

# PORTS *and* HARBORS

December, 1973 Vol. 18, No. 12

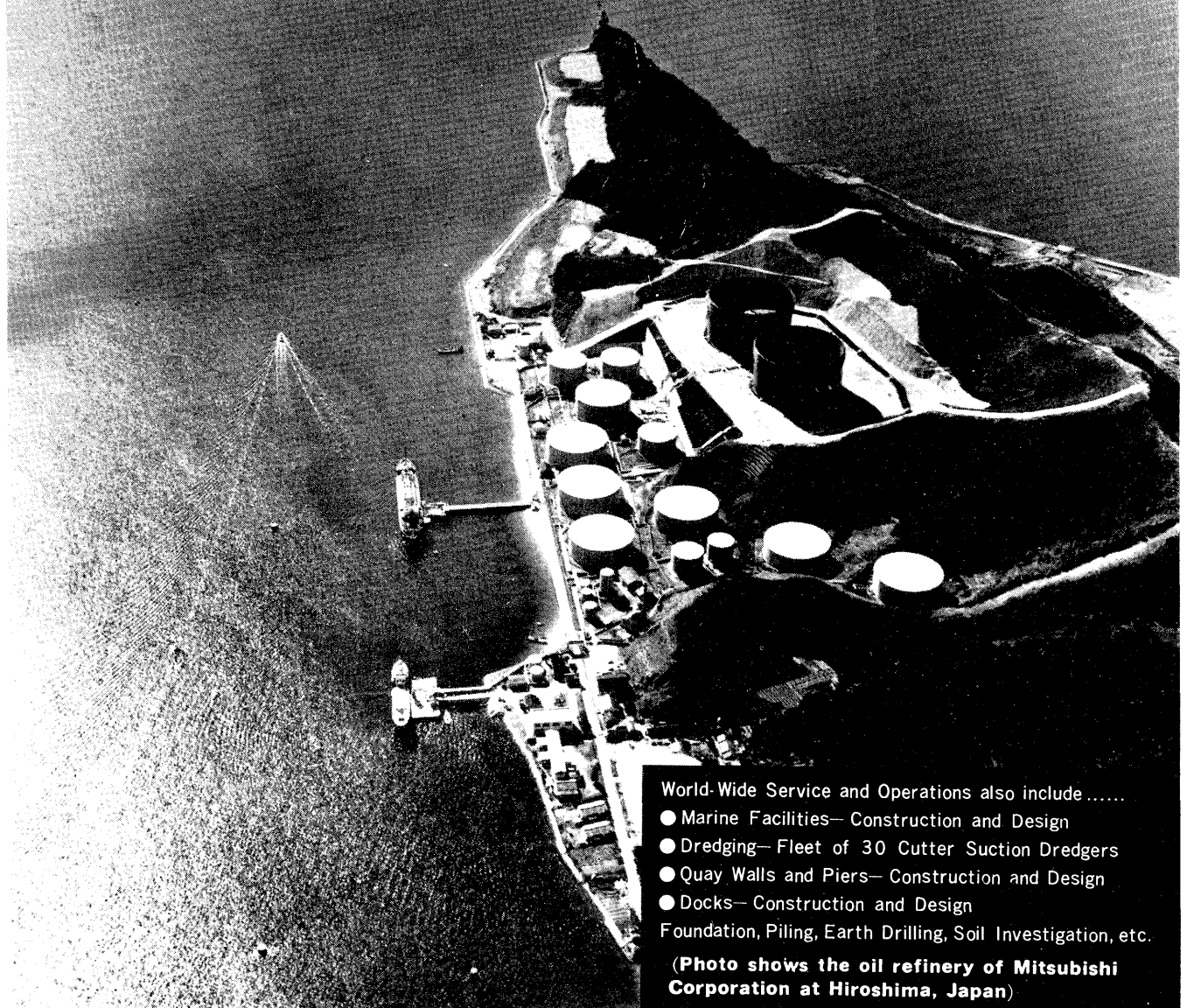
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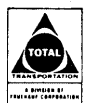
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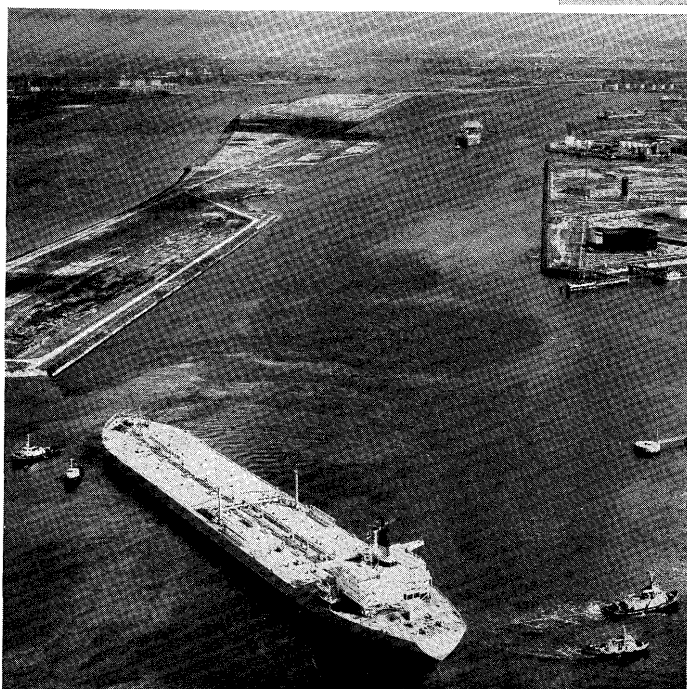


