000
RR Service—Yes
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
No. Container Spaces—350 (20 ft.)
No. Spaces with Elect. Outlets—

PORT OF ROTTERDAM (Europe)

SEA-LAND TERMINAL
Status—In operation
Operator—Sea-Land Nederland
Type of Mgmnt.—D
Mode of Ops.—I
No. Berths—1
Berth Length—620
Depth at Berth—13.00
CFS—Yes
CFS Space Covered—2,850
Uncovered—
Term. Area—
RR Service—Yes
No. Cranes—4
Crane Lift Capt.—Each 30.5
Reach on Water Side—1) 38.4, 2) 38.4, 3) 35.7, 4) 35.7
Reach on Land Side—1) 50.9, 2) 50.9, 3) 37.8, 4) 37.8
Crane Rail Width—Each 15.2
Crane Bridge Hght.—1) 28.3, 2) 28.3, 3) 25.3, 4) 22.2
No. Container Spaces—1,070
No. Spaces with Elect. Outlets—100

PRINSES MARGRIETHAVEN
Status—In operation, under construction, planning stage
Operator—Europe Container Terminus, Ltd.
Type of Mgmnt.—F
Mode of Ops.—G, H, I, J
No. Berths—(Depends on length of ships)
Berth Length—2,500 total
Depth at Berth—13.65
CFS—Yes
CFS Space Covered—8,250
Uncovered—149,583
Term. Area—607,050
RR Service—Yes
No. Cranes—11
Crane Lift Capt.—1) 41.7, 2) 41.7, 3) 41.7, 4) 41.7, 5) 41.7, 6) 41.7, 7) 41.7, 8) 41.7 9) 40.6, 10) 37.6, 11) 53.8
Reach on Water Side—Each 32
Reach on Land Side—Each 33
Crane Rail Width—Each 15
Crane Bridge Hght.—Each 30
No. Container Spaces—7,500 (20 ft.)
No. Spaces with Elect. Outlets—125

UNIT CENTRE
Status—In operation
Operator—Unit Centre
Type of Mgmnt.—F
Mode of Ops.—G, J
No. Berths—1
Berth Length—800
Depth at Berth—12
CFS—Yes
CFS Space Covered—12,000
Uncovered—38,000
Term. Area—200,000
RR Service—Yes
No. Cranes—5
Crane Lift Capt.—Each 45
Reach on Water Side—Each 45
Reach on Land Side—Each 82
Crane Rail Width—Each 70
Crane Bridge Hght.—Each 27
No. Container Spaces—6,000 (20 ft.)
No. Spaces with Elect. Outlets—50

BRITTANIEHAVEN (Private Terminal)
Status—In operation
Operator—Bell Line
Type of Mgmnt.—X (private terminal)
Mode of Ops.—K (automated container gantry)
No. Berths—1
Berth Length—190
Depth at Berth—6.5
CFS—
CFS Space Covered—
Uncovered—
Term. Area—25,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—1) 25.4, 2) 38.6
Reach on Water Side—Each 16
Reach on Land Side—Each 63
Crane Rail Width—Each 48
Crane Bridge Hght.—Each 19
No. Container Spaces—748 (20 ft.)
No. Spaces with Elect. Outlets—

WAALHAVEN
Status—In operation, under construction, planning stage
Operator—Pakhoed Rotterdam
Type of Mgmnt.—F
Mode of Ops.—G, J
No. Berths—1 (1 additional in planning stage)
Berth Length—
Depth at Berth—10.2
CFS—Yes (in future)
CFS Space Covered—
Uncovered—
Term. Area—36,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 30.5
Reach on Water Side—Each 20
Reach on Land Side—Each 20
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—1,000 (20 ft.)
No. Spaces with Elect. Outlets—(Outlets will be available in future)

TRANSPORT FERRY SERVICE (Ned.)
Status—In operation
Operator—Transport Ferry Service (N.E.D.)
Type of Mgmnt.—E
Mode of Ops.—G, I, J
No. Berths—1
Berth Length—350
Depth at Berth—7.65
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—14,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—32
Reach on Water Side—25
Reach on Land Side—61
Crane Rail Width—50
Crane Bridge Hght.—24
No. Container Spaces—416 (20 ft.), 224 (40 ft.)
No. Spaces with Elect. Outlets—

PORT OF SOUTHAMPTON (Europe)

BERTH 201
Status—In operation
Operator—British Transport Docks Board
Type of Mgmnt.—F
Mode of Ops.—H, I, J
No. Berths—1
Berth Length—304
Depth at Berth—10.2
CFS—Yes
CFS Space Covered—5,580 (common with berths 202, 204, 205)
Uncovered—22,750 (common with 202, 204, 205)
Term. Area—80,900
RR Service—Yes
No. Cranes—3 (common with berth 202)
Crane Lift Capt.—1) 30.5, 2) 30.5, 3) 40.6
Reach on Water Side—1) 33.5, 2) 33.5, 3) 35.4
Reach on Land Side—Each 25.9
Crane Rail Width—Each 15.2
Crane Bridge Hght.—1) 29.1, 2) 29.1, 3) 30.6
No. Container Spaces—2,034 (20 ft.) (common with berth 202)
No. Spaces with Elect. Outlets—15

BERTH 202
Status—In operation
Operator—British Transport Docks Board
Type of Mgmnt.—F
Mode of Ops.—H, I
No. Berths—1
Berth Length—274
Depth at Berth—12.2
CFS—Yes
CFS Space Covered—5,580 (common with berths 201, 204, 205)
Uncovered—22,750 (common with berths 201, 204, 205)
Term. Area—75,100
RR Service—Yes
No. Cranes—3 (common with berths 201)
Crane Lift Capt.—1) 30.5, 2) 30.5, 3) 40.6
Reach on Water Side—1) 33.5, 2) 33.5, 3) 35.4
Reach on Land Side—Each 25.9
Crane Rail Width—Each 15.2
Crane Bridge Hght.—1) 29.1, 2) 29.1, 3) 30.6
No. Container Spaces—2,034 (20 ft.) (common with berth 201)
No. Spaces with Elect. Outlets—15

BERTHS 204, 205
Status—In operation
Operator—British Transport Docks Board
Type of Mgmnt.—E
Mode of Ops.—H, I
No. Berths—2
Berth Length—640 (total)
Depth at Berth—Each 12.8
CFS—Yes
CFS Space Covered—5,580 (common with berths 201, 202)
Uncovered—22,750 (common with berths 201, 202)
Term. Area—200,000
RR Service—Yes
No. Cranes—3
Crane Lift Capt.—Each 35.6
Reach on Water Side—Each 35.4
Reach on Land Side—Each 30.5
Crane Rail Width—Each 19.8
Crane Bridge Hght.—Each 31.0
No. Container Spaces—3,108 (20 ft.)
No. Spaces with Elect. Outlets—52

PORT OF STOCKHOLM (Europe)

CONTAINER TERMINAL STOCKHOLM
Status—In operation
Operator—Free Port Company
Type of Mgmnt.—F
Mode of Ops.—H, I, J
No. Berths—2
Berth Length—Each 125
Depth at Berth—Each 10.4
CFS—Yes
CFS Space Covered—8,000
Uncovered—46,000
Term. Area—10,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 20
Reach on Water Side—Each 16.9
Reach on Land Side—Each 22.3
Crane Rail Width—Each 11.0
Crane Bridge Hght.—Each 17.0
No. Container Spaces—700 (20 ft.)
No. Spaces with Elect. Outlets—30

TRANS-TERMINALEN

Status—In operation
Operator—Trans-Terminalen I
Type of Mgmnt.—E
Mode of Ops.—
No. Berths—
Berth Length—
Depth at Berth—
CFS—Yes
CFS Space Covered—3,000
Uncovered—3,000
Term. Area—
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—50
No. Spaces with Elect. Outlets—

PORT OF SWANSEA
(Europe)

SWANSEA FERRYPORT

Status—In operation
Operator—British Transport Docks Board
Type of Mgmnt.—F
Mode of Ops.—J
No. Berths—1
Berth Length—153
Depth at Berth—9
CFS—Yes
CFS Space Covered—
Uncovered—4,500
Term. Area—20,500
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—200 (20 ft.)
No. Spaces with Elect. Outlets—

PORT OF VALENCIA
(Europe)

MARITIMA VALENCIA

Status—In operation
Operator—Maritima Valencia
Type of Mgmnt.—F
Mode of Ops.—G, H, I
No. Berths—1
Berth Length—220
Depth at Berth—12
CFS—Yes
CFS Space Covered—1,500
Uncovered—
Term. Area—11,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—30
Reach on Water Side—22
Reach on Land Side—30
Crane Rail Width—30
Crane Bridge Hght.—20
No. Container Spaces—900
No. Spaces with Elect. Outlets—4

Container Facilities—United States and Canada

PORT OF BALTIMORE
(U.S.A.)

DUNDALK MARINE TERMINAL

Status—In operation
Operator—Maryland Port Administration
Type of Mgmnt.—F
Mode of Ops.—H, I, J
No. Berths—6
Berth Length—1) 221, 2) 221, 3) 186, 4) 186, 5) 275, 6) 275
Depth at Berth—Each 10.4
CFS—Yes
CFS Space Covered—24,850
Uncovered—34,420
Term. Area—612,510
RR Service—Yes
No. Cranes—7
Crane Lift Capt.—Each 36
Reach on Water Side—Each 31.4
Reach on Land Side—Each 33.6
Crane Rail Width—Each 15.3
Crane Bridge Hght.—Each 24.7
No. Container Spaces—1,300 (20 ft.), 5,200 (40 ft.)
No. Spaces with Elect. Outlets—

SEA-LAND TERMINAL

Status—In operation
Operator—Sea-Land Service
Type of Mgmnt.—E
Mode of Ops.—I
No. Berths—1
Berth Length—244
Depth at Berth—9.7
CFS—Yes
CFS Space Covered—4,650
Uncovered—
Term. Area—91,459
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—25
Reach on Water Side—32
Reach on Land Side—33.6
Crane Rail Width—15.3
Crane Bridge Hght.—24.7
No. Container Spaces—781 (35 ft.)
No. Spaces with Elect. Outlets—35

PORT OF BOSTON (U.S.A.)

MYSTIC CONTAINER FACILITY

Status—In operation
Operator—Massachusetts Port Authority
Type of Mgmnt.—F
Mode of Ops.—G, I
No. Berths—2
Berth Length—274 (total)
Depth at Berth—Each 13.7
CFS—Yes
CFS Space Covered—3,530
Uncovered—169,967
Term. Area—
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—1) 71, 2) 47
Reach on Water Side—Each 35
Reach on Land Side—Each 35
Crane Rail Width—Each 15
Crane Bridge Hght.—1) 32, 2) 31
No. Container Spaces—2,500
No. Spaces with Elect. Outlets—90

CASTLE ISLAND TERMINAL

Status—In operation
Operator—Sea-Land
Type of Mgmnt.—D
Mode of Ops.—I
No. Berths—1
Berth Length—182
Depth at Berth—11
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—45,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—28
Reach on Water Side—24
Reach on Land Side—
Crane Rail Width—14
Crane Bridge Hght.—20
No. Container Spaces—600 (35 ft.)
No. Spaces with Elect. Outlets—50

PORT OF CHARLESTON
(U.S.A.)

COLUMBUS STREET TERMINAL

Status—In operation
Operator—South Carolina State Ports Authority
Type of Mgmnt.—E, F
Mode of Ops.—H, I, K (Raygo-Wagner Container Handlers)
No. Berths—1
Berth Length—274.3
Depth at Berth—10.7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—7,000.1
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—40.6
Reach on Water Side—32
Reach on Land Side—36.3
Crane Rail Width—15.24
Crane Bridge Hght.—24
No. Container Spaces—1,600 (20 ft.)
No. Spaces with Elect. Outlets—

NORTH CHARLESTON HARBOR

Status—In operation
Operator—South Carolina State Ports Authority
Type of Mgmnt.—E, F
Mode of Ops.—H, I, K (Raygo-Wagner Container Handlers)
No. Berths—1
Berth Length—283.5
Depth at Berth—10.7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—7,500.1
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—40.6
Reach on Water Side—31.7
Reach on Land Side—36.6
Crane Rail Width—15.24
Crane Bridge Hght.—24.0
No. Container Spaces—1,420 (20 ft.)
No. Spaces with Elect. Outlets—

NORTH CHARLESTON TERMINAL

Status—Under construction
Operator—South Carolina State Ports Authority
Type of Mgmnt.—F

KEY

D—Exclusive lease for specified users
E—Preferential use
F—Common user terminal (open to all users)
X—If other type management, please specify
G—Transtainer operation
H—Straddle carrier operation
I—Chassis operation
J—Roll on/Roll off operation
K—Other than above—specify
(If mixed operation, list above letters that apply)

Mode of Ops.—H, I, K (Raygo-Wagner Container Handlers)
No. Berths—1
Berth Length—283.5
Depth at Berth—10.7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—7,500.1
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—40.6
Reach on Water Side—31.7
Reach on Land Side—36.6
Crane Rail Width—15.24
Crane Bridge Hght.—24.0
No. Container Spaces—1,420 (20 ft.)
No. Spaces with Elect. Outlets—

FRASER RIVER HARBOUR COMMISSION (Canada)

FRASER SURREY DOCKS AND CONTAINER TERMINAL

Status—Docks—In operation, Container Terminal, Under construction
Operator—Fraser Surrey Docks, Ltd.
Type of Mgmnt.—E, F
Mode of Ops.—G, H, I, J
No. Berths—2
Berth Length—274 (total)
Depth at Berth—Each 10.7
CFS—Yes
CFS Space Covered—
Uncovered—9,290
Term. Area—420,888
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 40.6
Reach on Water Side—Each 36.6
Reach on Land Side—Each 42.2
Crane Rail Width—Each 24.2
Crane Bridge Hght.—Each 29.3
No. Container Spaces—2,000 (10 ft.)
No. Spaces with Elect. Outlets—

PORT OF HALIFAX (Canada)

PIER C

Status—In operation
Operator—Halterm, Ltd.
Type of Mgmnt.—F
Mode of Ops.—G, H, I, J, K (direct rail loading & unloading)
No. Berths—2
Berth Length—Each 260
Depth at Berth—1) 12.2, 2) 15.2
CFS—Yes
CFS Space Covered—3,300
Uncovered—18,000
Term. Area—205,400
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 40.6
Reach on Water Side—1) 32.6, 2) 38.1
Reach on Land Side—1) 35, 2) 36
Crane Rail Width—Each 15.2
Crane Bridge Hght.—1) 26.7, 2) 31.9
No. Container Spaces—2,918 (tens double stacked)
No. Spaces with Elect. Outlets—81

PORT OF HONOLULU (U.S.A.)

DIAMOND HEAD

Status—In operation
Operator—Matson Navigation Co.
Type of Mgmnt.—F
Mode of Ops.—H
No. Berths—3
Berth Length—1) 158.5, 2) 214.9, 3) 248.1
Depth at Berth—Each 10.7
CFS—Yes
CFS Space Covered—13,935
Uncovered—10,916
Term. Area—163,467
RR Service—No
No. Cranes—3
Crane Lift Capt.—1) 22.7, 2) 22.7, 3) 29.9
Reach on Water Side—1) 21.6, 2) 21.6, 3) 30.8
Reach on Land Side—1) 20.1, 2) 20.1, 3) 21.9
Crane Rail Width—Each 9.8
Crane Bridge Hght.—1) 22.33, 2) 22.33, 3) 25.37
No. Container Spaces—2,200 (24 ft.)
No. Spaces with Elect. Outlets—190

PIER 51B (Sand Island)

Status—In operation
Operator—Seatrain Lines
Type of Mgmnt.—F
Mode of Ops.—I
No. Berths—1
Berth Length—207.3
Depth at Berth—10.7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—84,932
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 40.8
Reach on Water Side—Each 25.9
Reach on Land Side—Each 53.3
Crane Rail Width—Each 30.5
Crane Bridge Hght.—Each 23.55
No. Container Spaces—753 (27 ft.), 147 (40 ft.)
No Spaces with Elect. Outlets—82

PIER 51A (Sand Island)

Status—Under construction
Operator—United States Lines
Type of Mgmnt.—F
Mode of Ops.—I
No. Berths—1
Berth Length—169.5
Depth at Berth—10.7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—66,924
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 40.6
Reach on Water Side—Each 29.0
Reach on Land Side—Each 64.0
Crane Rail Width—Each 30.5
Crane Bridge Hght.—Each 23.55
No. Container Spaces—63 (20 ft.), 578 (40 ft.)
No. Spaces with Elect. Outlets—42

PORT OF LAKE CHARLES (U.S.A.)

BERTH 7

Status—In operation
Operator—Port of Lake Charles
Type of Mgmnt.—F
Mode of Ops.—K (crawlers-cranes)
No. Berths—1
Berth Length—160
Depth at Berth—10.7
CFS—Yes
CFS Space Covered—
Uncovered—5,806
Term. Area—
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—30
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF LONG BEACH (U.S.A.)