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# PORTS *and* HARBORS

Editor: Yoshio Hayashi

Published monthly by

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

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# PORTS *and* HARBORS

**IAPH Head Office Announcements: Pages 7~12**

## President's Message Concerning Next Meeting of Executive Committee

The next meeting of the Executive Committee of our Association shall take place in Auckland (New Zealand) from March 27th till 29th 1974.

We are much indebted to our New Zealand Colleagues for their active cooperation and particularly to Mr. R. W. Carr, Chairman and the members of the Auckland Harbour Board, our hosts.

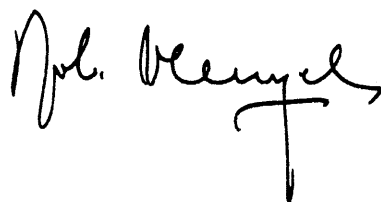
Executive Director Mr. R. K. Trimmer, Chairman of the Northland Harbor Board, deserves our special thanks for the work he already did in preparing the organization.

I much appreciate this opportunity to address myself to all members of the Executive Committee and to advise them about this meeting. An agenda is being prepared which includes several items which are of extreme importance for our Association. I hope and should wish that all will be able to participate.

Furthermore I want to inform

them about the invitation extended by the President of the Harbors Association of New Zealand, Mr. R. K. Trimmer to attend their Annual Conference which will be held in Dunedin (N.Z.) from March 20th till 22nd 1974. I strongly suggest that they would accept. More details shall be transmitted by personal correspondence.

I look forward to the pleasure of meeting all Executive Directors in Auckland and Dunedin in good health and full of energy!



Robert L. M. Vleugels  
(Signed)



Mr. Robert L. M. Vleugels

## Membership Notes

### NEW REGULAR MEMBER

- \* The Port of Hueneme  
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### NEW ASSOCIATE MEMBERS

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- (Continued on Next Page Bottom)

# Season's Greetings and Best Wishes for A Happy New Year

**IAPH Head Office  
Secretary General and Staff**

# IAPH in the U.N.

## 1. Resolution No. 7 Brought to Attention of International Marine Pollution Conference

The following is a reprint of an IMCO official information of International Conference on Marine Pollution, 1973 held in London from October 8 to November 2.

Further development will be reported in this column when available. (K. Yokoyama, Deputy Secretary General)

MP/CONF/INF.13  
26 September 1973

## ACTIVITIES IN OTHER ORGANIZATIONS RELATING TO MARINE POLLUTION

### The International Association of Ports and Harbors

The eighth Conference of the International Association of Ports and Harbors held in Amsterdam from 6-12 May 1973 adopted, inter alia, a Resolution relating to "Water Pollution in Port Areas" (Resolution No. 7), a copy of which is attached, expressing the views of IAPH on measures for eliminating the dis-

da-ku, Tokyo 101, Japan  
(Mr. Hachiro Fujii, President)  
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\* Former Yemen Ports Corporation, Rep. of Yemen, has changed its name to Port of Aden Authority.

charge of sewage into waters while ships are in port. This Resolution was brought to the attention of the Maritime Safety Committee of the Organization. In view of its relationship to matters dealt with in Annex IV of the draft International Convention for the Prevention of Pollution from Ships, 1973 (MP/CONF/4), the Committee decided to bring the Resolution to the attention of the Conference.

## 2. Resolution No. 8 Noted by Legal Committee IMCO

The 20th session of the Legal Committee convened under the chairmanship of Mr. G. A. Maslow (USSR) from 3 to 7 September, officially noted IAPH Resolution No. 8.

Report No. 72 is a reproduction from an IMCO report of the session in this regard.

Report No. 73 is quoted as it happens to touch upon Resolution No. 9 adopted at the 6th Conference and Resolution No. 6 at the 7th Conference—Further details in this regard will be reported in the near future. (K. Yokoyama, Deputy Secretary General)

LEG XX/6  
11 September 1973

## REPORT OF THE LEGAL COMMITTEE ON THE WORK OF ITS TWENTIETH SESSION

### Any other business (Agenda item 5)

72. A resolution (Resolution No. 8) of the International Association of Ports and Harbors (IAPH) was presented in a document and explained by an Observer of the IAPH. The resolution, relating to the subject of shipowners' responsibilities for wreck removal and damage caused in ports by vessels, was noted by the Legal Committee for guidance in its future work on wreck removal and related issues.

73. Under this agenda item, a question was raised as to whether the legal consequences of the adoption of a new system for the determination of "tonnage" of ships might be the subject of a study by the Secretariat. A number of inter-

national maritime conventions will be affected by the future entry into force of the International Convention on Tonnage Measurement of Ships, 1969, which departs from existing systems concerning the determination of gross and net tonnages of ships. The "tonnage" issue also arises in the preparation of draft treaty articles on various subjects, at present under consideration in the Legal Committee.

## IMCO Working Group Meets on Wreck Removal

According to IMCO circular letter No. 126 dated 15 October 1973, the first session of the Working Group set up by the Legal Committee will open on December 3rd.

The purpose of this session is to consider a Draft Convention on Wreck Removal and Related Issues, and will last until December 7th.

The provisional agenda of this session follows:

1. Adoption of the Agenda
2. Consideration of a Draft Convention on Wreck Removal and Related Issues
3. Any other business
4. Report of the Working to the Legal Committee

In view of the importance of the future development of this Working Group, Head Office will keep IAPH members informed of the relevant news in cooperation with British Ports Association, IAPH Liaison Office with IMCO. (K. Yokoyama, Deputy Secretary General)

## IAPH Membership Directory 1974 Completed

The Membership Directory 1974 has just been completed and is ready for distribution to all members due to be dispatched from Tokyo toward the end of November.

Regular Members and Associate Members of Grade One of Class A, Class B and Class C are entitled to receive 3 copies, Grade Two of Class A Associate Members, 2 copies, and other members, 1 copy per unit.

In order to make latest addresses



available for the member's Christmas greetings, the first one copy is going out by airmail, while the remaining ones by seammil.

If members wish to receive additional copies, they are available at U.S.\$5 per copy including airmail charge.

The distribution of the Membership Directory is limited to its members.

## Resolution No. 8 Further Studied

Secretary General requested the Board of Directors in a circular letter of October 19th to send in their information at hand and their views and suggestions on the following three questions which were raised by Mr. A. J. Smith, IAPH Liaison Officer with IMCO.

- a) The urgency and applicability of the case presented by port authorities may well be determined by the statistics of navigation accidents occurring in port areas and the extent to which port authorities suffer as a result of these accidents. It would therefore be helpful if you could circularise your members on this matter at an early date with a view to presenting appropriate background information to IMCO in support of the Resolution.
- b) The Liberian representative asked whether port authorities would also be willing to subscribe to the principle and practice of unlimited liability when considering a situation of a shipowner's ability to claim for damage against a port authority. There are, as you are aware, occasions when a sinking may be attributable to faulty direction on the part of a harbour authority.
- c) A representative of the international organization of Marine Insurers asked whether IAPH had considered the applicability of a ceiling on the amount of compulsory "unlimited" insurance to be carried by vessels. Our response necessarily to the question, there being no instruction on the matter, took the form of laying stress on the principles of insuring against wreck. You may

# *The 23rd Congress of Permanent International Assosiation of Navigation*

(Held in Ottawa, Canada, 9-18 July, 1973)

## Report of Mr. R. Boeuf

General Manager of Port of Dunkirk  
Member of IAPH Executive Committee

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

The 23rd International Navigation Congress organized by the Permanent International Association of Navigation Congresses was held in Ottawa from 9 to 18 July 1973. Mr. G. WILLEMS, President of this Association, was present.