PIER J BERTHS 232-233

Status—Planning stage
Operator—International Transportation Services, Inc.
Type of Mgmnt.—E
Mode of Ops.—G, I
No. Berths—2
Berth Length—198, 144
Depth at Berth—Each 9.7
CFS—No
CFS Space Covered—6,300 (shared with berth 234)
Uncovered—
Term. Area—111,330
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 30.49
Reach on Water Side—Each 32.5
Reach on Land Side—Each 28.34
Crane Rail Width—Each 15.24
Crane Bridge Hght.—Each 38.4
No. Container Spaces—20 ft.—1074, 25 ft.—53, 40 ft.—657
No. Spaces with Elect. Outlets—60

PIER J BERTH 234

Status—In operation
Operator—International Transportation Services, Inc.
Type of Mgmnt.—E
Mode of Ops.—I
No. Berths—1
Berth Length—358
Depth at Berth—12.8
CFS—Yes
CFS Space Covered—6,300 (shared with berths 232-233)
Uncovered—
Term. Area—147,700
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 30.49
Reach on Water Side—Each 32.5
Reach on Land Side—Each 28.34
Crane Rail Width—Each 15.24
Crane Bridge Hght.—Each 31.0
No. Container Spaces—2066 (40 ft.)
No. Spaces with Elect. Outlets—144

PIER J BERTHS 245-247

Status—In operation
Operator—Pacific Container Terminal
Type of Mgmnt.—E
Mode of Ops.—G, I
No. Berths—3
Berth Length—Each 213.4
Depth at Berth—Each 11.5
CFS—Yes
CFS Space Covered—8,361
Uncovered—
Term. Area—129,495
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—1) 40.65, 2) 50.81
Reach on Water Side—Each 32.6
Reach on Land Side—Each 33
Crane Rail Width—Each 15.24
Crane Bridge Hght.—1) 30.8, 2) 33.8
No. Container Spaces—460 (20 ft.), 884 (40 ft.)
No. Spaces with Elect. Outlets—70

PIER G BERTHS 227-229

Status—In operation
Operator—Sea-Land Service, Inc.
Type of Mgmnt.—E, (D—Container Freight Station)
Mode of Ops.—I
No. Berths—3
Berth Length—Each 198
Depth at Berth—Each 12.8
CFS—Yes
CFS Space Covered—6,690
Uncovered—60,160
Term. Area—267,670
RR Service—Yes
No. Cranes—4
Crane Lift Capt.—Each 30.49
Reach on Water Side—Each 40.38
Reach on Land Side—Each 48.77
Crane Rail Width—Each 30.48
Crane Bridge Hght.—Each 31.7
No. Container Spaces—1278 (35 ft.), 1406 (40 ft.)
No. Spaces with Elect. Outlets—242

PIER G BERTH 230

Status—Under construction
Operator—U.S. Lines
Type of Mgmnt.—E (D—Container Freight Station)
Mode of Ops.—I
No. Berths—1
Berth Length—198
Depth at Berth—12.8
CFS—Yes
CFS Space Covered—1,365
Uncovered—13,490
Term. Area—91,700
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 30.49
Reach on Water Side—Each 40.38
Reach on Land Side—Each 48.77
Crane Rail Width—Each 30.48
Crane Bridge Hght.—Each 31.7
No. Container Spaces—637 (40 ft.)
No. Spaces with Elect. Outlets—50

PORT OF LOS ANGELES (U.S.A.)

CONSOLIDATED MARINE TERMINAL

Status—In operation
Operator—Consolidated Marine, Inc.
Type of Mgmnt.—E
Mode of Ops.—H, K (fork lift)
No. Berths—1
Berth Length—244
Depth at Berth—10.7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—80,940
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—40.6
Reach on Water Side—32.6
Reach on Land Side—26.8
Crane Rail Width—15.2
Crane Bridge Hght.—31.4
No. Container Spaces—1,132 (20 ft.)
No. Spaces with Elect. Outlets—38

EAST-WEST TERMINAL

Status—In operation
Operator—L A Container Co.
Type of Mgmnt.—E
Mode of Ops.—G, I
No. Berths—1
Berth Length—792
Depth at Berth—10.7
CFS—Yes
CFS Space Covered—5,574
Uncovered—
Term. Area—103,695
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—40.6
Reach on Water Side—32.5
Reach on Land Side—27.7
Crane Rail Width—15.2
Crane Bridge Hght.—26.8
No. Container Spaces—1,612 (20 ft.)
No. Spaces with Elect. Outlets—130

OVERSEAS TERMINAL

Status—In operation
Operator—Overseas Shipping Co.
Type of Mgmnt.—E
Mode of Ops.—G, H, K
No. Berths—2
Berth Length—1) 395, 2) 154
Depth at Berth—Each 10.7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—129,504
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—1) 33.5. 2) 40.6
Reach on Water Side—1) 24.7, 2) 34.6
Reach on Land Side—1) 6.1, 2) 18.6
Crane Rail Width—1) 21.3. 2) 15.2
Crane Bridge Hght.—1) 23.2, 2) 29.6
No. Container Spaces—2,211 (20 ft.)
No. Spaces with Elect. Outlets—

MATSON TERMINAL

Status—In operation
Operator—Matson Terminal, Inc.
Type of Mgmnt.—E
Mode of Ops.—H
No. Berths—2
Berth Length—Each 228.6
Depth at Berth—Each 10.7
CFS—Yes
CFS Space Covered—6,503
Uncovered—
Term. Area—194,256
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 25.4
Reach on Water Side—Each 31.1
Reach on Land Side—Each 22.7
Crane Rail Width—Each 10.4
Crane Bridge Hght.—1) 29.4, 2) 24.4
No. Container Spaces—1,204 (24 ft.)
No. Spaces with Elect. Outlets—412

PORT OF MILWAUKEE (U.S.A.)

GENERAL CARGO TERMINAL NO. 1

Status—In operation
Operator—Stearns Milwaukee Marine Terminal, Inc.
Type of Mgmnt.—D
Mode of Ops.—I, K (Forklift carrier)
No. Berths—3
Berth Length—Each 145
Depth at Berth—Each 8.2
CFS—Yes
CFS Space Covered—5,017
Uncovered—2,462
Term. Area—10,172
RR Service—Yes
No. Cranes—None
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—N/A
No. Spaces with Elect. Outlets—

SOUTH PIER NO. 1 (North Side)

Status—In operation
Operator—Stearns Milwaukee Marine Terminal, Inc.
Type of Mgmnt.—D
Mode of Ops.—I, K (Forklift Carrier)
No. Berths—2
Berth Length—Each 137
Depth at Berth—Each 8.2
CFS—Yes
CFS Space Covered—
Uncovered—4,181
Term. Area—
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—1) 27.2, 2) 45.4
Reach on Water Side—1) 14, 2) 27
Reach on Land Side—1) 14, 2) 27
Crane Rail Width—1) 4.9, 2) Mobile
Crane Bridge Hght.—Not applicable (Gantry, Mobile Cranes)
No. Container Spaces—
No. Spaces with Elect. Outlets—

GENERAL CARGO TERMINAL NO. 2

Status—In operation
Operator—Pier, Inc.
Type of Mgmnt.—D
Mode of Ops.—I, K (Forklift Carrier)
No. Berths—3
Berth Length—1) 145, 2) 145, 3) 91
Depth at Berth—Each 8.2
CFS—Yes
CFS Space Covered—4,645
Uncovered—
Term. Area—9,755
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—45.4
Reach on Water Side—27
Reach on Land Side—27
Crane Rail Width—Mobile Crane
Crane Bridge Hght.—Not applicable (Mobile Crane)
No. Container Spaces—
No. Spaces with Elect. Outlets—

GENERAL CARGO TERMINAL NO. 3

Status—In operation
Operator—Hansen Seaway Service, Ltd.
Type of Mgmnt.—D
Mode of Ops.—I, K (Forklift carrier)
No. Berths—2
Berth Length—Each 137
Depth at Berth—Each 8.2
CFS—Yes
CFS Space Covered—6,968
Uncovered—4,413
Term. Area—9,522
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—45.4
Reach on Water Side—27
Reach on Land Side—27
Crane Rail Width—Mobile Crane
Crane Bridge Hght.—Not applicable (Mobile crane)
No. Container Spaces—
No. Spaces with Elect. Outlets—

GENERAL CARGO TERMINAL NO. 4

Status—In operation
Operator—Hansen Seaway Service, Ltd.
Type of Mgmnt.—D
Mode of Ops.—I, K (Forklift carrier)
No. Berths—3
Berth Length—Each 152
Depth at Berth—Each 8.2
CFS—Yes
CFS Space Covered—9,643
Uncovered—1,858
Term. Area—11,724
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—45.4
Reach on Water Side—27
Reach on Land Side—27
Crane Rail Width—Mobile Crane
Crane Bridge Hght.—Not applicable (Mobile crane)
No. Container Spaces—
No. Spaces with Elect. Outlets—

CITY HEAVY LIFT DOCK

Status—In operation
Operator—Hansen Seaway Service, Ltd. and Stearns Milwaukee Marine Terminal, Inc. (Jointly)
Type of Mgmnt.—D
Mode of Ops.—I, K (Forklift carrier)
No. Berths—2
Berth Length—Each 152
Depth at Berth—Each 8.2
CFS—Yes
CFS Space Covered—
Uncovered—6,503
Term. Area—17,651
RR Service—Yes
No. Cranes—4
Crane Lift Capt.—1) 63.5, 2) 45.4, 3) 181.4, 4) 45.4
Reach on Water Side—1) 24, 2) 24, 3) 21, 4) 27
Reach on Land Side—1) 24, 2) 24, 3) 21, 4) 27
Crane Rail Width—1) 6.1, 2) 4.9, 3) Stiffleg Crane, 4) Mobile Crane
Crane Bridge Hght.—Not applicable (Mobile Cranes)
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF MONTREAL (Canada)

MANCHESTER CONTAINER TERMINAL

Status—In operation
Operator—Manchester Liners Ltd.
Type of Mgmnt.—D
Mode of Ops.—H
No. Berths—1
Berth Length—183
Depth at Berth—10.8
CFS—Yes
CFS Space Covered—2,323
Uncovered—74,565
Term. Area—
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—1) 35.2, 2) 25.3
Reach on Water Side—Each 21.5
Reach on Land Side—Each 27.5
Crane Rail Width—Each 18.5
Crane Bridge Hght.—Each 27
No. Container Spaces—1,450 (20 ft.), 150 (40 ft.)
No. Spaces with Elect. Outlets—78

CAST CONTAINER TERMINAL

Status—In operation
Operator—Task Terminal Operators
Type of Mgmnt.—D
Mode of Ops.—K (Top handler lifters)
No. Berths—2
Berth Length—1) 201, 2) 175
Depth at Berth—Each 10.8
CFS—Yes
CFS Space Covered—2,665
Uncovered—35,617
Term. Area—11,872
RR Service—Yes
No. Cranes—0
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—1,000 (20 ft.)
No. Spaces with Elect. Outlets—

SABB CONTAINER TERMINAL

Status—In operation
Operator—Societe D Arrimage Des Battures de Beauport
Type of Mgmnt.—E
Mode of Ops.—K (Top handler lifters)
No. Berths—1
Berth Length—192
Depth at Berth—10.8
CFS—Yes
CFS Space Covered—2,405
Uncovered—22,536
Term. Area—8,361
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—33
Reach on)Water Side—28.3
Reach on Land Side—27.5
Crane Rail Width—18.5
Crane Bridge Hght.—21
No. Container Spaces—650 (20 ft.), 100 (40 ft.)
No. Spaces with Elect. Outlets—

CARE LINE TERMINAL

Status—In operation
Operator—Atlantic Container Line
Type of Mgmnt.—D
Mode of Ops.—J
No. Berths—1
Berth Length—107
Depth at Berth—7.6
CFS—Yes
CFS Space Covered—2,800
Uncovered—18,480
Term. Area—3,454
RR Service—Yes
No. Cranes—Various mobile
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—400 (20 ft.)
No. Spaces with Elect. Outlets—

KEY

D—Exclusive lease for specified users
E—Preferential use
F—Common user terminal (open to all users)
X—If other type management, please specify
G—Transtainer operation
H—Straddle carrier operation
I—Chassis operation
J—Roll on/Roll off operation
K—Other than above—specify
(If mixed operation, list above letters that apply)

KENMONT TERMINAL
Status—In operation
Operator—Kenmont Terminal Operators
Type of Mgmnt.—D
Mode of Ops.—K (Top handler lifters)
No. Berths—1
Berth Length—198
Depth at Berth—10.0
CFS—Yes
CFS Space Covered—1,055
Uncovered—24,210
Term. Area—
RR Service—Yes
No. Cranes—Various mobile
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—500 (20 ft.)
No. Spaces with Elect. Outlets—

PORT OF NEW ORLEANS (U.S.A.)

FRANCE ROAD BERTH 1
Status—In operation
Operator—Sea-Land Service Inc.
Type of Mgmnt.—D
Mode of Ops.—I
No. Berths—1
Berth Length—253
Depth at Berth—12.2
CFS—Yes
CFS Space Covered—4,645
Uncovered—
Term. Area—113,316
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—27.2
Reach on Water Side—34.7
Reach on Land Side—9.1
Crane Rail Width—15.2
Crane Bridge Hght.—30
No. Container Spaces—1,100 (35 ft.)
No. Spaces with Elect. Outlets—120

FRANCE ROAD BERTH 5
Status—Under construction
Operator—Any full container line
Type of Mgmnt.—F
Mode of Ops.—I
No. Berths—1
Berth Length—215.3
Depth at Berth—12.2
CFS—Yes
CFS Space Covered—2,787
Uncovered—
Term. Area—60,705
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—40.6
Reach on Water Side—34.4
Reach on Land Side—24.3
Crane Rail Width—15.2
Crane Bridge Hght.—30
No. Container Spaces—720 (40 ft.)
No. Spaces with Elect. Outlets—60

FRANCE ROAD
Status—Planning stage
Operator—N/A
Type of Mgmnt.—N/A
Mode of Ops.—N/A
No. Berths—7
Berth Length—N/A
Depth at Berth—N/A
CFS—N/A
CFS Space Covered—
Uncovered—
Term. Area—
RR Service—N/A
No. Cranes—N/A
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF NEW YORK (U.S.A.)

PITTSTON TERMINAL
Status—In operation
Operator—Pittston Stevedore Corp.
Type of Mgmnt.—F
Mode of Ops.—I
No. Berths—1
Berth Length—332
Depth at Berth—10.7
CFS—Yes
CFS Space Covered—7,200
Uncovered—
Term. Area—56,000
RR Service—Yes
No. Cranes—1 (two cranes interchangeable between ACL and Pittston)
Crane Lift Capt.—30.5
Reach on Water Side—32.2
Reach on Land Side—24.4
Crane Rail Width—15.2
Crane Bridge Hght.—20.7
No. Container Spaces—1,000 (20 ft.)
No. Spaces with Elect. Outlets—

MAHER CONTAINER TERMINAL
Status—In operation
Operator—Maher Terminal, Inc.
Type of Mgmnt.—F
Mode of Ops.—I
No. Berths—3
Berth Length—731 (total)
Depth at Berth—Each 10.7
CFS—Yes
CFS Space Covered—14,000
Uncovered—
Term. Area—600,000
RR Service—Yes
No. Cranes—3
Crane Lift Capt.—Each 40.6
Reach on Water Side—Each 31.8
Reach on Land Side—Each 46.9
Crane Rail Width—Each 30.5
Crane Bridge Hght.—Each 30.5
No. Container Spaces—4,800 (40 ft.)
No. Spaces with Elect. Outlets—128

ITO CONTAINER TERMINAL
Status—In operation
Operator—International Terminal Operating Co.
Type of Mgmnt.—F
Mode of Ops.—H, I
No. Berths—2
Berth Length—585 (total)
Depth at Berth—Each 10.7
CFS—Yes
CFS Space Covered—34,000
Uncovered—
Term. Area—320,000
RR Service—Yes
No. Cranes—4
Crane Lift Capt.—Each 40.6
Reach on Water Side—Each 32.2
Reach on Land Side—Each 26.7
Crane Rail Width—Each 15.2
Crane Bridge Hght.—Each 24.5
No. Container Spaces—6,000 (20 ft.), 1,700 (40 ft.)
No. Spaces with Elect. Outlets—200

ACL CONTAINER TERMINAL
Status—In operation
Operator—Atlantic Container Line
Type of Mgmnt.—D
Mode of Ops.—H, I, J
No. Berths—2
Berth Length—472 (total)
Depth at Berth—Each 10.7
CFS—Yes
CFR Space Covered—13,600
Uncovered—
Term. Area—263,000
RR Service—Yes
No. Cranes—1 (two cranes interchangeable between ACL and Pittston)
Crane Lift Capt.—30.5
Reach on Water Side—32.2
Reach on Land Side—24.4
Crane Rail Width—15.2
Crane Bridge Hght.—20.7
No. Container Spaces—2,000 (40 ft.), 500 (20 ft.)
No. Spaces with Elect. Outlets—60

PORT SEATRAIN
Status—In operation
Operator—Seatrain Lines, Inc. Container Division
Type of Mgmnt.—D
Mode of Ops.—I
No. Berths—2
Berth Length—Each 296
Depth at Berth—11.3
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—150,000
RR Service—Yes
No. Cranes—3
Crane Lift Capt.—Each 45.7
Reach on Water Side—Each 30.5
Reach on Land Side—Each 33.5
Crane Rail Width—Each 30.5
Crane Bridge Hght.—Each 23.4
No. Container Spaces—1,500 (40 ft.)
No. Spaces with Elect. Outlets—100

TRANSOCEAN GATEWAY CONTAINER TERMINAL
Status—In operation
Operator—Transocean Gateway Corporation
Type of Mgmnt.—F, E
Mode of Ops.—G, I, K (Toploaders)
No. Berths—3
Berth Length—762 (total)
Depth at Berth—Each 10.7
CFS—Yes
CFS Space Covered—10,100
Uncovered—34,400
Term. Area—441,000
RR Service—Yes
No. Cranes—4
Crane Lift Capt.—Each 40.6
Reach on Water Side—Each 35.1
Reach on Land Side—Each 30.5
Crane Rail Width—Each 15.2
Crane Bridge Hght.—Each 24.4
No. Container Spaces—N/A
No. Spaces with Elect. Outlets—348

PORT JERSEY
Status—In operation, planning stage
Operator—Global Terminal & Container Services
Type of Mgmnt.—D
Mode of Ops.—H, I
No. Berths—3
Berth Length—1) 275 2) 274, 3) 134 (planning stage)
Depth at Berth—Each 12.2
CFS—Yes
CFS Space Covered—12,973
Uncovered—282,000
Term. Area—282,000 (planning stage 42,000)
RR Service—Yes
No. Cranes—3, 1 (planning stage)
Crane Lift Capt.—Each 45.7
Reach on Water Side—Each 42.7
Reach on Land Side—Each 27.4
Crane Rail Width—Each 15.2
Crane Bridge Hght.—
No Container Spaces—1,351 (20 ft.), 1,376 (40 ft.)
No. Spaces with Elect. Outlets—64 (20 ft.), 32 (40 ft.)