In all 462 delegates came from 35 countries.

The Congress was organized under the patronage of His Excellency the Right Hon. Roland MICHENER, Governor-General of Canada.

The Official Presidents were:  
—the Hon. Jean Eudes DUBE, Minister of Public Works of

---

wish, however, to advise me whether detailed consideration has been given to this matter by IAPH.

Their replies will be circulated to Mr. A. Pages, Chairman, and his members of the Special Committee on Legal Protection of Navigable Waterways as important materials for the follow-up study of the Resolution No. 8.

As for the Mr. Smith's letter in question dated September 7, please refer to P. 10-11 of the November issue. (K. Yokoyama, Deputy Secretary General)

Canada;

—and the Hon. Jean MARCHAND, Minister of Transport of Canada.

The Vice-President was:

Dr. Pierre CAMU, President of the St. Lawrence Seaway Authority at Ottawa.

The delegates and their wives assembled for the opening ceremony of the Congress in the Opera House of the National Centre for the Arts. This ceremony which began at 5.30 p.m. on 9 July was presided over by Mr. C. K. HURST, President of the Canadian Organizing Committee of the Congress, and the highlight of the occasion was the address by Mr. DUBE, Minister of Public Works; it was followed by a very enjoyable reception.

The Congress discussions were then divided into two series:

—one from 10 to 12 July;

—the other from 16 to 18 July.

They were held respectively in the —Conference Hall of the Governmental Conference Centre in the case of the Ocean Navigation Section;

—Congress room of the Hotel Château-Laurier in the case of the Inland Navigation Section.

An excursion was organized between the two series of discussions, viz. from 13 to 15 July: it consisted of a visit to the Niagara falls, attendance at the official ceremony inaugurating the diversion of the Welland Canal by the St. Lawrence Seaway Authority and finally a visit to the Peterborough lock.

On the evening of 17 July a grand International Banquet followed by a Ball in the Hôtel Château-Laurier

was attended by the delegates to the Congress and their wives as well as by the official guests of the Congress. This occasion was particularly remarkable for its brilliance and splendour.

Finally the closing ceremony of the 23rd Congress took place on 18 July at 5.30 p.m. in the conference hall of the Governmental Conference Centre presided over by Dr. Pierre CAMU, President of the Saint Lawrence Seaway Authority.

All the discussions of the Maritime Navigation Section were chaired by Mr. Howard MANN, Vice-President of SWAN-WOOSTER Engineering Company Limited of Vancouver.

The résumés of these discussions follow.

## Résumés of Discussion

### SUBJECT 1

Engineering and economic aspects of fixed or floating offshore structures in deep water:

- sea protection works;
- installations for unloading and storing goods;
- installations for the discovery and exploitation of underground resources;
- installations for the display of navigational aids.

This subject which is of a very general nature not only led to the submission of a large number of reports but also to numerous communications and animated discussions.

Both the technical and legal aspects of the construction of offshore ports were dealt with on several occasions. When comparing such ports with coastal and estuarial ports two varying points of view were expressed concerning problems of protection against pollution: some considered that they made protection easier while others maintained the contrary. In actual fact it is rather the offshore mooring point at a buoy or a tower which can give rise to this controversy and not an actual port.

Amongst the oil installations dealt with the French port at Cap d'Antifer (under construction), the two Italian terminals at Genoa and Ancona (recently finished) and the

drilling rigs off the British Coast deserve special mention.

The U.S. Delegates pointed out that in their country the concept of offshore structures had grown and now included gigantic structures for stocking dry bulk goods as well as floating nuclear power-stations.

Certain doubts were expressed in some quarters about the need to study ports for giant tankers, more in particular the one million d.w.t. tanker.

However, it was pointed out that it is the duty of the Permanent International Association of Navigation Congresses to consider in advance the technical problems involved and to study them in conjunction with industrialists, ship-builders and shipowners.

### SUBJECT 2

Means of controlling littoral drift to protect beaches, dunes, estuaries and harbour entrances. Establishments of artificial beaches.

There were many long reports on this subject.

The discussions began on a somewhat pessimistic note to which the various reports submitted had given rise: much of our knowledge still seems to come from the sphere of the arts rather than from that of the exact sciences.

In fact research in this field must be actively continued, a sentiment expressed by various speakers.

The latter were interested in all the various methods for transporting materials, whether it be for constructing or improving pleasure beaches or ground reclaimed from the sea for the port, or for excavating or maintaining navigation channels or for creating offshore artificial islands.

The erosion of certain sand beaches is a very worrying subject.

The papers also revealed the ever increasing influence which fears of possible effects on local conditions were having on sea dredging and shore embankment projects.

Generally speaking a programme for carrying out port works and channels should lay down if necessary the means for reducing possible damage in the form of silting or erosion.

As far as natural movements of

materials which may occur if alterations are undertaken on a shore or in an estuary are concerned, they can be forecast much better today thanks to the use of scale models with a movable bottom; the difficulties which are still met in adjusting these models is the result of the simulations action of sea swell and a current.

Much still remains to be learned about the laws of proportionality and the correct use of the models. The difficulty of obtaining precise data both about past and even about present conditions must be stressed. The value of a model is only a function of the value of the data fed into it.

### SUBJECT 3

Structures in maritime access channels for large vessels designed to ensure their safety under way and at berthing, having regard to tidal streams, reversing currents and wind action.

The reports and communications submitted during the working session dealt with developments in three ways:

1) some were of a mainly descriptive nature and supplied information about projects either planned or already carried out to improve access routes or channels, about the ways of determining or if possible forecasting the tide, swell, wind, currents and visibility as well as the ways of passing on this information so as to ensure safer navigation;

2) others contained summaries either of enquiries made among owners and users of wharves or of large-scale tests which have been carried out; these concern the effects of currents either on the wharves themselves or on manoeuvres while approaching and berthing.

Attention was also paid to the phenomenon of the repulsion of the vessel by the wharf.

3) Finally others considered the hydromechanical problems involved in the navigation of large tankers in access channels to a port and in their berthing manoeuvres; they dealt with the research carried out with a view to improving these manoeuvres and to determining the transversal dimensions of channels with regard to the characteristics of



the largest vessel able to use them.

In fact all these developments express one and the same concern, that of ensuring the safety of navigation in channels and ports. Port authorities have certainly always been concerned about this, but the technical and economic difficulties which they have to overcome when they adapt channels or construct berthing facilities to take the giant vessels of today are becoming greater all the time. Such vessels can require new and sometimes even revolutionary solutions.

Cooperation is thus all the more useful.

#### SUBJECT 4

##### **Effects of ice on structures and on navigation. Means of preventing ice formation and control of ice movement.**

This somewhat special subject was of particular interest to delegates from the ports of certain northern countries as far as maritime navigation is concerned; but other countries are concerned with this with regard to inland navigation.

The discussion first of all revealed the importance of meteorological forecasts but also the difficulty of providing forecasts valid for more than 24 hours in advance.

As a result of the discovery of petroleum deposits in some northern regions (Alaska, the north of Canada) the problems posed by navigation in waters exposed to ice formation must be studied in greater depth by maritime and port specialists.

The introduction of giant tankers has certainly added to the importance of this question which deserves all the attention of the Permanent International Association of Navigation Congresses: are the existing charts and nautical documents sufficiently up-to-date? Are the characteristics of the tides in the waters in question sufficiently well-known? Are the currents being regularly studied? Is it not a matter of extreme importance to improve the navigational aids? What facilities are best suited for the berthing of large vessels when there is ice?

The main discussions concerned the following points:

—the observation of conditions

- under which ice is formed
- means of controlling the formation and movement of ice
- effects of ice upon facilities and their use
- aids to navigation in ice.

The choice of the site for a port in a region subject to ice formation must take into consideration conditions which are very different to those affecting the choice for an ice-free port. Thus, for example, it would be a catastrophic mistake to use the small bays on the St. Lawrence River in order to seek for better shelter.

Most of the speakers insisted on the fundamental importance of on-site experiments undertaken by observing the actual conditions of ice formation. Such observations should be carried out for several years.

Two systems are in use for the prevention of ice formation: "barboteurs" (paddlers) and "circulateurs" (stirrers)

#### SUBJECT 5

##### **The application of computer science in port planning and operation.**

It should be pointed out that this is the first time that this question has been raised by the Permanent International Association of Navigation Congresses.

It was agreed that the discussions should be limited to general aspects of computer science.