RED HOOK
Status—Planning stage
Operator—Port of New York Authority
Type of Mgmnt.—F
Mode of Ops.—G
No. Berths—2
Berth Length—Each 259
Depth at Berth—Each 12
CFS—
CFS Space Covered—
Uncovered—
Term. Area—300,000
RR Service—Yes
No. Cranes—N/A
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—8,700 (20 ft.)
No. Spaces with Elect. Outlets—

BUSH TERMINAL
Status—Planning stage
Operator—N/A
Type of Mgmnt.—E
Mode of Ops.—N/A
No. Berths—6
Berth Length—Each 305
Depth at Berth—Each 11
CFS—
CFS Space Covered—
Uncovered—
Term. Area—440,000
RR Service—Yes
No. Cranes—N/A
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—10,900 (20 ft.)
No. Spaces with Elect. Outlets—

HOWLAND HOOK
Status—In operation
Operator—International Terminal Operating Co., Inc.
Type of Mgmnt.—F
Mode of Ops.—G
No. Berths—4
Berth Length—1) 190, 2) 190, 3) 191, 4) 191
Depth at Berth—11
CFS—
CFS Space Covered—
Uncovered—
Term. Area—700,000
RR Service—Yes
No. Cranes—4

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Phone (Area _____) _____

Crane Lift Capt.—Each 41 (actual lifting capacity—not rated capacity)
Reach on Water Side—Each 35
Reach on Land Side—Each 30
Crane Rail Width—Each 15
Crane Bridge Hght.—
No. Container Spaces—17,424 (20 ft.)
No. Spaces with Elect. Outlets—348

NORTHEAST MARINE TERMINAL

Status—In operation, under construction
Operator—Northeast Marine Terminal, Inc.
Type of Mgmnt.—E
Mode of Ops.—G
No. Berths—4
Berth Length—1) 230, 2) 231, 3) 231, 4) 231
Depth at Berth—Each 11
CFS—
CFS Space Covered—
Uncovered—
Term. Area—560,000
RR Service—Yes
No. Cranes—4
Crane Lift Capt.—1) 277, 2) 127, 3) 64*, 4) 64*
*Actual lifting capacity—not rated capacity
Reach on Water Side—1) —, 2 —, 3) 41, 4) 41
Reach on Land Side—1) —, 2) —, 3) 46, 4) 46
Crane Rail Width—1 Mobile, 2) Mobile, 3) 27, 4) 27
Crane Bridge Hght.—1) —, 2) —, 3) 29, 4) 29
No. Container Spaces—13,350 (20 ft.)
No. Spaces with Elect. Outlets—137

SEA-LAND TERMINAL

Status—In operation
Operator—Sea-Land Service, Inc.
Type of Mgmnt.—D
Mode of Ops.—I
No. Berths—10
Berth Length—233.4 (avg. length)
Depth at Berth—Each up to 12.2
CFS—Yes
CFS Space Covered—38,100
Uncovered—
Term. Area—1,460,000
RR Service—Yes
No. Cranes—9
Crane Lift Capt.—3) 27.9, 6) 40.6
Reach on Water Side—3) 32.2, 6) 31.8
Reach on Land Side—3) 26.8, 6) 46.9
Crane Rail Width—3) 15.2, 6) 30.5
Crane Bridge Hght.—3) 20.7, 6) 30.5
No. Container Spaces—10,154 (40 ft.)
No. Spaces with Elect. Outlets—724

UNIVERSAL TERMINAL

Status—In operation
Operator—Universal Maritime Service Corp.
Type of Mgmnt.—F
Mode of Ops.—I
No. Berths—4
Berth Length—233 (avg. length)
Depth at Berth—Each 10.7
CFS—Yes
CFS Space Covered—4,600
Uncovered—
Term. Area—150,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 30.5
Reach on Water Side—Each 32.2
Reach on Land Side—Each 48.4
Crane Rail Width—Each 15.2
Crane Bridge Hght.—Each 20.7
No. Container Spaces—2,000 (20 ft.)
No. Spaces with Elect. Outlets—138

PORT OF OAKLAND (U.S.A.)

PUBLIC CONTAINER TERMINAL

Status—In operation
Operator—Marine Terminals Corp.
Type of Mgmnt.—F
Mode of Ops.—H, I, J
No. Berths—3
Berth Length—1) 233, 2) 234, 3) 241
Depth at Berth—Each 10.6
CFS—Yes
CFS Space Covered—4,645
Uncovered—2,787
Term. Area—120,278
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 40.4
Reach on Water)Side—Each 35
Reach on Land Side—Each 25
Crane Rail Width—Each 29
Crane Bridge Hght.—Each 27
No. Container Spaces—2,200 (20 ft.)
No. Spaces with Elect. Outlets—96

OAKLAND CONTAINER TERMINAL

Status—In operation
Operator—Oakland Container Terminal
Type of Mgmnt.—E
Mode of Ops.—G
No. Berths—1
Berth Length—191
Depth at Berth—10.6
CFS—Yes
CFS Space Covered—2,151
Uncovered—2,972
Term. Area—85,119
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—30.4
Reach on Water Side—31.0
Reach on Land Side—27.4
Crane Rail Width—29
Crane Bridge Hght.—23.4
No. Container Spaces—1,400 (20 ft.)
No. Spaces with Elect. Outlets—115

SEA-LAND TERMINAL

Status—In operation
Operator—Sea-Land Service, Inc.
Type of Mgmnt.—E
Mode of Ops.—I
No. Berths—2
Berth Length—Each 207
Depth at Berth—Each 10.6
CFS—Yes
CFS Space Covered—7,078
Uncovered—31,407
Term. Area—244,805
RR Service—Yes
No. Cranes—4
Crane Lift Capt.—Each 30.4
Reach on Water Side—Each 30.4
Reach on Land Side—
Crane Rail Width—Each 15.2
Crane Bridge Hght.—Each 27
No. Container Spaces—3,500 (20 ft. equiv.)
No. Spaces with Elect. Outlets—250

MATSON TERMINAL

Status—In operation
Operator—Matson Terminal, Inc.
Type of Mgmnt.—D
Mode of Ops.—H
No. Berths—2
Berth Length—Each 206
Depth at Berth—Each 10.6
CFS—Yes
CFS Space Covered—2,718
Uncovered—1,709
Term. Area—218,158
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—1) 27.9, 2) 30.4
Reach on Water Side—1) 20, 2) 31
Reach on Land Side—
Crane Rail Width—Each 10.3
Crane Bridge Hght.—1) 21.2, 2) 17.4
No. Container Spaces—5,400 (20 ft.)
No. Spaces with Elect. Outlets—200

SEATRAIN LINES

Status—In operation
Operator—Seatrain Lines
Type of Mgmnt.—D
Mode of Ops.—I
No. Berths—2
Berth Length—1) 213, 2) 183
Depth at Berth—Each 9.1
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—194,256
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 40.6
Reach on Water Side—Each 27.4
Reach on Land Side—Each 33.5
Crane Rail Width—Each 30.4
Crane Bridge Hght.—Each 22.4
No. Container Spaces—3,700 (20 ft.)
No. Spaces with Elect. Outlets—82

OUTER HARBOR

Status—In operation
Operator—Crescent Wharf & Warehouse
Type of Mgmnt.—F
Mode of Ops.—H
No. Berths—1
Berth Length—247
Depth at Berth—10.6
CFS—No
CFS Space Covered—
Uncovered—
Term Area—11,560
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—30.4
Reach on Water Side—27.4
Reach on Land Side—27.4
Crane Rail Width—Mobile crane
Crane Bridge Hght.—
No. Container Spaces—160 (20 ft.)
No. Spaces with Elect. Outlets—

MIDDLE HARBOR

Status—Under construction
Operator—Marine Terminals Corporation
Type of Mgmnt.—F
Mode of Ops.—
No. Berths—1
Berth Length—220
Depth at Berth—9.1
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—60,705
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—1,200 (20 ft.)
No. Spaces with Elect. Outlets—

UNITED STATES LINES

Status—Under construction
Operator—Marine Terminals Corporation
Type of Mgmnt.—E
Mode of Ops.—
No. Berths—1
Berth Length—220
Depth at Berth—9.1
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—89,034
RR Services—No
No. Cranes—2
Crane Lift Capt.—Each 40.6
Reach on Water Side—Each 27.4
Reach on Land Side—Each 33.5
Crane Rail Width—Each 30.4
Crane Bridge Hght.—Each 22.4
No. Container Spaces—1,800 (20 ft.)
No. Spaces with Elect. Outlets—51

PORT OF PHILADELPHIA (U.S.A.)

TIOGA I CONTAINER TERMINAL

Status—In operation
Operator—Delaware River Terminal & Stevedoring Co., Inc.
Type of Mgmnt.—E
Mode of Ops.—I, J
No. Berths—2
Berth Length—Each 194
Depth at Berth—Each 10.7
CFS—Yes
CFS Space Covered—8,361
Uncovered—80,934
Term. Area—
No. Cranes—2 (2nd crane under construction)
Crane Lift Capt.—Each 40.7
Reach on Water Side—Each 30
Reach on Land Side—Each 60.7
Crane Rail Width—Each 27.5
Crane Bridge Hght.—Each 34.7
No. Container Spaces—860 (40 ft.)
No. Spaces with Elect. Outlets—100

PACKER II CONTAINER TERMINAL

Status—In operation
Operator—Lavimo Shipping Co.
Type of Mgmnt.—E
Mode of Ops.—H, I, J
No. Berths—2
Berth Length—Each 188
Depth at Berth—Each 10.7
CFS—Yes
CFS Space Covered—8,361
Uncovered—120,405
Term. Area—
RR Service—Yes
No. Cranes—2 (2nd crane under construction)
Crane Lift Capt.—Each 40.7
Reach on Water Side—Each 33
Reach on Land Side—Each 57.8
Crane Rail Width—Each 27.5
Crane Bridge Hght.—Each 34.7
No. Container Spaces—860 (40 ft.)
No. Spaces with Elect. Outlets—100

KEY

D—Exclusive lease for specified users
E—Preferential use
F—Common user terminal (open to all users)
X—If other type management, please specify
G—Transtainer operation
H—Straddle carrier operation
I—Chassis operation
J—Roll on/Roll off operation
K—Other than above—specify
(If mixed operation, list above letters that apply)

PORT OF PORTLAND (Ore.) (U.S.A.)

TERMINAL NO. 2

Status—In operation
Operator—Port of Portland
Type of Mgmnt.—F
Mode of Ops.—H
No. Berths—2
Berth Length—Each 233
Depth at Berth—Each 12
CFS—Yes
CFS Space Covered—8,361
Uncovered—9,290
Term. Area—80,936
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—1) 31.75, 2) 36.28
Reach on Water Side—Each 32
Reach on Land Side—Each 26.82
Crane Rail Width—Each 12.47
Crane Bridge Hght.—21.35
No. Container Spaces—3744 (20 ft.)
No. Spaces with Elect. Outlets—72

TERMINAL NO. 4, PIER 2

Status—In operation
Operator—Matson Terminals, Inc.
Type of Mgmnt.—D
Mode of Ops.—H
No. Berths—1
Berth Length—200
Depth at Berth—10.5
CFS—Yes
CFS Space Covered—9,290
Uncovered—2,787
Term. Area—29,728
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—31.75
Reach on Water Side—32
Reach on Land Side—17.67
Crane Rail Width—11.58
Crane Bridge Hght.—18.28
No. Container Spaces—2,496 (20 ft.)
No. Spaces with Elect. Outlets—27

TERMINAL NO. 6

Status—Under construction
Operator—Port of Portland
Type of Mgmnt.—F
Mode of Ops.—G
No. Berths—2
Berth Length—Each 274
Depth at Berth—Each 12
CFS—Yes
CFS Space Covered—5,574
Uncovered—2,787
Term. Area—239,687
RR Service—Yes
No. Cranes—3
Crane Lift Capt.—Each 36.28
Reach on Water Side—Each 32
Reach on Land Side—Each 39.92
Crane Rail Width—Each 15.24
Crane Bridge Hght.—Each 21.34
No. Container Spaces—18,720 (20 ft.)
No. Spaces with Elect. Outlets—180

PORT OF QUEBEC (Canada)

CANADIAN PACIFIC SHIPPING (Wolfe's Cove)

Status—In operation
Operator—C.P.S.
Type of Mgmnt.—D
Mode of Ops.—G, H, I
No. Berths—2
Berth Length—Each 196
Depth at Berth—Each 11.3
CFS—Yes
CFS Space Covered—5,667
Uncovered—45,380
Term. Area—
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 40
Reach on Water Side—Each 37
Reach on Land Side—1) 18, 2) 37
Crane Rail Width—Each 15
Crane Bridge Hght.—Each 30
No. Container Spaces—3,000 (20 ft.), 1,500 (40 ft.)
No. Spaces with Elect. Outlets—25

BEAUPORT FLATS

Status—In operation
Operator—S.A.B.B., Inc.
Type of Mgmnt.—F
Mode of Ops.—G, H
No. Berths—2
Berth Length—Each 210
Depth at Berth—Each 12.2
CFS—Yes
CFS Space Covered—
Uncovered—149,729
Term. Area—
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—36
Reach on Water Side—34
Reach on Land Side—34
Crane Rail Width—15
Crane Bridge Hght.—30
No. Container Spaces—15,000 (20 ft.), 7,500 (40 ft.)
No. Spaces with Elect. Outlets—Unlimited

ST. CHARLES RIVER BASIN

Status—In operation
Operator—National Harbor Board
Type of Mgmnt.—F
Mode of Ops.—J, H
No. Berths—1
Berth Length—293
Depth at Berth—12.2
CFS—
CFS Space Covered—5,109
Uncovered—21,250
Term. Area—
RR Service—
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—1,000 (20 ft.), 500 (40 ft.)
No. Spaces with Elect. Outlets—10

PORT OF RICHMOND (U.S.A.)

UNNAMED

Status—Planning stage
Operator—
Type of Mgmnt.—D
Mode of Ops.—G, H, I
No. Berths—2
Berth Length—1) 243, 2) 244
Depth at Berth—Each 10.6
Status—In operation
CFS Space Covered—12,542
Uncovered—
Term. Area—129,099
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 30.4
Reach on Water Side—Each 27
Reach on Land Side—Each 27
Crane Rail Width—Each 30
Crane Bridge Hght.—Each 27
No. Container Spaces—2,000
No. Spaces with Elect. Outlets—200

PORT OF SAINT JOHN (Canada)

NAVY ISLAND

Status—In operation
Operator—Brunterm Limited
Type of Mgmnt.—E
Mode of Ops.—G, I
No. Berths—1
Berth Length—255
Depth at Berth—11
CFS—Yes
CFS Space Covered—1,000
Uncovered—
Term. Area—40,500
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—40.6
Reach on Water Side—35
Reach on Land Side—36
Crane Rail Width—15.24
Crane Bridge Hght.—25.6
No. Container Spaces—17,000 (20 ft.)
No. Spaces with Elect. Outlets—Mobile refrigeration units

RODNEY TERMINAL

Status—Under construction
Operator—Brunterm Limited
Type of Mgmnt.—Undetermined
Mode of Ops.—G, I
No. Berths—4
Berth Length—1) 182, 2) 182, 3) 220, 4) 220
Depth at Berth—Each 12.2
CFS—Yes
CFS Space Covered—2,000
Uncovered—
Term. Area—162,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 40.6
Reach on Water Side—Each 35
Reach on Land Side—Each 36
Crane Rail Width—Each 15.24
Crane Bridge Hght.—25.6
No. Container Spaces—Undetermined
No. Spaces with Elect. Outlets—

PORT OF SAN DIEGO (U.S.A.)

NATIONAL CITY MARINE TERMINAL

Status—Under construction
Operator—San Diego Unified Port District
Type of Mgmnt.—F
Mode of Ops.—G
No. Berths—1
Berth Length—154
Depth at Berth—10.7
CFS—Yes
CFS Space Covered—3,284
Uncovered—58,987
Term. Area—
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—40.6
Reach on Water Side—34.4
Reach on Land Side—26.8
Crane Rail Width—15.2
Crane Bridge Hght.—24.2
No. Container Spaces—1,234 (40 ft.)
No. Spaces with Elect. Outlets—45

PORT OF SAN FRANCISCO (U.S.A.)

PIER 50—MISSION ROCK TERMINAL

Status—In operation
Operator—Crescent Wharf and Warehouse
Type of Mgmnt.—E
Mode of Ops.—H
No. Berths—2
Berth Length—1) 305, 2) 335
Depth at Berth—Each 10.7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—54,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—30.5
Reach on Water Side—25.3
Reach on Land Side—35.7
Crane Rail Width—Mobile crane
Crane Bridge Hght.—
No. Container Spaces—1,100 (20 ft.)
No. Spaces with Elect. Outlets—

PIER 80 ARMY STREET

Status—In operation
Operator—American President Lines and States Lines
Type of Mgmnt.—E
Mode of Ops.—H
No. Berths—3
Berth Length—Each 270
Depth at)Berth—Each 12.2
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—277,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 30.5
Reach on Water Side—1) 32, 2) 25.3
Reach on Land Side—1) 23.3, 2) 35.7
Crane Rail Width—1) 10.4, 2) Mobile crane
Crane Bridge Hght.—1) 21.6, 2) Mobile crane
No. Container Spaces—5,000 (20 ft.)
No. Spaces with Elect. Outlets—210

PIER 94

Status—Under construction
Operator—American President Lines
Type of Mgmnt.—D
Mode of Ops.—G, H
No. Berths—2
Berth Length—Each 249
Depth at Berth—Each 12.2
CFS—Yes
CFS Space Covered—5,300
Uncovered—
Term. Area—136,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 30.5
Reach on Water Side—Each 31.8
Reach on Land Side—Each 27.3
Crane Rail Width—Each 15.2
Crane Bridge Hght.—Each 26.8
No. Container Spaces—2,000 (20 ft.)
No. Spaces with Elect. Outlets—96

PIER 96
Status—In operation
Operator—Pacific Far East Lines
Type of Mgmnt.—D
Mode of Ops.—H
No. Berths—2
Berth Length—Each 265
Depth at Berth—Each 11.6
CFS—Yes
CFS Space Covered—5,300
Uncovered—
Term. Area—97,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 30.5
Reach on Water Side—Each 31.8
Reach on Land Side—Each 27.3
Crane Rail Width—Each 15.2
Crane Bridge Hght.—Each 26.8
No. Container Spaces—1,025 (20 ft.)
No. Spaces with Elect. Outlets—208

PIER 23
Status—In operation
Operator—Pacific Oriental Terminals
Type of Mgmnt.—E
Mode of Ops.—H
No. Berths—1
Berth Length—213
Depth at Berth—10.7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—11,000
RR Service—Yes
No. Cranes—5 (floating cranes)
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—200 (20 ft.)
No. Spaces with Elect. Outlets—

PIERS 30-32
Status—In operation
Operator—Crescent Wharf-Warehouse
Type of Mgmnt.—E
Mode of Ops.—H
No. Berths—3
Berth Length—1) 284, 2) 258, 3) 191
Depth at Berth—Each 10.7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—53,000
RR Service—Yes
No. Cranes—5 (floating cranes)
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—1,200 (20 ft.)
No. Spaces with Elect. Outlets—