The discussions revealed that it plays an important role in four spheres of the activity of those responsible for managing ports:

- civil engineering projects (calculations for buildings, foundations, etc.)
- administrative operations
- research to achieve optimum results in running the port
- determining the best decisions with regard to the programming of investments.

The first two uses are not particular to port administration but it should be noted that the use of computers makes it possible to obtain rapid results in experiments using scale models and to collect data on swell quickly.

The latter two categories are much more characteristic of ports. There are many difficulties involved in the determination of the best decisions

concerning financial investments even when using modern scale models, but this use of computer science makes it possible to carry out completely new work of enormous economic importance.

The discussions showed that the number of papers required in running a port is constantly increasing and that they circulate slowly, systems based on written documents will have to be progressively abandoned.

Certain delegates suggested that all the various types of data should be centrally stored in a world bank and thus considered that it was absolutely necessary to lay down an international code to define the traffic of goods and to deal with and regulate the latter solely by means of computer science.

Other delegates pointed out the difficulties which computers of one and the same country already have in communicating with each other. The problem of coordination must therefore first be solved at a national level. This is less complex and would give quicker results.

It would be difficult to lay down at the present time a single code for the duly classified data as this is a problem which is both commercial and psychological.

However, a start must now be made with a view to achieving international coordination, although it must be realized that this will be a long process.

An effort to achieve coordination has already been undertaken by the ports of Barcelona, Marseilles and Genova.

The PIANC has proposed the setting up of an International Commission for the Study of Port Computer Science. As the work of this Commission progresses it can serve as a guide for the studies being made in every country with a view to making preparations for the final coordination. However, every country must continue to develop the uses of computer science in its ports without waiting for internationally coordinated rules.

Finally the importance of the time factor in dealing with commercial traffic was stressed in the discussions: it is essential for the data to arrive quickly and for the computer science technicians to reply without delay.

## SUBJECT 6

Measures for preventing pollution in harbours and on coasts. Means of minimizing and remedying such pollution.

Considerable attention was paid to this subject by the Permanent International Association of Navigation Congresses as was also done by the International Association of Ports and Harbours at its eighth conference on 8 May of this year (although it treated the problem in a more general way by including air pollution as well).

As a result of the very numerous reports and communication there is probably no aspect of sea, ocean or river pollution which was not brought up.

The subject was dealt with from three points of view:

- the qualitative and quantitative study of the pollutants and their effects
- preventive measures
- sanctions against offenders

The type of pollution which is most often considered is that caused by hydrocarbons. However, other types of pollution are equally extremely dangerous; they can be due to the discharge of water from the tanks, or to sewage, refuse or chemical products. Pollution can also be caused by the loading or unloading operations of heavy bulk materials (grain, coal, phosphates, etc.) There is also bacterial pollution which is of particular importance for the maritime coastline. Some delegates even pointed out that dredging is also a dangerous operation as it can free waste matter and put it into suspension thus giving rise to pollution.

It was regretted that TOVALOP Insurance for tankers does not cover the results of accidents and that regulations aimed at combatting sea pollution are both heterogeneous and ad hoc and that the measures taken are essentially repressive.

Maritime countries should get together with a view to adopting a common stand in view of the gravity of the pollution problem.

The various International Conferences and Conventions which have taken place or are due to take place with the aim of combatting pollution

# *U.S. Government-Sponsored Port Management Seminar Mission Visiting 3 West-African Ports*

New York, Oct. 12, (News from The Port Authority of NY & NJ): —A Port of New York-New Jersey official will head a United States government export promotion mission to three leading African ports between October 16 and November 3. Townsend M. Lucas of Englewood, New Jersey, Manager of the Port Authority's Port Service Improvement Committee, has been selected by the United States Department of Commerce to head a Technical Sales Seminar on Modern Port Management and Development. The cities to be visited on the mission, the first of its kind in this sector, are Lagos, Nigeria; Kinshasa, Zaire; and Douala, Cameroon.

Mr. Lucas will lead a seminar by hydrocarbons were naturally discussed.

As representative of the IAPH I personally took part in the discussions to describe the serious consequences which a port can suffer in the case of an accident involving a tanker under way in the waters of a port and I informed the PIANC of resolution n° 8 adopted by that Association for the legal protection of ports and navigation channels and called upon the PIANC to adopt a similar position.

As it had already declared with regard to subject n° 1, the latter Association considered that it was certainly fully competent to deal with the technical problems but that it would not be wise for it to play a preponderant role in working out the regulations.