PIERS 27-29
Status—In operation
Operator—California Stevedore & Ballast
Type of Mgmnt.—E
Mode of Ops.—H
No. Berths—3
Berth Length—1) 207, 2) 207, 3) 244
Depth at Berth—Each 11.6
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—66,000
RR Service—Yes
No. Cranes—5 (floating cranes)
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—1,500 (20 ft.)
No. Spaces with Elect. Outlets—30

PIER 48
Status—In operation
Operator—Overseas Shipping
Type of Mgmnt.—E
Mode of Ops.—H
No. Berths—2
Berth Length—1) 194, 2) 186
Depth at Berth—Each 10.7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—34,000
RR Service—Yes
No. Cranes—5 (floating cranes)
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—800 (20 ft.)
No. Spaces with Elect. Outlets—

PIERS 15-17
Status—In operation
Operator—
Type of Mgmnt.—F
Mode of Ops.—
No. Berths—1
Berth Length—244
Depth at Berth—10.7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—40,000
RR Services—Yes
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—900 (20 ft.)
No. Spaces with Elect. Outlets—

PORT OF SAVANNAH (U.S.A.)
CONTAINER CENTRAL BERTH 58 GARDEN CITY TERMINAL
Status—In operation
Operator—Georgia Ports Authority
Type of Mgmnt.—F
Mode of Ops.—G, I, K (lift truck)
No. Berths—1
Berth Length—303
Depth at Berth—11
CFS—Yes
CFS Space Covered—11,625
Uncovered—
Term. Area—81,020
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 40.9
Reach on Water Side—Each 35
Reach on Land Side—Each 35
Crane Rail Width—1) 27.5, 2) Mobile crane
Crane Bridge Hght.—1) 35.05
No. Container Spaces—3,100 (40 ft.), 5,940 (20 ft.)
No. Spaces with Elect. Outlets—57

CONTAINER CENTRAL BERTH 59 GARDEN CITY TERMINAL
Status—Under construction
Operator—Georgia Ports Authority
Type of Mgmnt.—F
Mode of Ops.—G, I, K (lift truck)
No. Berths—1
Berth Length—303
Depth at Berth—11
CFS—Yes
CFS Space Covered—11,625
Uncovered—
Term. Area—81,020
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—40.9
Reach on Water Side—35
Reach on Land Side—35
Crane Rail Width—27.5
Crane Bridge Hght.—35.05
No. Container Spaces—3,100 (40 ft.), 5,940 (20 ft.)
No. Spaces with Elect. Outlets—57

PORT OF SEATTLE (U.S.A.)
TERMINAL 18
Status—In operation
Operator—Port of Seattle
Type of Mgmnt.—F
Mode of Ops.—H
No. Berths—3
Berth Length—1) 212.1, 2) 219.4, 3) 219.4
Depth at Berth—Each 15.2
CFS—No (Terminal 102 provides CFS services)
CFS Space Covered—
Uncovered—
Term. Area—232,702.5
RR Services—Yes
No. Cranes—3
Crane Lift Capt.—1) 30.5, 2) 30.5, 3) 40.8
Reach on Water Side—Each 32.6
Reach on Land Side—Each 24.4
Crane Rail Width—Each 15.2
Crane Bridge Hght.—1) 21.3, 2) 21.3, 3) 27.4
No. Container Spaces—4,800 (20 ft.-stacked 3 high)
No. Spaces with Elect. Outlets—252

TERMINAL 25
Status—In operation
Operator—American Mail Line
Type of Mgmnt.—D
Mode of Ops.—G
No. Berths—2
Berth Length—Each 228.6
Depth at Berth—Each 15.2
CFS—Yes (Terminal 42 used as temp. CFS)
CFS Space Covered—10,008.5
Uncovered—32,376
Term. Area—121,937.5
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 40.8
Reach on Water Side—Each 32.6
Reach on Land Side—Each 24.4
Crane Rail Width—Each 15.2
Crane Bridge Hght.—Each 27.4
No. Container Spaces—1,130 (20 ft. stacked 3 high)
No. Spaces with Elect. Outlets—72

PIER 5
Status—In operation
Operator—Sea-Land Service
Type of Mgmnt.—D
Mode of Ops.—I
No. Berths—3
Berth Length—1) 164.6, 2) 164.6, 3) 207.2
Depth at Berth—Each 12.2
CFS—Yes
CFS Space Covered—9225.6
Uncovered—101,175.0
Term. Area—175,194.6
RR Service—Yes
No. Cranes—3
Crane Lift Capt.—Each 24.9
Reach on Water Side—Each 32.6
Reach on Land Side—Each 24.4
Crane Rail Width—Each 15.2
Crane Bridge Hght.—Each 21.3
No. Container Spaces—975 (35 ft.)
No. Spaces with Elect. Outlets—120

TERMINAL 46
Status—In operation
Operator—Kerr Steamship Corp.
Type of Mgmnt.—E
Mode of Ops.—I
No. Berths—3
Berth Length—1) 185, 2) 228.6, 3) 192
Depth at Berth—1) 12.2, 2 12.2, 3) 10.9
CFS—Yes
CFS Space Covered—7756.2
Uncovered—
Term. Area—83,813.3
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—40.8
Reach on Water Side—32.6
Reach on Land Side—24.4
Crane Rail Width—15.2
Crane Bridge Hght.—27.4
No. Container Spaces—500 (40 ft.)
No. Spaces with Elect. Outlets—60

TERMINAL 102
Status—In operation
Operator—Port of Seattle
Type of Mgmnt.—F
Mode of Ops.—
No. Berths—
Berth Length—
Depth at Berth—
CFS—Yes (off dock CFS serving all Port of Seattle Container Terminals)
CFS Space Covered—11,948.6
Uncovered—47,956.9
Term. Area—
RR Service—Yes
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

KEY

D—Exclusive lease for specified users
E—Preferential use
F—Common user terminal (open to all users)
X—If other type management, please specify
G—Transtainer operation
H—Straddle carrier operation
I—Chassis operation
J—Roll on/Roll off operation
K—Other than above—specify
(If mixed operation, list above letters that apply)

PORT OF TOLEDO (U.S.A.)

FACILITY NO. 1

Status—In operation
Operator—Toledo Overseas Terminals Co.
Type of Mgmnt.—D
Mode of Ops.—K (Containers handled as part of break bulk operation only)
No. Berths—7
Berth Length—1) 183, 2) 122, 3) 152, 4) 152, 5) 152, 6) 152, 7) 152
Depth at Berth—Each 8.2
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—141,635
RR Service—Yes
No. Cranes—2 (Gantry cranes handle containers)
Crane Lift Capt.—1) 66, 2) 100
Reach on Water Side—Each 24
Reach on Land Side—Each 37
Crane Rail Width—Each 9.75
Crane Bridge Hght.—Each 9.75
No. Container Spaces—None designated
No. Space with Elect. Outlets—

BERTH 7

Status—In operation
Operator—Toledo-Lucas County Port Authority
Type of Mgmnt.—F
Mode of Ops.—K (containers handled as part of break bulk operation only)
No. Berths—1
Berth Length—183
Depth at Berth—8.2
CFS—No
Term. Area—32,374
RR Service—Yes
No. Cranes—2 (Gantry cranes handle containeres)
Crane Lift Capt.—1) 66, 2) 100
Reach on Water Side—Each 24
Reach on Land Side—Each 37
Crane Rail Width—Each 9.75
Crane Bridge Hght.—Each 9.75
No. Container Spaces—None designated
No. Spaces with Elect. Outlets—

PORT OF VANCOUVER (Canada)

CENTENNIAL PIER 6

Status—In operation
Operator—Empire Stevedoring
Type of Mgmnt.—E
Mode of Ops.—H
No. Berths—1
Berth Length—211
Depth at Berth—12.3
CFS—Yes
CFS Space Covered—4,700
Uncovered—1,100
Term. Area—61,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—40
Reach on Water Side—33.23
Reach on Land Side—26.2
Crane Rail Width—13.15
Crane Bridge Hght.—24
No. Container Spaces—1,800 (20 ft.)
No. Spaces with Elect. Outlets—30

LaPOINTE PIER

Status—In operation
Operator—Casco Terminals, Ltd.
Type of Mgmnt.—F
Mode of Ops.—K (Shipboard gear & lift trucks)
No. Berths—1
Berth Length—185
Depth at Berth—10.7
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—20,400
RR Service—Yes
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—300 (20 ft.)
No. Spaces with Elect. Outlets—

VANTERM

Status—Planning stage
Operator—Not known
Type of Mgmnt.—Not known
Mode of Ops.—Not known
No. Berths—3
Berth Length—1) 276, 2) 276, 3) 230
Depth at Berth—Each 15.3
CFS—Yes
CFS Space Covered—Not known
Uncovered—
Term. Area—284,000
RR Service—Yes
No. Cranes—2 (capabilities not known)
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—Not known
No. Spaces with 4lect. Outlets—

Container Facilities—Central and South America

PORT OF ACAJUTLA (Central America)

ACAJUTLA MUELLE "B"

Status—In operation
Operator—Comision Ejecutiva Portuaria Autonoma
Type of Mgmnt.—F
Mode of Ops.—I
No. Berths—2
Berth Length—1) 200, 2) 160
Depth at Berth—1) 12, 2) 10
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—110,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—25
Reach on Water Side—19
Reach on Land Side—12.3
Crane Rail Width—16
Crane Bridge Hght.—20
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF BALBOA (Central America)

BALBOA

Status—In operation
Operator—Terminals Division
Type if Mgmnt.—F
Mode of Ops.—K (General Bulk and chassis container)
No. Berths—12
Berth Length—Each 152
Depth at Berth—Each 10.7
CFS—Yes (Area also used for bulk cargo)
CFS Space Covered—5,016
Uncovered—2,555
Term. Area—30,657
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—50.8
Reach on Water Side—21.3
Reach on Land Side—25.6
Crane Rail Width—6.7
Crane Bridge Hght.—7.6
No. Container Spaces—500 (20 ft.)
No. Spaces with Elect. Outlets—16 (privately owned outlets)

PORT OF CRISTOBAL (Central America)

CRISTOBAL

Status—In operation
Operator—Terminals Division
Type of Mgmnt.—F
Mode of Ops.—K (Central bulk and chasis container)
No. Berths—12
Berth Length—Each 152
Depth at Berth—Each 10.7
CFS—Yes
CFS Space Covered—28,854
Uncovered—20,438
Term. Area—49,515
RR Service—Yes
No. Cranes—6 (1 derrick, 5 mobile)
Crane Lift Capt.—1) 50.8, 2) 18.3, 3) 18.3 4) 30.5, 5) 20.3, 6) 50.8 derrick
Reach on Water Side—Derrick—18.4
Reach on Land Side—Derrick—24.4
Crane Rail Width—
Crane Bridge Hght.—Derrick 5.5
No. Container Spaces—(Area not specifically marked for containers)
No. Spaces with Elect. Outlets—

Container Facilities—Africa and Middle East

PORT OF ASHDOD (Middle East)

ASHDOD PORT CONTAINER TERMINAL

Status—In operation
Operator—Ashdod Port
Type of Mgmnt.—F
Mode of Ops.—G, H, I, J
No. Berths—1
Berth Length—250
Depth at Berth—10
CFS—Yes
CFS Space Covered—8,000
Uncovered—32,000
Term. Area—50,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 25
Reach on Water Side—Each 20
Reach on Land Side—Each 25
Crane Rail Width—Each 6
Crane Bridge Hght.—Each 28
No. Container Spaces—1,600 (20 ft.)
No. Spaces with Elect. Outlets—

ASHDOD PORT CONTAINER TERMINAL

Status—Under construction
Operator—Ashdod Port
Type of Mgmnt.—F
Mode of Ops.—G, H, I, J
No. Berths—1
Berth Length—450
Depth at Berth—12
CFS—Yes
CFS Space Covered—5,000
Uncovered—
Term. Area—150,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—43
Reach on Water Side—32
Reach on Land Side—40
Crane Rail Width—16
Crane Bridge Hght.—23
No. Container Spaces—2,160 (20 ft.)
No. Spaces with Elect. Outlets—50

PORT OF EILAT (Middle East)

EILAT PORT CONTAINER TERMINAL

Status—In operation
Operator—Eilat Port
Type of Mgmnt.—F
Mode of Ops.—I, J
No. Berths—1
Berth Length—200
Depth at Berth—12
CFS—Yes
CFS Space Covered—1,000
Uncovered—
Term. Area—5,000
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 25
Reach on Water Side—Each 20
Reach on Land Side—Each 25
Crane Rail Width—Each 6
Crane Bridge Hght—Each 28
No. Container Spaces—300 (20 ft.)
No. Spaces with Elect. Outlets—

PORT OF HAIFA (Middle East)

HAIFA PORT CONTAINER TERMINAL

Status—In operation
Operator—Haifa Port
Type of Mgmnt.—F
Mode of Ops.—G, H, I, J
No. Berths—1
Berth Length—300
Depth at Berth—11
CFS—Yes
CFS Space Covered—6,000
Uncovered—
Term. Area—100,000
RR Service—Yes
No. Cranes—3
Crane Lift Capt.—1) 43, 2) 25, 3) 25
Reach on Water Side—1) 32, 2) 20, 3) 20
Reach on Land Side—1) 40, 2) 25, 3) 25
Crane Rail Width—1) 16, 2) 6, 3) 6
Crane Bridge Hght.—1) 23, 2) 28, 3) 28
No. Container Spaces—1,700 (20 ft.)
No. Spaces with Elect. Outlets—50

PORT OF KARACHI (Middle East)

KARACHI PORT CONTAINER TERMINAL

Status—Planning stage
Operator—Karachi Port Trust
Type of Mgmnt.—F
Mode of Ops.—H, I
No. Berths—2
Berth Length—520 (Total)
Depth at Berth—Each 12.2
CFS—Yes
CFS Space Covered—13,940
Uncovered—13,940
Term. Area—134,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 30.5
Reach on Water Side—Each 35
Reach on Land Side—Each 25
Crane Rail Width—Each 25
Crane Bridge Hght.—Each 27
No. Container Spaces—2,000 (30 ft.)
No. Spaces with Elect. Outlets—50

PORT OF LAGOS (Africa)

BERTH 14/14A APAPA QUAY

Status—In operation
Operator—Nigerian Ports Authority
Type of Mgmnt.—F
Mode of Ops.—I, J
No. Berths—1
Berth Length—207.26
Depth at Berth—8.23
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—16,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—25.4
Reach on Water Side—13.7
Reach on Land Side—13.7
Crane Rail Width—6.7
Crane Bridge Hght.—7.5
No. Container Spaces—400 (20 ft.)
No. Spaces with Elect. Outlets—

PORT OF LOBITO-ANGOLA (Africa)

ZONE 3

Status—Under construction
Operator—Direccad de Exploracao do Porto do Lobito e Fiscalizacad do Caminho de Ferro de Benguela
Type of Mgmnt.—F
Mode of Ops.—
No. Berths—1
Berth Length—300
Depth at Berth—12.5
CFS—No
CFS Space Covered—
Uncovered—
RR Service—Yes
Term. Area—120,000
No. Cranes—1
Crane Lift Capt.—40
Reach on Water Side—30
Reach on Land Side—26.5
Crane Rail Width—14
Crane Bridge Hght.—23.5
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF LUANDA-ANGOLA (Africa)

ZONE G

Status—Under construction
Operator—Direccad de)Exploracao do Porto do Lobito e Fiscalizacad do Caminho de Ferro de Benguela
Type of Mgmnt.—F
Mode of Ops.—
No. Berths—1
Berth Length—300
Depth at Berth—12.5
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—80,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—1) 20, 2) 40
Reach on Water Side—1) 30
Reach on Land Side—1) 26.5
Crane Rail Width—1) 14
Crane Bridge Hght.—1) 23.5
No. Container Spaces—
No. Spaces with Elect. Outlets—

Container Facilities—Asia

PORT OF BANGKOK (Asia)

PORT AUTHORITY OF THAILAND

Status—Under construction, planning stage
Operator—Port Authority of Thailand
Type of Mgmnt.—F
Mode of Ops.—
No. Berths—2
Berth Length—390 (Total)
Depth at Berth—11.5
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—40,000
RR Service—Yes
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF HONG KONG (Asia)

THE HONG KONG & KOWLOON WHARF & GODOWN CO., LTD., KOWLOON, HONG KONG

Status—In operation
Operator—The Hongkong & Kowloon Wharf & Godown Co. Ltd.
Type of Mgmnt.—E, F
Mode of Ops.—G, I
No. Berths—6
Berth Length—1) 379, 2) 379, 3) 242, 4) 242, 5) 212, 6) 212
Depth at Berth—1) 10.9, 2) 10.9, 3) 10.9, 4) 10.9, 5) 10.6, 6) 10.6
CFS—Yes
CFS Space Covered—15,747
Uncovered—18,045
Term. Area—25,083
RR Service—No
No. Cranes—1
Crane Lift Capt.—25
Reach on Water Side—31.06
Reach on Land Side—7.6
Crane Rail Width—15.15
Crane Bridge Hght.—19.7
No. Container Spaces—330 (40 ft.)
No. Spaces with Elect. Outlets—100

KEY

D—Exclusive lease for specified users
E—Preferential use
F—Common user terminal (open to all users)
X—If other type management, please specify
G—Transtainer operation
H—Straddle carrier operation
I—Chassis operation
J—Roll on/Roll off operation
K—Other than above—specify
(If mixed operation, list above letters that apply)

BERTH 1 KWAI CHUNG

Status—In operation
Operator—Modern Terminals, Ltd.
Type of Mgmnt.—E
Mode of Ops.—H
No. Berths—1
Berth Length—304.8
Depth at Berth—12.19
CFS—Yes
CFS Space Covered—18,988
Uncovered—3,200
Term. Area—131,012
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 35.6
Reach on Water Side—Each 33.53
Reach on Land Side—Each 36.88
Crane Rail Width—Each 24.38
Crane Bridge Hght.—Each 27.13
No. Container Spaces—2,387 (20 ft.)
No. Spaces with Elect. Outlets—52

KWUN TONG CONTAINER TERMINAL KOWLOON

Status—In operation
Operator—North Point Wharves, Ltd.
Type of Mgmnt.—E
Mode of Ops.—K (sideloaders)
No. Berths—1
Berth Length—247
Depth at Berth—4.4
CFS—Yes
CFS Space Covered—9,172
Uncovered—
Term. Area—34,758
RR Service—No
No. Cranes—2
Crane Lift Capt.—1) 30.9, 2) 30.5
Reach on Water Side—1) 14.8, 2) 6.7
Reach on Land Side—1) 36.9, 2) Mobile crane
Crane Rail Width—1) Fixed, 2) Mobile
Crane Bridge Hght.—
No. Container Spaces—750 (20 ft.)
No. Spaces with Elect. Outlets—10

NORTH POINT CONTAINER BERTH

Status—In operation
Operator—North Point Wharves, Ltd.
Type of Mgmnt.—E
Mode of Ops.—G
No. Berths—1
Berth Length—171
Depth at Berth—10.8
CFS—Yes
CFS Space Covered—1,513
Uncovered—
Term. Area—11,380
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 30.9
Reach on Water Side—Each 33.23
Reach on Land Side—Each 36.92
Crane Rail Width—Each 17.54
Crane Bridge Hght.—Derrick cranes
No. Container Spaces—968 (20 ft.)
No. Spaces with Elect. Outlets—

WHAMPOA TERMINALS, LTD.

Status—In operation, under construction, planning stage
Operator—Whampoa Terminals, Ltd.
Type of Mgmnt.—F
Mode of Ops.—G, H
No. Berths—1
Berth Length—599.8
Depth at Berth—9
CFS—Yes
CFS Space Covered—4,181 (3716 addition planned)
Uncovered—
Term. Area—46,455
RR Services—No
No. Cranes—1
Crane Lift Capt.—30.5
Reach on Water Side—28.6
Reach on Land Side—60.6
Crane Rail Width—18.3
Crane Bridge Hght.—39.5
No. Container Spaces—1,224 (20 ft.), planned
No. Spaces with Elect. Outlets—100, planned

PORT OF KAOHSIUNG (Asia)

CONTAINER TERMINAL NO. 1

Status—In operation
Operator—Kaohsiung Harbor Bureau
Type of Mgmnt.—F
Mode of Ops.—H
No. Berths—3
Berth Length—1) 214.17, 2) 204.53, 3) 229.37
Depth at Berth—Each 10.5
CFS—Yes
CFS Space Covered—10,790
Uncovered—
Term. Area—68,000
RR Service—Yes
No. Cranes—1 (floating crane)
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

CONTAINER TERMINAL NO. 2

Status—In operation, under construction
Operator—Kaohsiung Harbor Bureau
Type of Mgmnt.—D, E, F
Mode of Ops.—H, I
No. Berths—3
Berth Length—Each 250
Depth at Berth—1) 10.5, 2) 10.5, 3) 11.0
CFS—Yes
CFS Space Covered—13,500
Uncovered—
Term. Area—432,000
RR Service—Yes
No. Cranes—3
Crane Lift Capt.—1) 31, 2) 31, 3) 41
Readh on Water Side—1) 33, 2) 33, 3) 31
Reach on Land Side—Each 31
Crane Rail Width—Each 15.2
Crane Bridge Hght.—1) 33.3, 2) 33.3. 3) 27.4
No. Container Spaces—10,440 (20 ft.)
No. Spaces with Elect. Outlets—224

CONTAINER TERMINAL NO. 3

Status—In operation
Operator—Chinese Maritime Trust Ltd.
Type of Mgmnt.—D
Mode of Ops.—H, I
No. Berths—1
Berth Length—250
Depth at Berth—10.5
CFS—Yes
CFS Space Covered—4,500
Uncovered—
Term. Area—432,000 (in common with Wharfs No. 63, 64, 65)
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—41
Reach on Water Side—31
Reach on Land Side—31
Crane Rail Width—15.2
Crane Bridge Hght.—27.4
No. Container Spaces—2,200 (20 ft.)
No. Spaces with Elect. Outlets—96

PORT OF KEELUNG (Asia)

CONTAINER TERMINAL

Status—In operation
Operator—Keelung Harbor Bureau
Type of Mgmnt.—F
Mode of Ops.—H, I, J
No. Berths—5
Berth Length—1) 200, 2) 200, 3) 240, 4) 255, 5) 256
Depth at Berth—1) 11, 2) 11, 3) 11, 4) 13, 5) 13
CFS—Yes
CFS Space Covered—2,720
Uncovered—3,000
Term. Area—63,750
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 31
Reach on Water Side—Each 37
Reach on Land Side—Each 43.5
Crane Rail Width—Each 15
Crane Bridge Hght.—Each 28
No. Container Spaces—4,000 (20 ft.)
No. Spaces with Elect. Outlets—60

2ND CONTAINER TERMINAL

Status—Planning stage
Operator—Keelung Harbor Bureau
Type of Mgmnt.—F
Mode of Ops.—C
No. Berths—2
Berth Length—540 (Total)
Depth at Berth—Planning stage
CFS—Planning stage
CFS Space Covered—
Uncovered—
Term. Area—33,000
RR Service—Planning stage
No. Cranes—Planning stage
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane.Bridge Hght.—
No. Container Spaces—2,000 (40 ft.)
No. Spaces with Elect. Outlets—

PORT OF KELANG (Asia)

NORTH PORT CONTAINER TERMINAL

Status—Under construction
Operator—Kelang Port Authority
Type of Mgmnt.—F
Mode of Ops.—H, I
No. Berths—2
Berth Length—Each 320
CFS—Yes
Depth at Berth—Each 13.4
CFS Space Covered—6,691
Uncovered—
Term. Area—155,080
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Not rated yet
Reach on Water Side—Each 34.1
Reach on Land Side—Each 26.6
Crane Rail Width—Each 15.2
Crane Bridge Hght.—Each 27
No. Container Spaces—1,500 (20 ft.)
No. Spaces with Elect. Outlets—20

PORT OF KITAKYUSHU (Asia)

TANOURA CONTAINER TERMINAL

Status—In operation
Operator—Kanmon Container Terminal Co., Ltd.
Type of Mgmnt.—F
Mode of Ops.—H
No. Berths—1
Berth Length—300
Depth at Berth—12.0
CFS—Yes
CFS Space Covered—2,400
Uncovered—20,000
Term. Area—63,220
RR Services—No
No. Cranes—1
Crane Lift Capt.—37
Reach on Water Side—37.2
Reach on Land Side—40
Crane Rail Width—30
Crane Bridge Hght.—25
No. Container Spaces—1,000 (20 ft.)
No. Spaces with Elect. Outlets—40

KOBE PORT ISLAND (Asia)

PORT ISLAND NO. 1 BERTH

Status—In operation
Operator—Mitsui Warehouse Co., Ltd.
Type of Mgmnt.—D
Mode of Ops.—I
No. Berths—1
Berth Length—300
Depth at Berth—12
CFS—Yes
CFS Space Covered—6,700
Uncovered—
Term. Area—98,300
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 38.5
Reach on Water Side—Each 31.5
Reach on Land Side—Each 28.0
Crane Rail Width—Each 16.0
Crane Bridge Hght.—Each 21.0
No. Container Spaces—53 (20 ft.), 454 (40 ft), 446 (35 ft.)
No. Spaces with Elect. Outlets—80

PORT ISLAND NO. 2 BERTH

Status—In operation
Operator—Sumitomo Warehouse Co., Ltd.
Type of Mgmnt.—D
Mode of Ops.—G
No. Berths—1
Berth Length—300
Depth at Berth—12
CFS—Yes
CFS Space Covered—4,200
Uncovered—
Term. Area—100,800
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 44
Reach on Water Side—Each 33
Reach on Land Side—Each 30
Crane Rail Width—Each 16
Crane Bridge Hght.—Each 25
No. Container Spaces—1,638 (20 ft.)
No. Spaces with Elect. Outlets—120

PORT ISLAND NO. 3 BERTH

Status—In operation
Operator—Mitsubishi Warehouse Co., Ltd.
Type of Mgmnt.—D
Mode of Ops.—H
No. Berths—1
Berth Length—300
Depth at Berth—12
CFS—Yes
CFS Space Covered—6,700
Uncovered—
Term. Area—105,000
RR Service—No

No. Cranes—2
Crane Lift Capt.—Each 44
Reach on Water Side—Each 33
Reach on Land Side—Each 30
Crane Rail Width—Each 16
Crane Bridge Hght.—Each 25
No. Container Spaces—1,532 (20 ft), 60 (40 ft.)
No. Spaces with Elect. Outlets—60

PORT ISLAND NO. 4 BERTH

Status—In operation
Operator—Nippon Unyu Kaisha Co., Ltd.
Type of Mgmnt.—D
Mode of Ops.—H
No. Berths—1
Berth Length—300
Depth at Berth—12
CFS—Yes
CFS Space Covered—5,000
Uncovered—
Term. Area—105,000
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 44
Reach on Water Side—Each 33
Reach on Land Side—Each 30
Crane Rail Width—Each 16
Crane Bridge Hght.—Each 25
No. Container Spaces—1,684 (20 ft), 88 (40 ft.)
No. Spaces with Elect. Outlets—88

PORT ISLAND NO. 5 BERTH

Status—In operation
Operator—Sumitomo Warehouse Co., Ltd.
Type of Mgmnt.—D
Mode of Ops.—G
No. Berths—1
Berth Length—250
Depth at Berth—12
CFS—Yes
CFS Space Covered—3,900
Uncovered—
Term. Area—101,100
RR Service—No
No. Cranes—2 (1 in planning stage)
Crane Lift Capt.—Each 44
Reach on Water Side—Each 33
Reach on Land Side—Each 30
Crane Rail Width—Each 16
Crane Bridge Hght.—Each 25
No. Container Spaces—1,247 (20 ft.), 78 (40 ft.)
No. Spaces with Elect. Outlets—78

PORT ISLAND NO. 6 BERTH

Status—In operation
Operator—Mitsui Warehouse Co., Ltd.
Type of Mgmnt.—D
Mode of Ops.—I
No. Berths—1
Berth Length—300
Depth at Berth—12
CFS—Yes
CFS Space Covered—5,050
Uncovered—
Term. Area—99,950
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 38.5
Reach on Water Side—Each 31.5
Reach on Land Side—Each 28
Crane Rail Width—16
Crane Bridge Hght.—Each 21.5
No. Container Spaces—91 (20 ft.). 627 (40 ft.)
No. Spaces with Elect. Outlets—78

PORT ISLAND NO. 7 BERTH

Status—Under construction
Operator—
Type of Mgmnt.—D
Mode of Ops.—
No. Berths—1
Berth Length—300
Depth at Berth—12
CFS—
CFS Space Covered—
Uncovered—
Term. Area—105,000
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT ISLAND NO. 8 BERTH

Status—Under construction
Operator—
Type of Mgmnt.—D
Mode of Ops.—
No. Berths—1
Berth Length—300
Depth at Berth—12
CFS—
CFS Space Covered—
Uncovered—
Term. Area—105,000
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT ISLAND NO. 9 BERTH

Status—Under construction
Operator—
Type of Mgmnt.—D
Mode of Ops.—
No. Berths—1
Berth Length—300
Depth at Berth—12
CFS—
CFS Space Covered—
Uncovered—
Term. Area—90,400
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF KOBE (Asia)

MAYA CONTAINER TERMINAL

Status—In operation
Operator—Mitsui Warehouse, Nitto Transport Warehouse, Nippon Container Terminal, Sankyu Transportation and Engineering Co., Ltd., Kamigumi Co., Ltd.
Type of Mgmnt.—E
Mode of Ops.—G, H
No. Berths—4
Berth Length—1) 200, 2) 200, 3) 300, 4) 300
Depth at Berth—Each 12
CFS—Yes
CFS Space Covered—4,964
Uncovered—
Term. Area—162,100
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—1) 25.4, 2) 30.5
Reach on Water Side—Each 29.2
Reach on Land Side—Each 27.3
Crane Rail Width—Each 16
Crane Bridge Hght.—Each 31.5
No. Container Spaces—822 (20 ft.)
No. Spaces with Elect. Outlets—64

PORT KOTA KINABALU (Asia)

KOTA KINABALU TERMINAL

Status—Planning stage
Operator—Sabah Ports Authority
Type of Mgmnt.—F
Mode of Ops.—G, I
No. Berths—3
Berth Length—1) 212, 2) 122, 3) 122
Depth at Berth—1) 9.15, 2) 7.00, 3) 7.00
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—82,500
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 30
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—1) 15.25, 2) 5.15
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF MANILA (Asia)

PIER 3, SOUTH HARBOR PORT OF MANILA

Status—In operation
Operator—E. Razon, Inc.
Type of Mgmnt.—D
Mode of Ops.—H, I
No. Berths—2
Berth Length—Each 180
Depth at Berth—Each 10
CFS—Yes
CFS Space Covered—
Uncovered—15,000
Term. Area—35,000
RR Service—No
No. Cranes—2
Crane Lift Capt.—1) 71.1, 2) 40.6
Reach on Water Side—1) 50, 2) 12
Reach on Land Side—1) 50, 2) 12
Crane Rail Width—1) 4.5, 2) 2.45
Crane Bridge Hght.—Each 6
No. Container Spaces—425
No. Spaces with Elect. Outlets—

PORT OF NAGOYA (Asia)

KINJO CONTAINER TERMINAL

Status—In operation
Operator—Nagoya Port Authority
Type of Mgmnt.—F
Mode of Ops.—H
No. Berths—2
Berth Length—Each 200
Depth at Berth—Each 10.5
CFS—Yes
CFS Space Covered—8,760
Uncovered—
Term. Area—94,640
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 37.5
Reach on Water Side—Each 35.00
Reach on Land Side—Each 7.5
Crane Rail Width—Each 17.0
Crane Bridge Hght.—Each 24.0
No. Container Spaces—1,500 (20 ft.)
No. Spaces with Elect. Outlets—78

NAGOYA CONTAINER BERTH

Status—In operation
Operator—Nagoya Container Berth Co., Ltd.
Type of Mgmnt.—D
Mode of Ops.—H, J
No. Berths—2
Berth Length—1) 322, 2) 300
Depth at Berth—Each 12
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—184,092
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 44
Reach on Water Side—Each 35.5
Reach on Land Side—Each 9.5
Crane Rail Width—Each 17.0
Crane Bridge Hght.—Each 32.2
No. Container Spaces—1,068 (20 ft.), 40 (40 ft.)
No. Spaces with Elect. Outlets—60

NAGOYA CONTAINER BERTH

Status—Planning stage
Operator—Nagoya Container Berth Co., Ltd.
Type of Mgmnt.—D
Mode of Ops.—H
No. Berths—2
Berth Length—Each 250
Depth at Berth—12
CFS—Yes
CFS Space Covered—22,000
Uncovered—
Term. Area—141,608
RR Service—No
No. Cranes—6
Crane Lift Capt.—Each 44
Reach on Water Side—Each 35.5
Reach on Land Side—Each 9.5
Crane Rail Width—Each 17.0
Crane Bridge Hght.—Each 32.2
No. Container Spaces—2,572 (20 ft.), 32 (40 ft.)
No. Spaces with Elect. Outlets—48

PORT OF OSAKA (Asia)

SOUTH PORT NO. 1 BERTH

Status—In operation
Operator—Nitto Transportation Co., Ltd.
Type of Mgmnt.—D
Mode of Ops.—G, J
No. Berths—1
Berth Length—250
Depth at Berth—12
CFS—Yes
CFS Space Covered—4,600
Uncovered—

KEY

D—Exclusive lease for specified users
E—Preferential use
F—Common user terminal (open to all users)
X—If other type management, please specify
G—Transtainer operation
H—Straddle carrier operation
I—Chassis operation
J—Roll on/Roll off operation
K—Other than above—specify
(If mixed operation, list above letters that apply)

Term. Area—72,200
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 37.5
Reach on Water Side—1) 31.5, 2) 32
Reach on Land Side—1 26, 2) 27
Crane Rail Width—Each 16
Crane Bridge Hght.—Each 21
No. Container Spaces—1,014 (20 ft.), 30 (40 ft.)
No. Spaces with Elect. Outlets—80

SOUTH PORT NO. 2 BERTH

Status—In operation
Operator—Shosen Koun Co., Ltd.
Type of Mgmnt.—D
Mode of Ops.—G
No. Berths—1
Berth Length—250
Depth at Berth—12
CFS—Yes
CFS Space Covered—3,000
Uncovered—
Term. Area—72,000
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 37.5
Reach on Water Side—Each 31.5
Reach on Land Side—Each 26
Crane Rail Width—Each 16
Crane Bridge Hght.—Each 21
No. Container Spaces—893 (20 ft.), 45 (40 ft.)
No. Spaces with Elect. Outlets—150

SOUTH PORT NO. 3 BERTH

Status—Under construction
Operator—
Type of Mgmnt.—D
Mode of Ops.—G
No. Berths—1
Berth Length—300
Depth at Berth—12
CFS—
CFS Space Covered—
Uncovered—
Term. Area—90,000
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

SOUTH PORT NO. 4 BERTH

Status—Under construction
Operator—
Type of Mgmnt.—D
Mode of Ops.—G
No. Berths—1
Berth Length—300
Depth at Berth—12
CFS—
CFS Space Covered—
Uncovered—
Term. Area—75,000
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces withElect. Outlets—

SOUTH PORT NO. 5 BERTH

Status—Under construction
Operator—
Type of Mgmnt.—D
Mode of Ops.—
No. Berths—1
Berth Length—300
Depth at Berth—12
CFS—
CFS Space Covered—
Uncovered—
Term. Area—105,000
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

SOUTH PORT NO. 6 BERTH

Status—Planning stage
Operator—
Type of Mgmnt.—D
Mode of Ops.—
No. Berths—1
Berth Length—300
Depth at Berth—12
CFS—
CFS Space Covered—
Uncovered—
Term. Area—105,000
RR Service—No
No. Cranes—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF PENANG (Asia)

BUTTERWORTH WHARVES

Status—In operation
Operator—Penang Port Commission
Type of Mgmnt.—F
Mode of Ops.—I
No. Berths—5
Berth Length—1) 183, 2) 183 3) 174, 4) 174 5) 174
Depth at Berth—Each 9.75
CFS—
CFS Space Covered—
Uncovered—
Term. Area—54,290
RR Service—Yes
No. Cranes—1 (Mobile crane)
Crane Lift Capt.—30.5
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—112
No. Spaces with Elect. Outlets—