As a result it only proposed to increase cooperation and hold more intensive talks on the problems of pollution with other international bodies (including the IAPH) pursuing similar aims.

team, made up of representatives of six to eight United States firms, which will present technical papers on various aspects of port management and development before audiences of port authority executives, government officials and business leaders in the host countries. A technical sales seminar is a new export promotion vehicle developed by the Department of Commerce which presents, in a seminar format, the advances made by American technology in a particular economic sector.

According to the Department of Commerce, the African mission of Mr. Lucas and his team, will result in a substantial amount of new U.S. exports in port operations and maintenance equipment to these countries. The port expansion planned by each of the three countries provides a significant opportunity for American exports, and should, as an additional benefit, result in added business for American ports.

Mr. Lucas was invited to serve as chairman of the seminar because of his experience in port authority management, combined with his 1964-65 study of West African trade. In 1964, Mr. Lucas was awarded the Port Authority's Howard S. Cullman Fellowship, which involved a year's study of the realignment of trade ties between the former West African colonies and Europe. During the course of this study, he observed industrial, commercial, agricultural and port installations in some seventeen African countries and interviewed government and private officials to assemble a 300-page profile of trade development of the West African nations since independence.

As Manager of the Port Authority's Port Service Improvement Committee since 1969, Mr. Lucas has

been responsible for the development of programs to improve the inter-modal service involved in the movement of international commerce through the Port. His unit was established to expedite improvements in the Port which requires coordination between the various industries in waterborne commerce.

Mr. Lucas began his Port Authority career in 1960 as an Administrative Trainee. His career includes service as a Management-Analyst; Administrative Assistant to the Director of The World Trade Center; Executive Assistant in the Planning & Development Department; Manager of Personnel Administration; and Special Assistant to the Director of Marine Terminals.

When he returned in 1965 from his Fellowship year in West Africa, Mr. Lucas was given responsibility for a program of international port development under the direction of the Port Authority's Executive Director who was then serving as Chairman of the Committee on International Port Development of the International Association of Ports and Harbors. During this assignment, Mr. Lucas obtained the cooperation of foreign governments, international bodies, and port officials in multi-faceted projects of assistance for the developing ports of Africa, Asia and Latin America. In recognition of his contributions on this assignment, the Port Authority awarded Mr. Lucas the Executive Director's Award of Achievement in 1966.

Mr. Lucas, who is 43, is a native of Washington, D.C. He attended American University, and received a B.A. degree in Political Science from Howard University in 1958, and a Master's degree in African Studies in 1960. In 1958-59, he studied French Colonial History at the Institute of Political Studies in Paris under a Fulbright Scholarship Grant. He also received the Agnes & Eugene Meyer Foundation Scholarship for summer travel to Nigeria, West Africa, for the Experiment in International Living program in 1958. He served for three years with the United States Coast Guard.

Mr. Lucas lives at 131 John Street in Englewood, with his wife and two daughters. He is President of the Social Service Federation of

## *Port of San Diego in the Limelight of 1973 AAPA Convention*

### **Port Officials to Convene in San Diego**

(San Diego Unified Port District, Sailing Schedule, October 8, 1973) The American Association of Port Authorities' (AAPA) Convention will open in San Diego October 14 at the Sheraton-Harbor Island Hotel.

Featured speakers include Helen Delich Bentley, Chairman, Federal Maritime Commission; Robert J. Blackwell, Assistant Secretary of Commerce for Maritime Affairs, and Paul A. Amundsen, Executive Director, American Association of Port Authorities.

The opening reception will take place Sunday evening for all delegates. In attendance will be a general committee (which will include the Mayors of five cities belonging to the San Diego Unified Port District), the officers and board of directors of the AAPA and the Board of Port Commissioners of the District.

Prior to the reception will be a ribbon cutting to open the exhibit hall in the Sheraton Convention Center. Twenty-two exhibitors will participate, including a joint exhibit by the San Diego Unified Port District and the San Diego Convention and Visitors Bureau. Among other displays will be Alcoa, Goodyear, Lockheed, United States Steel and Union Pacific Railroad.

Monday's welcoming comments will feature Dudley D. Williams, chairman of the San Diego Board of Port Commissioners, and C.R. Campbell, vice-chairman of the San Diego Board of Port Commissioners, and Don L. Nay, port director for San Diego. Responses to their welcome will be made by delegates representing United States, Canadian and Latin American members. (Simultaneous translations will be provided during all Latin American presentations at the Convention.)