PORT OF RAJANG (Asia)

SIBU PORT

Status—Planning stage
Operator—Rajang Port Authority
Type of Mgmnt.—F
Mode of Ops.—K
No. Berths—2
Berth Length—Each 150
Depth at Berth—Each 8
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF SANDAKAN (Asia)

SANDAKAN TERMINAL

Status—Planning stage
Operator—Sabah Ports Authority
Type of Mgmnt.—F
Mode of Ops.—G, I
No. Berths—3
Berth Length—1) 212, 2) 165, 3) 122
Depth at Berth—
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—40,500
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 30
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—1) 15.25, 2) 5.15
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF SHIMIZU (Asia)

PUBLIC CONTAINER TERMINAL

Status—In operation
Operator—Suzuyo & Co., Ltd.
Type of Mgmnt.—F
Mode of Ops.—G. K
No. Berths—1
Berth Length—220
Depth at Berth—12
CFS—Yes
CFS Space Covered—2,160
Uncovered—3,200
Term. Area—45,000
RR Service—No
No. Cranes—1
Crane Lift Capt.—38.1
Reach on Water Side—32
Reach on Land Side—28
Crane Rail Width—16
Crane Bridge Hght.—28.8
No. Container Spaces—3,700 (20 ft.)
No. Spaces with Elect. Outlets—50

PUBLIC CONTAINER TERMINAL (Okitsu Wharf)

Status—Under construction
Operator—Suzuyo & Co., Ltd.
Type of Mgmnt.—F
Mode of Ops.—
No. Berths—1
Berth Length—220
Depth at Berth—12
CFS—
CFS Space Covered—
Uncovered—
Term. Area—18,700
RR Service—
No. Cranes—1
Crane Lift Capt.—40.6
Reach on Water Side—32.7
Reach on Land Side—32.5
Crane Rail Width—16
Crane Bridge Hght.—31.8
No. Container Spaces—1,270 (20 ft.)
No. Spaces with Elect. Outlets—30

PORT OF SINGAPORE (Asia)

PSA CONTAINER PORT EAST LAGOON

Status—In operation, under construction
Operator—Port of Singapore Authority
Type of Mgmnt.—F
Mode of Ops.—H, I
No. Berths—4
Berth Length—1) 213.36, 2) 304.8, 3) 304.8, 4) 304.8
Depth at Berth—1) 10.36, 2) 13.41, 3) 13.41, 4) 13.41
CFS—Yes
CFS Space Covered—20,902
Uncovered—
Term. Area—262,377
RR Service—Yes
No. Cranes—3
Crane Lift Capt.—Each 35.56
Reach on Water Side—Each 33.67
Reach on Land Side—Each 37.04
Crane Rail Width—Each 23.48
Crane Bridge Hght.—Each 27.43
No. Container Spaces—4,000 (20 ft.)
No. Spaces with Elect. Outlets—64

PORT OF TOKYO (Asia)

OHI KPDA CONTAINER TERMINAL

Status—In operation, under construction
Operator—K Line
Type of Mgmnt.—D
Mode of Ops.—G
No. Berths—2
Berth Length—1) 300, 2) 250
Depth at Berth—Each 12
CFS—Yes
CFS Space Covered—6,600
Uncovered—
Term. Area—190,000
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 30.5
Reach on Water Side—Each 33.5
Reach on Land Side—Each 29
Crane Rail Width—Each 16
Crane Bridge Hght.—Each 30
No. Container Spaces—
No. Spaces with Elect. Outlets—

OHI KPDA CONTAINER TERMINAL

Status—In operation, under construction
Operator—Mitsui OSK Line
Type of Mgmnt.—D
Mode of Ops.—G
No. Berths—3
Berth Length—1) 250, 2) 300, 3) 300
Depth at Berth—Each 12
CFS—Yes
CFS Space Covered—6,000
Uncovered—
Term. Area—293,300
RR Service—No
No. Cranes—3
Crane Lift Capt.—Each 30.5
Reach on Water Side—Each 33.5
Reach on Land Side—Each 29
Crane Rail Width—Each 16
Crane Bridge Hght.—Each 30
No. Container Spaces—3,500
No. Spaces with Elect. Outlets—280

OHI KPDA CONTAINER TERMINAL

Status—Under construction
Operator—NYK Line
Type of Mgmnt.—D
Mode of Ops.—
No. Berths—2
Berth Length—Each 300
Depth at Berth—Each 12
CFS—
CFS Space Covered—
Uncovered—
Term. Area—210,000
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

OHI KPDA CONTAINER TERMINAL

Status—In operation
Operator—Y-S Line, Japan Line
Type of Mgmnt.—D
Mode of Ops.—G
No. Berths—1
Berth Length—300
Depth at Berth—12
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—105,000
RR Servicee—No
No. Cranes—2
Crane Lift Capt.—Each 30.5
Reach on Water Side—Each 33
Reach on Land Side—Each 34
Crane Rail Width—Each 16
Crane Bridge Hght.—Each 30
No. Container Spaces—
No. Spaces with Elect. Outlets—186

ODAIBA KPDA CONTAINER TERMINAL

Status—Planning stage
Operator—
Type of Mgmnt.—D
Mode of Ops.—2
No. Berths—Each 300
Berth Length—Each 12.0
Depth at Berth—
CFS—
CFS Space Covered—
Uncovered—
Term. Area—210,000
RR Service—
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF YOKKAICHI (Asia)

CONTAINER TERMINAL

Status—Under construction
Operator—Yokkaichi Warehouse Co., Ltd.
Type of Mgmnt.—E
Mode of Ops.—H
No. Berths—1
Berth Length—280
Depth at Berth—12
CFS—Yes
CFS Space Covered—48,000
Uncovered—32,750
Term. Area—106,750
RR Service—No
No. Cranes—2
Crane Lift Capt.—30.5
Reach on Water Side—32.1
Reach on Land Side—7.5
Crane Rail Width—16
Crane Bridge Hght.—33
No. Container Spaces—936 (20 ft.)
No. Spaces with Elect. Outlets—50

PORT OF YOKOHAMA (Asia)

HONMOKU KPDA CONTAINER TERMINAL NO. 1

Status—In operation
Operator—K Line
Type of Mgmnt.—D
Mode of Ops.—G, J
No. Berths—1
Berth Length—325
Depth at Berth—12
CFS—Yes
CFS Space Covered—2,600
Uncovered—
Term. Area—67,000
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 30.5
Reach on Water Side—Each 31.5
Reach on Land Side—Each 25.5
Crane Rail Width—Each 16
Crane Bridge Hght.—Each 27
No. Container Spaces—1,012 (20 ft.)
No. Spaces with Elect. Outlets—100

HONMOKU KPDA CONTAINER TERMINAL NO. 2

Status—In operation
Operator—Mitsui-OSK Line, Showa Shipping, NYK Line, YS Line
Type of Mgmnt.—D
Mode of Ops.—H
No. Berths—1
Berth Length—250
Depth at Berth—12
CFS—Yes
CFS Space Covered—3,000
Uncovered—
Term. Area—70,000
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 30.5
Reach on Water Side—Each 31.5
Reach on Land Side—Each 25.5
Crane Rail Width—Each 16
Crane Bridge Hght.—Each 27
No. Container Spaces—1,276 (20 ft.)
No. Spaces with Elect. Outlets—99

HONMOKU KPDA CONTAINER TERMINAL NO. 3 & 4

Status—In operation, under construction
Operator—Sea-Land Service Inc.
Type of Mgmnt.—D
Mode of Ops.—I
No. Berths—2
Berth Length—Each 300
Depth at Berth—Each 12
CFS—Yes
CFS Space Covered—3,400
Uncovered—
Term. Area—190,000
RR Service—No
No. Cranes—2
Crane Lift Capt.—Each 30.5
Reach on Water Side—Each 31.5
Reach on Land Side—Each 25.5
Crane Rail Width—Each 16
Crane Bridge Hght.—Each 27
No. Container Spaces—697 (35 ft.)
No. Spaces with Elect. Outlets—48

DAIKDKU-CAO KPDA CONTAINER TERMINAL

Status—Planning stage
Operator—
Type of Mgmnt.—D
Mode of Ops.—
No. Berths—2
Berth Length—Each 300
Depth at Berth—Each 12
CFS—
CFS Space Covered—
Uncovered—
Term. Area—210,000
RR Service—
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

Container Facilities—Australia and New Zealand

PORT OF ADELAIDE (Australia)

OUTER HARBOR BERTH 6

Status—Under construction
Operator—To be decided
Type of Mgmnt.—F
Mode of Ops.—H
No. Berths—1
Berth Length—275
Depth at Berth—11
CFS—To be decided
CFS Space Covered—
Uncovered—
Term. Area—67,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—30
Reach on Water Side—34
Reach on Land Side—37
Crane Rail Width—23
Crane Bridge Hght.—25
No. Container Spaces—2,000 (20 ft.)
No. Spaces with Elect. Outlets—To be decided

PORT OF AUCKLAND (New Zealand)

PUBLIC CONTAINER TERMINAL

Status—In operation, under construction
Operator—Auckland Harbour Board
Type of Mgmnt.—F
Mode of Ops.—H, I
No. Berths—2
Berth Length—457 (total)
Depth at Berth—Each 12.2
CFS—Yes
CFS Space Covered—3,680 (to be increased)
Uncovered—1,748
Term. Area—89,034 (to be increased to 129,504)
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—45.66.
Reach on Water Side—32.7
Reach on Land Side—33.8
Crane Rail Width—18.3
Crane Bridge Hght.—28.3
No. Container Spaces—750 (20 ft.)
No. Spaces with Elect. Outlets—240 (to be increased)

SEACARGO TERMINAL

Status—In operation
Operator—Union Steamship Co., Ltd.

KEY

D—Exclusive lease for specified users
E—Preferential use
F—Common user terminal (open to all users)
X—If other type management, please specify
G—Transtainer operation
H—Straddle carrier operation
I—Chassis operation
J—Roll on/Roll off operation
K—Other than above—specify
(If mixed operation, list above letters that apply)

Type of Mgmnt.—D
Mode of Ops.—J
No. Berths—1
Berth Length—122
Depth at Berth—8.5
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—16,188
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF FREMANTLE (Australia)

PORT OF FREMANTLE CONTAINER TERMINAL

Status—In operation
Operator—Fremantle Port Authority (Berth and container crane), Seatainer Terminals, Lt., Freightbases Pty., Lt. (Operating area to rear of berth)
Type of Mgmnt.—F,D
Mode of Ops.—G, I
No. Berths—1
Berth Length—272
Depth at Berth—11
CFS—Yes
CFS Space Covered—926
Uncovered—15,140
Term. Area—46,733
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—66
Reach on Water Side—31
Reach on Land Side—40
Crane Rail Width—25.3
Crane Bridge Hght.—26
No. Container Spaces—1,800 (20 ft.)
No. Spaces with Elect. Outlets—190

PORT OF LYTTELTON (New Zealand)

CASHIN QUAY CONTAINER TERMINAL

Status—Under construction
Operator—Lyttelton Harbour Board
Type of Mgmnt.—F
Mode of Ops.—I, K (forklift)
No. Berths—1
Berth Length—250
Depth at Berth—13
CFS—Yes
CFS Space Covered—3,900
Uncovered—19.700
Term. Area—25,400
RR Service—Yes
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

UNION SEACARGO TERMINAL

Status—In operation
Operator—Union Steamship Co. of New Zealand, Ltd.
Type of Mgmnt.—D
Mode of Ops.—J
No. Berths—1
Berth Length—160
Depth at Berth—9.75
CFS—Yes
CFS Space Covered—1,800
Uncovered—7,000
Term. Area—500
RR Service—Yes
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF MELBOURNE (Australia)

LINER SERVICES

Status—In operation
Operator—Liner Services Pty., Ltd.
Type of Mgmnt.—D
Mode of Ops.—H, J
No. Berths—1
Berth Length—192
Depth at Berth—9.4
CFS—Yes
CFS Space Covered—21,450
Uncovered—27,100
Term. Area—67,785
RR Service—Yes
No. Cranes—2 (Shared with Trans Ocean and Common User Area)
Crane Lift Capt.—Each 45.7
Reach on Water Side—Each 31
Reach on Land Side—1) 40.5, 2) 39.6
Crane Rail Width—Each 25.3
Crane Bridge Hght.—1) 26.2, 2) 24.4
No. Container Spaces—2,601 (20 ft.)
No. Spaces with Elect. Outlets—128

COMMON USER AREA

Status—In operation
Operator—Port of Melbourne
Type of Mgmnt.—F
Mode of Ops.—H
No. Berths—2
Berth Length—1) 243, 2) 261
Depth at Berth—Each 9.4
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—37,432
RR Service—No
No. Cranes—2 (Shared with Trans Ocean and Liner Services)
Crane Lift Capt.—Each 45.7
Reach on Water Side—Each 31
Reach on Land Side—1) 40.5, 2) 39.6
Crane Rail Width—Each 25.3
Crane Bridge Hght.—1) 26.2, 2) 24.4
No. Container Spaces—1,440 (20 ft.)
No. Spaces with Elect. Outlets—148

TRANS OCEAN

Status—In operation
Operator—Trans Ocean Terminals, Ltd.
Type of Mgmnt.—D
Mode of Ops.—H
No. Berths—2
Berth Length—1) 243, 2) 261
Depth at Berth—Each 9.4
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—79,922
RR Service—Yes
No. Cranes—2 (Shared with common user area and Liner Services)
Crane Lift Capt.—Each 45.7
Reach on Water Side—Each 31
Reach on Land Side—1) 40.5, 2) 39.6
Crane Rail Width—Each 25.3
Crane Bridge Hght.—1) 26.2, 2) 24.4
No. Container Spaces—2,675 (20 ft.)
No. Spaces with Elect. Outlets—160

SEATAINER TERMINALS

Status—In operation
Operator—Seatainer Terminals, Ltd.
Type of Mgmnt.—D
Mode of Ops.—K (overhead traveling cranes)
No. Berths—2
Berth Length—Each 244
Depth at Berth—Each 9.4
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—131,519
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 45.7
Reach on Water Side—Each 31
Reach on Land Side—Each 39.6
Crane Rail Width—Each 25.3
Crane Bridge Hght.—Each 26.8
No. Container Spaces—4,500 (20 ft.)
No. Spaces with Elect. Outlets—423

32 SOUTH WHARF

Status—In operation
Operator—Trans-Austral Shipping Pty., Ltd.
Type of Mgmnt.—E
Mode of Ops.—J
No. Berths—1
Berth Length—253
Depth at Berth—9.4
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—12,140
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—20

A.N.L. TERMINAL

Status—In operation, planning stage
Operator—Australian National Line
Type of Mgmnt.—D
Mode of Ops.—J
No. Berths—4
Berth Length—1) 122, 2) 152, 3) 183, 4) 271
Depth at Berth—1) 7.0, 2) 7.0, 3) 9.4, 4) 9.4
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—240,780
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—38

1 & 2 NORTH WHARF

Status—In operation
Operator—Union Steamship Co. of N.Z., Ltd.
Type of Mgmnt.—D
Mode of Ops.—J
No. Berths—2
Berth Length—1) 168, 2) 177
Depth at Berth—Each 7.9
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—18,210
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—30

5-6-7 VICTORIA DOCK

Status—Under construction
Operator—Union Steamship Co. of N.Z.,Ltd.
Type of Mgmnt.—D
Mode of Ops.—J
No. Berths—2
Berth Length—1) 219, 2) 317
Depth at Berth—Each 10.1
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—60,700
RR Service—Yes
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

NO. 3 WEST SWANSON DOCK

Status—Planning stage
Operator—
Type of Mgmnt.—C
Mode of Ops.—
No. Berths—2
Berth Length—Each 250
Depth at Berth—Each 9.4
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 45.7
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF NELSON (New Zealand)

PORT NELSON, NEW ZEALAND

Status—Under construction
Operator—Nelson Harbour Board
Type of Mgmnt.—F
Mode of Ops.—J
No. Berths—1
Berth Length—122
Depth at Berth—9
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—18,550
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF SYDNEY (Australia)

NO. 1-2 GLEBE ISLAND

Status—In operation
Operator—Maritime Services Board of N.S.W.
Type of Mgmnt.—F
Mode of Ops.—G
No. Berths—2
Berth Length—467.8 (total)
Depth at Berth—Each 12.19
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—99,553
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 35.5
Reach on Water Side—Each 33.5
Reach on Land Side—Each 51.2
Crane Rail Width—Each 25.3
Crane Bridge Hght.—Each 33
No. Container Spaces—2,200 (20 ft.)
No. Spaces with Elect. Outlets—436

NO. 4 WHITE BAY

Status—In operation
Operator—Seatainer Terminals, Ltd.
Type of Mgmnt.—D
Mode of Ops.—H
No. Berths—1
Berth Length—274.3
Depth at Berth—10.9
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—50,332
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—45.7
Reach on Water Side—30.4
Reach on Land Side—37.2
Crane Rail Width—25.3
Crane Bridge Hght.—24.5
No. Container Spaces—970 (20 ft.)
No. Spaces with Elect. Outlets—100 (20 ft.)

NO. 5-6 WHITE BAY

Status—In operation
Operator—Seatainer Terminals, Ltd.
Type of Mgmnt.—D
Mode of Ops.—K (Overhead electric cranes)
No. Berths—2
Berth Length—405.3 (Total)
Depth at Berth—Each 10.9
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—54,632
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 45.7
Reach on Water Side—Each 30.4
Reach on Land Side—Each 37.2
Crane Rail Width—Each 25.3
Crane Bridge Hght.—Each 24.5
No. Container Spaces—2,440 (20 ft.)
No. Spaces with Elect. Outlets—220

PORT OF TARANAKI (New Zealand)

BLYDE WHARF

Status—Under construction, planning stage
Operator—Taranaki Harbours Board
Type of Mgmnt.—F
Mode of Ops.—I
No. Berths—2
Berth Length—1) 183, 2) 183
Depth at Berth—Each 11
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—22,000
RR Service—Yes
No. Cranes—1 (crawler crane)
Crane Lift Capt.—71.1
Reach on Water Side—Not available
Reach on Land Side—Not available
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—100 (Planning stage)
No. Spaces with Elect. Outlets—100 (Planning stage)

PORT OF TOWNSVILLE (Australia)

A.N.L. TERMINAL

Status—In operation
Operator—The Australian Coastal Shipping Commission
Type of Mgmnt.—D
Mode of Ops.—J
No. Berths—1
Berth Length—68.9
Depth at Berth—8.3
CFS—Yes
CFS Space Covered—
Uncovered—23,500
Term. Area—
RR Service—No
No. Cranes—1
Crane Lift Capt.—25
Reach on Water Side—24.7
Reach on Land Side—36.5
Crane Rail Width—9.1
Crane Bridge Hght.—19.5
No. Container Spaces—Not available
No. Spaces with Elect. Outlets—20

COLUMBUS TERMINAL

Status—In operation
Operator—Columbus Line
Type of Mgmnt.—E
Mode of Ops.—K (Ships crane)
No. Berths—1
Berth Length—200
Depth at Berth—10.1
CFS—Yes
CFS Space Covered—
Uncovered—6,614
Term. Area—
RR Service—Yes
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—Not available
No. Spaces with Elect. Outlets—112 (20 ft.)

NO. 3 BERTH

Status—Under construction
Operator—Townsville Harbor Board
Type of Mgmnt.—F
Mode of Ops.—G
No. Berths—1
Berth Length—256
Depth at Berth—8.7
CFS—Yes
CFS Space Covered—
Uncovered—17,168
Term. Area—
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—35
Reach on Water Side—31.7
Reach on Land Side—60.7
Crane Rail Width—32.6
Crane Bridge Hght.—26.37
No. Container Spaces—Not available
No. Spaces with Elect. Outlets—

NO. 4 BERTH

Status—Planning stage
Operator—Townsville Harbor Board
Type of Mgmnt.—E
Mode of Ops.—J
No. Berths—1
Berth Length—247
Depth at Berth—9.3
CFS—Yes
CFS Space Covered—
Uncovered—16,555
Term. Area—
RR Service—Yes
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—Not available
No. Spaces with Elect. Outlets—

PORT OF WELLINGTON (New Zealand)

THORNTON CONTAINER WHARF CONTAINER TERMINAL

Status—In operation, under construction
Operator—Maritime Container Terminals, Ltd.
Type of Mgmnt.—F
Mode of Ops.—G, H
No. Berths—2
Berth Length—580 (total)
Depth at Berth—12.2
CFS—Yes
CFS Space Covered—5,825
Uncovered—
Term. Area—81,988
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—45
Reach on Water Side—32.2
Reach on Land Side—36.37
Crane Rail Width—22.85
Crane Bridge Hght.—27.48
No. Container Spaces—1,958 (20 ft.)
N o.Spaces with Elect. Outlets—458 (20 ft.)

BRISBANE WHARVES AND WOOL DUMPING PTY, LTD. (B.W. & W.D.)

Status—In operation
Operator—Brisbane Wharves and Wool Dumping Pty., Ltd.
Type of Mgmnt.—F
Mode of Ops.—H
No. Berths—1
Berth Length—250
Depth at Berth—10.36
CFS—Yes
CFS Space Covered—9,290
Uncovered—16,200
Term. Area—81,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—45.7
Reach on Water Side—33.5
Reach on Land Side—39.6
Crane Rail Width—25.3
Crane Bridge Hght.—25.0
No. Container Spaces—3,000
No. Spaces with Elect. Outlets—570

BRETTS WHARVES

Status—In operation
Operator—Bretts Wharves
Type of Mgmnt.—F
Mode of Ops.—J
No. Berths—1
Berth Length—230
Depth at Berth—9.2
CFS—No
CFS Space Covered—
Uncovered—
Term. Area—
RR Service—No
No. Cranes—
Crane Lift Capt.—
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

KEY
D—Exclusive lease for specified users
E—Preferential use
F—Common user terminal (open to all users)
X—If other type management, please specify
G—Transtainer operation
H—Straddle carrier operation
I—Chassis operation
J—Roll on/Roll off operation
K—Other than above—specify
(If mixed operation, list above letters that apply)

Respondents to the survey (port and terminal operators) were asked to complete the following questions regarding each of their LASH terminal facilities:

1. LASH Terminal Designation
2. Status (In Operation, Under Construction, Planning Stage)
3. Terminal Operator
4. Type of Management (D, E, F, X)
5. Purpose Built or Modernized for LASH Operations (G, H)
6. Are Non-LASH Operations Also Performed at This Facility? Yes/No
7. Types of Other Operations at LASH facility (I, J, K)
8. Number of Berths for
   Mother Ship
   Barges
9. Length of Berths (meters) for
   Mother Ship
   Barges
10. Depth of Berths (meters) for
    Mother Ship
    Barges
11. If Mother Ship Does Not Use Berth, List Type of Mooring Facility (L, M, N, O)
12. Size of Holding Area for Barges To Be Unloaded or In Storage (square meters)
13. Transit Shed Area for Cargo (square meters)
14. Number of Cargo Cranes Permanently Fitted at Transit Shed
15. Rated Lifting Capacity of Cranes at Cargo Shed (metric tons)

LASH Facilities—United States and Canada

PORT OF BOSTON (U.S.A.)

Boston Army Base (Used by Prudential-Grace)

Status—In operation
Operator—Port Terminals, Inc.
Type of Mgmnt.—F
Purpose Blt. or Modernized—
Non LASH Ops.—
Other Ops.—
Mother Ship Berths—
Barge Berths—
Berth Length (Mother Ship)—
Berth Length (Barges)—
Berth Depth (Mother Ship)—11
Berth Depth (Barges)—
Type Mooring Facility—
Barge Holding Area—
Transit Shed Area—
Cranes at Trans. Shed—
Crane Lift Cap.—

PORT OF LAKE CHARLES (U.S.A.)

BERTH 8

Status—In operation
Operator—Port of Lake Charles
Type of Mgmnt.—F
Purpose Blt. or Modernized—H
Non LASH Ops.—Yes
Other Ops.—I
Mother Ship Berths—None
Barge Berths—6
Berth Length (Mother Ship)—
Berth Length (Barges)—122
Berth Depth (Mother Ship)—
Berth Depth (Barges)—10.7
Type Mooring Facility—N
Barge Holding Area—4015
Transit Shed Area—2090
Cranes at Trans. Shed—2
Crane Lift Cap.—30

PORT OF LOS ANGELES (U.S.A.)

PFEL LASH TERMINAL

Status—Under construction
Operator—Pacific Far East Lines
Type of Mgmnt.—E
Purpose Blt. or Modernized—G
Non LASH Ops.—Yes
Other Ops.—J
Mother Ship Berths—1
Barge Berths—10
Berth Length (Mother Ship)—309
Berth Depth (Barges)—18.3
Berth Depth (Mother Ship)—11.5
Berth Depth (Barges)—10.7
Type Mooring Facility—N/A
Barge Holding Area—11,538
Transit Shed Area—8,454
Cranes at Trans. Shed—N/A
Crane Lift Cap.—N/A

PORT OF NEW ORLEANS (U.S.A.)

NAPOLEON-MILAN WHARF COMPLEX

Status—Under construction
Operator—Delta Steamship Lines, Inc.
Type of Mgmnt.—E
Purpose Blt. or Modernized—G (Milan section)
Non LASH Ops.—Yes
Other Ops.—I, J, K
Mother Ship Berths—Napoleon 1
Barge Berths—Milan 34
Berth Length (Mother Ship)—111.25
Berth Length (Barges)—Napoleon 491.1, Milan 385.3
Berth Depth (Mother Ship)—Napoleon 12.2
Berth Depth (Barges)—Milan 10.8
Type Mooring Facility—
Barge Holding Area—
Transit Shed Area—Napoleon 18,580, Milan 10,033
Cranes at Trans. Shed—
Crane Lift Cap.—

PORT OF QUEBEC (Canada)

BEAUPORT FLATS & ST. CHARLES RIVER ESTUARY

Status—In operation
Operator—National Harbour Board
Type of Mgmnt.—F
Purpose Blt. or Modernized—H
Non LASH Ops.—Yes
Other Ops.—I, J
Mother Ship Berths—6
Barge Berths—6
Berth Length (Mother Ship)—Each 210
Berth Length (Barges)—210
Berth Depth (Mother Ship)—Each 15.2
Berth Depth (Barges)—15.2
Type Mooring Facility—
Barge Holding Area—21,367
Transit Shed Area—68,117
Cranes at Trans. Shed—100 (movable cranes)
Crane Lift Cap.—

PORT OF SAN FRANCISCO (U.S.A.)

PIER 96

Status—In operation
Operator—Pacific Far East Lines
Purpose Blt. or Modernized—G
Non LASH Ops.—Yes
Other Ops.—J
Mother Ship Berths—2
Barge Berths—13
Berth Length (Mother Ship)—Each 265
Berth Length (Barges)—19.8
Berth Depth (Mother Ship)—Each 11.6
Berth Depth (Barges)—4.3
Type Mooring Facility—
Barge Holding Area—47,000
Transit Shed Area—24,000
Cranes at Trans. Shed—5
Crane Lift Cap.—5.1

PORT OF SAVANNAH (U.S.A.)

OYSTERBED ISLAND

Status—In operation
Operator—Georgia Ports Authority
Type of Mgmnt.—F
Purpose Blt. or Modernized—G
Non LASH Ops.—No
Other Ops.—N/A
Mother Ship Berths—1
Barge Berths—(General Cargo Terminal)
Berth Length (Mother Ship)—319.03
Berth Length (Barges)—
Berth Depth—(Mother Ship)—12.19
Berth Depth (Barges)—10.97
Type Mooring Facility—
Barge Holding Area—48 barges
Transit Shed Area—General Cargo Terminal
Cranes at Trans. Shed—6
Crane Lift Capt.—32

LASH Facilities—Europe

PORT OF BREMEN (Europe)

BREMEN UBERSEEHAFEN

Status—In operation
Operator—Bremer Lagerhaus Gessellschaft
Type of Mgmnt.—F
Purpose Blt. or Modernized—H
Non LASH Ops.—No
Other Ops.—
Mother Ship Berths—
Barge Berths—30
Berth Length (Mother Ship)—
Berth Length (Barges)—400
Berth Depth (Mother Ship)—
Berth Depth (Barges)—8.5
Type Mooring Facility—
Barge Holding Area—15,000
Transit Shed Area—25,000
Cranes at Trans. Shed—12
Crane Lift Cap.—3

PORT OF BREMERHAVEN (Europe)

BREMERHAVEN OSTHAFEN NORDHAFEN WEST

Status—In operation, under construction
Operator—Bremer Lagerhaus Gesell Schaft
Type of Mgmnt.—F
Purpose Blt. or Modernized—G
Non LASH Ops.—No
Other Ops.—
Mother Ship Berths—2 (1 additional under construction)
Barge Berths—80 (25 additional under construction)
Berth Length (Mother Ship)—400 (400 additional under construction)
Berth Length (Barges)—400 (200 additional under construction)
Berth Depth (Mother Ship)—12
Berth Depth (Barges)—5
Type Mooring Facility—0 (Quay wall facility under construction, L
Barge Holding Area—8,000 (4,000 under construction)
Transit Shed Area—17,000
Cranes at Trans. Shed—8
Crane Lift Cap.—3

PORT OF BRISTOL (Europe)

WALTON BAY ANCHORAGE

Status—Planning stage
Operator—Port Authority
Type of Mgmnt.—F
Purpose Blt. or Modernized—Anchorage
Non LASH Ops.—Anchorage only
Other Ops.—
Mother Ship Berths—
Barge Berths—3
Berth Length (Mother Ship)—
Berth Length (Barges)—
Berth Depth (Mother Ship)—
Berth Depth (Barges)—
Type Mooring Facility—N
Barge Holding Area—
Transit Shed Area—18,500
Cranes at Trans. Shed—10
Crane Lift Cap.—3 to 10 meter capacities

WEST DOCK

Status—Under construction
Operator—Port Authority
Type of Mgmnt.—F
Purpose Blt. or Modernized—Normal Dock facilities
Non LASH Ops.—Yes
Other Ops.—I, J, K (Ro-Ro)
Mother Ship Berths—1
Barge Berths—1
Berth Length (Mother Ship)—609.6
Berth Length (Barges)—609.6
Berth Depth (Mother Ship)—13.72
Berth Depth (Barges)—13.72
Type Mooring Facility—L
Barge Holding Area—
Transit Shed Area—Not yet provided for
Cranes at Trans. Shed—
Crane Lift Cap.—

PORT OF HAMBURG (Europe)

EVRO-KAI TERMINAL

Status—In operation
Operator—Euro-Kai K GaA
Type of Mgmnt.—F
Purpose Blt. or Modernized—G
Non LASH Ops.—Yes
Other Opjs.—I, J
Mother Ship Berths—1
Barge Berths—20 (seabees)/60 (LASH)

KEY

D—Exclusive lease for specified users
E—Preferential use
F—Common use facility—open to all callers
X—If other type management, please specify
G—Purpose built LASH facility
H—Facility modernized for LASH operations
I—General break-bulk cargo handling
J—Container operation
K—Other—specify
L—Quay wall
M—Jetty
N—Mooring buoys
O—Other—specify

Berth Length (Mother Ship)—360
Berth Length (Barges)—220
Berth Depth (Mother Ship)—13.0
Berth Depth (Barges)—11.0
Type Mooring Facility—L
Barge Holding Area—10,000
Transit Shed Area—13,000
Cranes at Trans. Shed—6
Crane Lift Cap.—4 at 25.7, 2 at 45.7

CARL ROBERT ECKELMAN

Status—In operation
Operator—Carl Robert Eckelmann
Type of Mgmnt.—F
Purpose Blt. or Modernized—
Non LASH Ops.—Yes
Other Ops.—K (Lighterage and inland waterways push towing)
Mother Ship Berths—
Barge Berths—20 (seabee)/60 (LASH)
Berth Length (Mother Ship)—
Berth Length (Barges)—Varies with type of Barge
Berth Depth (Mother Ship)—
Berth Depth (Barges)—4.0
Type Mooring Facility—
Barge Holding Area—10,000
Transit Shed Area—
Cranes at Trans. Shed—
Crane Lift Cap.—

THEODORE HITZLER WAREHOUSE

Status—In operation
Operator—Carl Robert Eckelmann
Type of Mgmnt.—F
Purpose Blt. or Modernized—G
Non LASH Ops.—Yes
Other Ops.—(Warehousing & Freight Forwarding)
Mother Ship Berths—
Barge Berths—6
Berth Length (Mother Ship)—
Berth Length (Barges)—65
Berth Depth (Mother Ship)—
Berth Depth (Barges)—4.5
Type Mooring Facility—
Barge Holding Area—2,000
Transit Shed Area—10,000
Cranes at Trans. Shed—2
Crane Lift Cap.—5.1

PORT OF LONDON (Europe)

VICTORIA DEEP WATER TERMINAL

Status—In operation
Operator—Victoria Deep Water Terminal, Ltd.
Type of Mgmnt.—F
Purpose Blt. or Modernized—
Non LASH Ops.—Yes
Other Ops.—I, J
Mother Ship Berths—
Barge Berths—3
Berth Length (Mother Ship)—
Berth Length (Barges)—90
Berth Depth (Mother Ship)—
Berth Depth (Barges)—3
Type Mooring Facility—L, N
Barge Holding Area—
Transit Shed Area—
Cranes at)Trans. Shed—
Crane Lift Cap.—

PORT OF ROTTERDAM (Europe)

COMBI LINE

Status—In operation
Operator—Stevedoring Co. Maas/Rijn
Type of Mgmnt.—D
Purpose Blt. or Modernized—G
Non LASH Ops.—No
Other Ops.—
Mother Ship Berths—1
Barge Berths—2
Berth Length (Mother Ship)—300
Berth Length (Barges)—124
Berth Depth (Mother Ship)—13.5
Berth Depth (Barges)—10
Type Mooring Facility—N
Barge Holding Area—16,000
Transit Shed Area—
Cranes at Trans. Shed—
Crane Lift Cap.—

CENTRAL GULF CONTAINER LINE

Status—In operation
Operator—Rotterdam Terminal
Type of Mgmnt.—D
Purpose Blt. or Modernized—G
Non LASH Ops.—No
Other Ops.—
Mother Ship Berths—1
Barge Berths—3
Berth Length (Mother Ship)—300
Berth Length (Barges)—150
Berth Depth (Mother Ship)—13.5
Berth Depth (Barges)—10
Type Mooring Facility—0
Barge Holding Area—15,000
Transit Shed Area—
Cranes at Trans. Shed—
Crane Lift Cap.—

LYKES CONTINENTAL LINE

Status—In operation
Operator—Cornelis Swarttowns Steveodres Mij.
Type of Mgmnt.—D
Purpose Blt. or Modernized—G
Non LASH Ops.—No
Other Ops.—
Mother Ship Berths—1
Barge Berths—2
Berth Length (Mother Ship)—300
Berth Length (Barges)—120
Berth Depth (Mother Ship)—15
Berth Depth (Barges)—13
Type Mooring Facility—N
Barge Holding Area—18,000
Transit Shed Area—
Cranes at Trans. Shed—
Crane Lift Cap.—

PORT OF VALENCIA (Europe)

TRANSVERSAL DE PONIENTE INTERIOR MORRO

Status—In operation
Operator—Francisco M. Roca Monzo
Type of Mgmnt.—D
Purpose Blt. or Modernized—
Non LASH Ops.—Yes
Other Ops.—I, J
Mother Ship Berths—
Barge Berths—1
Berth Length (Mother Ship)—
Berth Length (Barges)—100
Berth Depth (Mother Ship)—
Berth Depth (Barges)—6.4
Type Mooring Facility—Anchored
Barge Holding Area—1,980
Transit Shed Area—
Cranes at Trans. Shed—
Crane Lift Cap.—

LASH Facilities—Asia

PORT OF HONG KONG (Asia)

THE HONG KONG & KOWLOON WHARF & GODOWN CO., LTD., KOWLOON, HONG KONG

Status—In operation
Operator—Hong Kong & Kowloon Wharf & Godown Co., Ltd.
Type of Mgmnt.—F
Purpose Blt. or Modernized—H
Non LASH Ops.—Yes
Other Ops.—I, J
Mother Ship Berths—3
Barge Berths—8
Berth Length (Mother Ship)—1) 379, 2) 379 3) 242
Berth Length (Barges)—1) 379, 2) 379, 3) 242, 4) 242, 5) 212, 6) 212, 7) 182, 8) 182
Berth Depth (Mother Ship)—1) 10.9, 2) 10.6, 3) 9.0
Berth Depth (Barges)—1) 10.9, 2) 10.9, 3) 10.9, 4) 10.9, 5) 10.6, 6)10.6, 7) 9.0, 8) 4.0
Type Mooring Facility—O (Anchorage)
Barge Holding Area—8,800
Transit Shed Area—9,000
Cranes at Trans. Shed—7-Mobile, 7-Praya
Crane Lift Cap.—1) Mobile—10.16, 2) Praya—15.24

PORT OF KEELUNG (Asia)

LASH TERMINAL

Status—In operation
Operator—Keelung Harbor Bureau
Type of Mgmnt.—F
Purpose Blt. or Modernized—G
Non LASH Ops.—Yes
Other Ops.—Loading/Discharging Barges
Mother Ship Berths—
Barge Berths—7
Berth Length (Mother Ship)—
Berth Length (Barges)—150
Berth Depth (Mother Ship)—
Berth Depth (Barges)—5
Type Mooring Facility—N
Barge Holding Area—2,208
Transit Shed Area—1,980
Cranes at Trans. Shed—7
Crane Lift Cap.—3

PORT OF KOBE (Asia)

MAYA PIERS

Status—In operation
Operator—Port and Harbor Bureau of Kobe City
Type of Mgmnt.—E
Purpose Blt. or Modernized—Semi-container Berth used
Non LASH Ops.—Yes
Other Ops.—I, J
Mother Ship Berths—1
Barge Berths—10
Berth Length (Mother Ship)—250
Berth Length (Barges)—200 (total)
Berth Depth (Mother Ship)—12
Berth Depth (Barges)—4.2
Type Mooring Facility—
Barge Holding Area—3,000
Transit Shed Area—No shed
Cranes at Trans. Shed—
Crane Lift Cap.—

LASH Facilities—Africa and Middle East

PORT OF KARACHI
(Middle East)
KARACHI PORT LASH TERMINAL

Status—Planning stage
Operator—Karachi Port Trust
Type of Mgmnt.—F
Purpose Blt. or Modernized—G, H
Non LASH Ops.—Yes
Other Ops.—I
Mother Ship Berths—1
Barge Berths—2
Berth Length (Mother Ship)—305
Berth Length (Barges)—150
Berth Depth (Mother Ship)—10.5
Berth Depth (Barges)—9
Type Mooring Facility—N
Barge Holding Area—13,940
Transit Shed Area—5,130
Cranes at Trans. Shed—4
Crane Lift Capt.—3

LASH Facilities—Australia and New Zealand

PORT OF BRISBANE
(Australia)
DALGETY WHARVES

Status—In operation
Operator—Capricorn Stevedores
Type of Mgmnt.—
Purpose Blt. or Modernized—H
Non LASH Ops.—Yes
Other Ops.—Conventional General Cargo
Mother Ship Berths—
Barge Berths—4
Berth Length (Mother Ship)—
Berth Length (Barges)—677
Berth Depth (Mother Ship)—
Berth Depth (Barges)—9.2
Type Mooring Facility—Anchorage
Barge Holding Area—38,500
Transit Shed Area—6,900
Cranes at Trans. Shed—1 (crane by hire)
Crane Lift. Capt.—50.8

HAMILTON WHARF

Status—In operation
Operator—Brisbane Wharves and Wool Dumping Pty., Ltd.
Type of Mgmnt.—F
Purpose Blt. or Modernized—H
Non LASH Ops.—Yes
Other Ops.—I, J, K (bulk materials)
Mother Ship Berths—1
Barge Berths—3
Berth Length (Mother Ship)—400
Berth Length (Barges)—60
Berth Depth (Mother Ship)—9.6
Berth Depth (Barges)—9.6
Type Mooring Facility—Anchorage
Barge Holding Area—
Transit Shed Area—5,000
Cranes at Trans. Shed—4
Crane Lift Cap.—6.1

PORT OF AUCKLAND
(New Zealand)
PUBLIC CONTAINER TERMINAL

Status—In operation
Operator—Auckland Harbour Board
Type of Mgmnt.—F
Purpose Blt. or Modernized—H
Non LASH Ops.—Yes
Other Ops.—J
Mother Ship Berths—1
Barge Berths—
Berth Length (Mother Ship)—457
Berth Length (Barges)—
Berth Depth (Mother Ship)—12.2
Berth Depth (Barges)—
Type Mooring Facility—Anchorage
Barge Holding Area—
Transit Shed Area—Not available
Cranes at Trans. Shed—Not available
Crane Lift Capt.—Not available

D—Exclusive lease for specified users
E—Preferential use
F—Common use facility—open to all callers
X—If other type management, please specify
G—Purpose built LASH facility
H—Facility modernized for LASH operations
I—General break-bulk cargo handling
J—Container operation
K—Other—specify
L—Quay wall
M—Jetty
N—Mooring buoys
O—Other—specify

ADDENDUM

Container Facilities

PORT OF BARCELONA (Europe)
MUELLE PRINCIPE DE ESPANA

Status—In operation
Operator—Maritima Layetana S.A.
Type of Mgmnt.—F
Mode of Ops.—G, H, I
No. Berths—1
Berth Length—400
Depth at Berth—14
CFS—Yes
CFS Space Covered—4,750
Uncovered—
Term. Area—40,000
RR Service—Yes
No. Cranes—1
Crane Lift Capt.—50
Reach on Water Side—36
Reach on Land Side—39
Crane Rail Width—15
Crane Bridge Hght.—30
No. Container Spaces—1,200 (20 ft.)
No. Spaces with Elect. Outlets—48

PORT OF HOUSTON (U.S.A.)
PORT OF HOUSTON AUTHORITY

Status—In operation, under construction, planning stage
Operator—Port Authority
Type of Mgmnt.—F
Mode of Ops.—G, I
No. Berths—11-A,2-C
Berth Length—(A) 11: 182.88 each, (C) 2: 304.80 each
Depth at Berth—(A) 10.97, (C) 12.19
CFS—Yes
CFS Space Covered—5,000 (A), 10,000 (C)
Uncovered—
Term. Area—214,000 (A), 162,000 (C)
RR Service—Yes
No. Cranes—(A) 3, (C) 4
Crane Lift Capt.—A: 1) 27.2, 2) 36.2, 3) 36.2; C: Each 36.2
Reach on Water Side—A: 1) 24.384, 2) 34.44, 3) 34.44; C: Each 34.44
Reach on Land Side—A: 1) 15.24, 2) 18.29, 3) 18.29, C: 1) 18.29, 2) 18.29
Crane Rail Width—A: 1) 9.144, 2) 15.24, 3) 9.753; C: Each 15.24
Crane Bridge Hght.—A: 1) 22.707, 2) 23.62, 3) 23.62
No. Container Spaces—A) 3,600, C) 3,000
No Spaces with Elect. Outlets—72

PORT OF NAPLES (Europe)
PONTILE 5

Status—In operation
Operator—Magazzini Generale Silos & Frigoriferi S.P.A. Piazzale Stazione Marittima Napoli
Type of Mgmnt.—
Mode of Ops.—
No. Berths—4
Berth Length—Total 715
Depth at Berth—
CFS—
CFS Space Covered—
Uncovered—
Term. Area—29,947
RR Service—
No. Cranes—1 (mobile crane)
Crane Lift Capt.—72.57
Reach on Water Side—
Reach on Land Side—
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF ROUEN (Europe)
ROUEN-QUERILLY DOCK

Status—In operation
Operator—Port of Rouen Authority
Type of Mgmnt.—F
Mode of Ops.—
No. Berths—1
Berth Length—180
Depth at Berth—10
CFS—
CFS Space Covered—
Uncovered—
Term. Area—70,000
RR Service—Yes
No. Cranes—2
Crane Lift Capt.—Each 25
Reach on Water Side—Each 25
Reach on Land Side—Each 25
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—
No. Spaces with Elect. Outlets—

PORT OF SAIGON (Asia)

Status—
Operator—
Type of Mgmnt.—F
Mode of Ops.—
No. Berths—1
Berth Length—155
Depth at Berth—18
CFS—Yes
CFS Space Covered—
Uncovered—
Term. Area—19,253
RR Service—No
No. Cranes—5
Crane Lift Capt.—1) 82.2, 2) 164.4, 3) 58.9, 4) 58.9, 5) 54.4
Reach on Water Side—1) 14, 2) 30, 3) 15, 4) 15, 5) 15
Reach on Land Side—Same as above
Crane Rail Width—
Crane Bridge Hght.—
No. Container Spaces—230 (20 ft.)
No. Spaces with Elect. Outlets—

LASH Facilities

PORT OF BARCELONA (Europe)
MUELLE APOSADO

Status—In operation
Operator—Saport
Type of Mgmnt.—D
Purpose Blt. or Modernized—H
Non LASH Ops.—Yes
Other Ops.—I, J, K
Mother Ship Berths—1
Barge Berths—20
Berth Length (Mother Ship)—271
Berth Length (Barges)—70
Berth Depth (Mother Ship)—12
Berth Depth (Barges)—12
Type Mooring Facility—None
Barge Holding Area—2,500
Transit Shed Area—10,140
Cranes at Trans. Shed—4
Crane Lift Cap.—6

PORT OF HOUSTON (U.S.A.)
PORT AUTHORITY

Status—In operation, under construction, planning stage
Operator—Port Authority
Type of Mgmnt.—F
Purpose Blt. or Modernized—G
Non LASH Ops.—Yes
Other Ops.—J
Mother Ship Berths—1
Barge Berths—20
Berth Length (Mother Ship)—304.8
Berth Length (Barges)—A. 91.44, C. 365.76
Berth Depth (Mother Ship)—12.192
Berth Depth (Barges)—4.572
Type Mooring Facility—M, N
Barge Holding Area—3,344.51
Transit Shed Area—9,290.30
Cranes at Trans. Shed—N/A
Crane Lift Cap.—N/A

PORT OF LE HAVRE (Europe)
QUAI DE L'ATLANTIQUE

Status—In operation
Operator—Port Autonome du Havre
Type of Mgmnt.—E, F
Purpose Blt. or Modernized—H
Non LASH Ops.—Yes
Other Ops.—J
Mother Ship Berths—2
Barge Berths—7
Berth Length (Mother Ship)—Each 400
Berth Length (Barges)—
Berth Depth (Mother Ship)—Each 12
Berth Depth (Barges)—10
Type Mooring Facility—L
Barge Holding Area—
Transit Shed Area—
Cranes at Trans. Shed—
Crane Lift Cap.—

PORT OF ROUEN (Europe)
JON QUAY

Status—Under construction
Operator—Port of Rouen Authority
Type of Mgmnt.—F
Purpose Blt. or Modernized—G
Non LASH Ops.—Yes
Other Ops.—I
Mother Ship Berths—No
Barge Berths—1
Berth Length (Mother Ship)—
Berth Length (Barges)—200
Berth Depth (Mother Ship)—
Berth Depth (Barges)—4
Type Mooring Facility—
Barge Holding Area—
Transit Shed Area—
Cranes at Trans. Shed—
Crane Lift Cap.—

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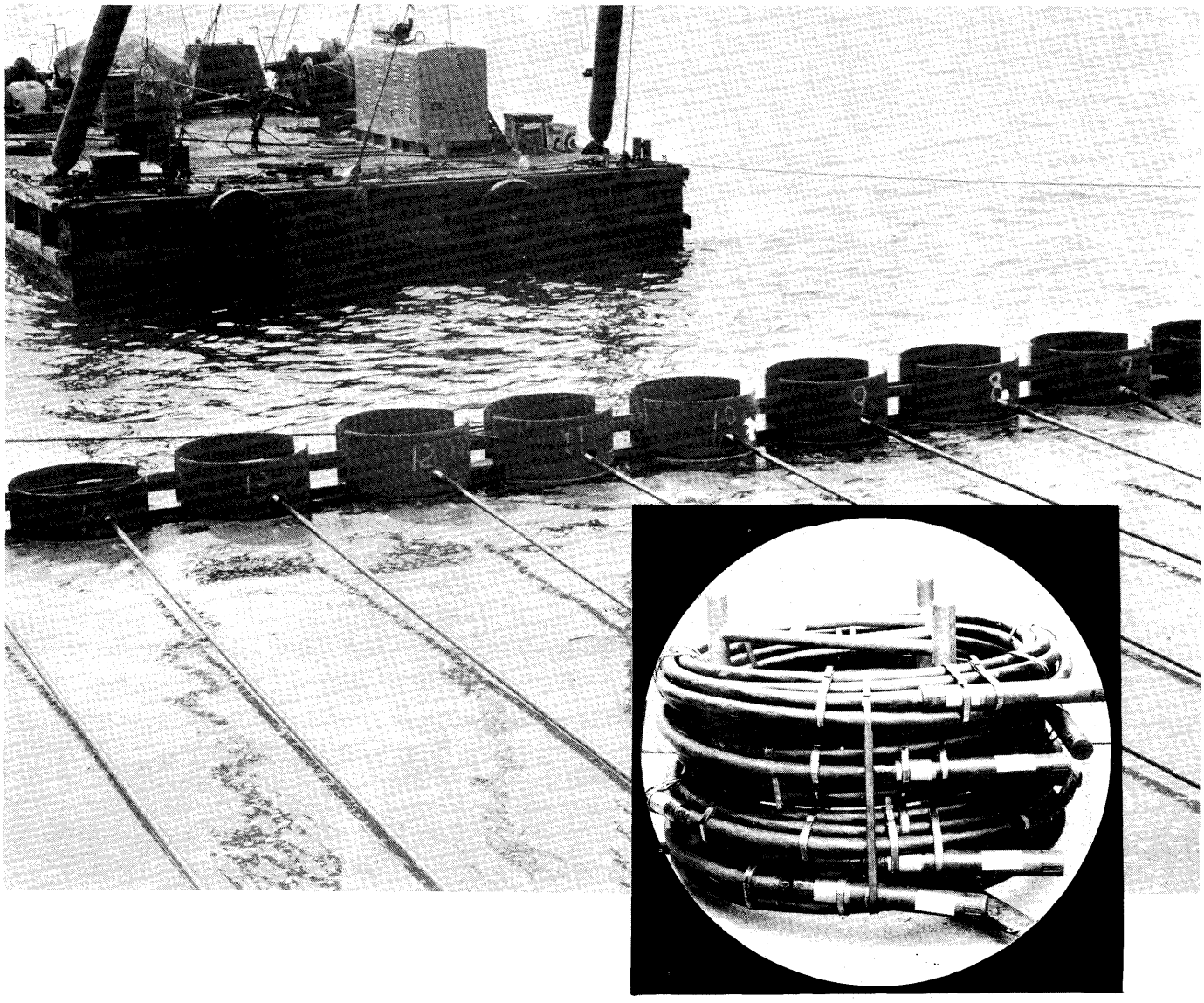

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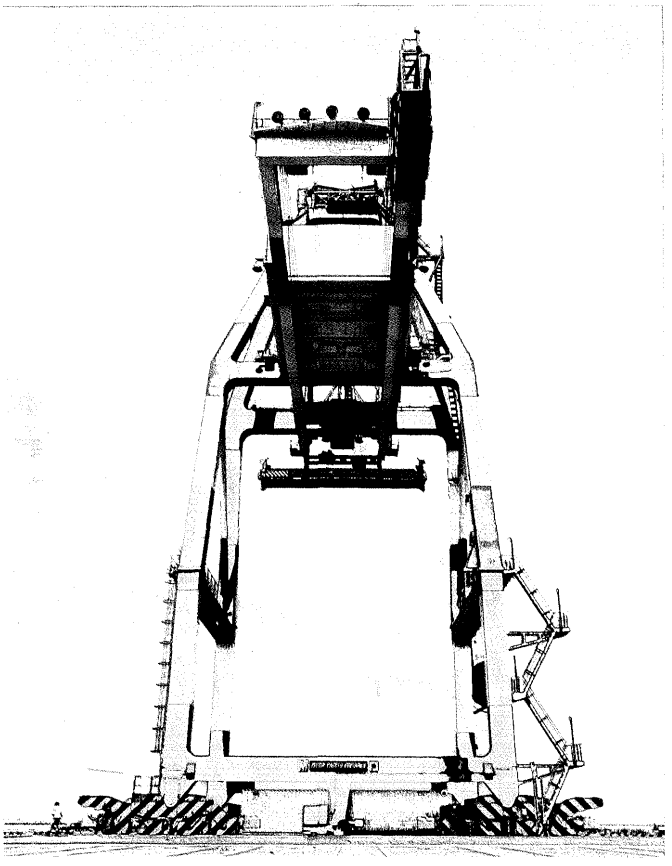

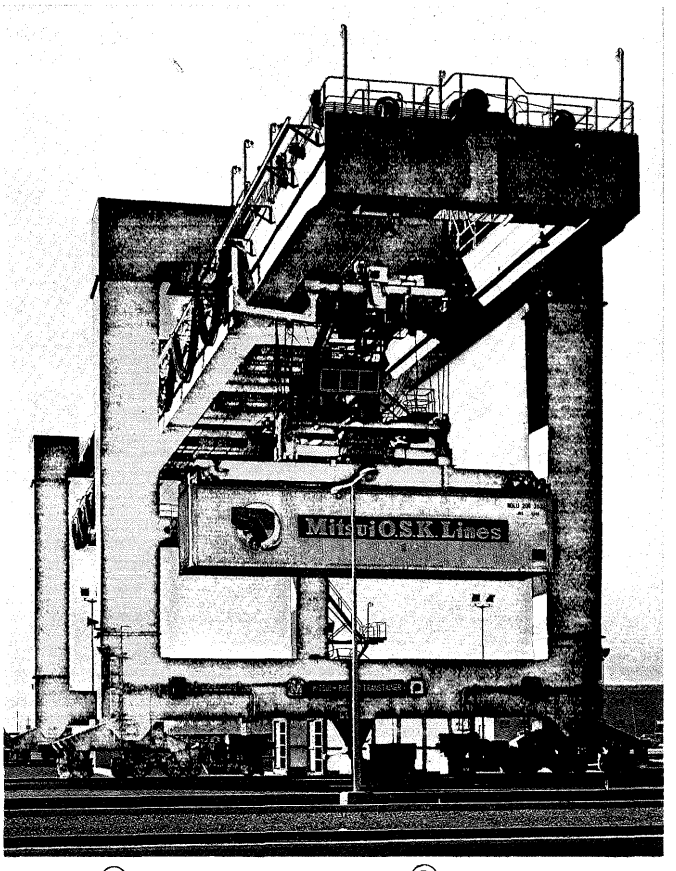

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