Included in highlights of the week will be discussions on "Port Trends in Mexico and Central America," "Port Ventures in Environmental Improvement" and "Container Handling Equipment of the Future."

The Convention will close Thursday, October 18 after the installation luncheon.

Englewood; a member of the Mayor's Advisory Council, City of Englewood; and also a member of the Adult Education Advisory Committee of that city.

He is a former member of the Board of Directors of the Urban League of Bergen County, and a former Vice President of the Englewood Civic Association.

### **The following paragraphs are selected from Port of San Diego News Releases.**

October 5:—John A. McWilliam, President, The American Association of Port Authorities, will preside over 800 delegates at the 62nd Annual AAPA Convention in San Diego, October 14-18.

Currently General Manager and Chief Executive Officer of the Toledo County Port Authority, McWilliam is the top administrative and fiscal officer. He is chairman of the Great Lakes Task Force and a member of the Great Lakes Commission, serving as chairman of the Commission's Seaway Navigation and Commerce Committee.

October 9:—C. S. Devoy, Port Director and General Manager, Galveston, Texas and First Vice-President of the American Association of Port Authorities, has been elected President for 1973-74.

October 11:—"The Nation's Seaports and International Trade" will be discussed by Robert J. Backwell, Assistant Secretary of Commerce for Maritime Affairs, Wednesday, October 17.

He'll be the featured speaker at a luncheon for the American Association of Port Authorities' Convention in San Diego October 14-18.

The thrust of his speech is expected to explore current trends and problems in U.S. imports and the possibilities of East-West trade. Blackwell is expected to relate these to productivity by American ports and show how to increase it.

Blackwell was appointed Assistant Secretary of Commerce in August 1972. He was the second man to hold this position. He also heads the Maritime Administration.

As a Deputy Assistant Secretary for Maritime Affairs, his contributions in formulating and implementing the Merchant Marine Act of 1970 earned him a Department of Commerce Gold Medal.

October 11:—The San Diego Wild Animal Park in San Pasqual Valley will be the site for a NEW YORK JOURNAL OF COMMERCE-sponsored evening of entertainment for delegates to the American Association of Port Authorities' Convention next week.

More than 750 delegates and wives are expected to be guests of Eric Ridder, Editor of the JOURNAL OF COMMERCE, for the "Nairobi Nights" reception Monday evening, October 15.

Guests will tour the park on board the Wgasa Bush Line. They will be greeted by troops of women attired in native Swahili costumes and listen to native music.

Dinner and an African show by C. C. Jones will include the Malaika singers and the Umoja and Zulu dancers. Dinner's entertainment will feature the famous African "boot dance," the Zulu dance, and a demonstration of musical instruments from central Africa. An evening of dancing will follow presentation of the show.

Wednesday, October 17 John A. McWilliam, President of AAPA, will host the presidential dinner dance at the Sheraton-Harbor Island. Entertainment and music will be provided by Les Urown and his Band of Renown.

October 12:—Advertising competition received 112 entries from 28 entrants this year for the American Association of Port Authorities' Convention scheduled next week in San Diego.

Entries ranged from annual reports to small advertisements in local trade publications. Much of the advertising, however, is international. It is reproduced in several languages for Western Europe and Japan. Also included in the competition are periodicals and promotional literature.

Winning ports are traditionally presented with a gold bell on a walnut plaque and a suitable inscription.

Last year the Ports of New York and New Jersey each earned two firsts. The Port of Long Beach was given a first and a second—and the Port of San Diego was awarded a second for its 1971-72 Annual Report.

Judging for this year's competition has been completed by Judges Sydney W. Kahn (vice-president, Mitchell and Herb Engraving Co., Los Angeles), Robert J. Colombatto (creative director, Davis, Johnson, Mogul and Colombatto, Los Angeles) and David E. Porter (president of a custom house brokerage firm in San Diego).

Awards will be given at a luncheon on Tuesday, October 16.

Mrs. Helen Delich Bentley, Federal Maritime Commission Chairman, will be the featured speaker. She will speak on the progress of the Bicentennial Fleet.

October 12:—San Diego's beautiful Broadway Pier will be the setting for a fashion show and luncheon, Tuesday, October 16 for women at-

tending the American Association of Port Authorities Convention.

Following an hour-long tour of San Diego Bay aboard harbor excursion boats, lunch will be served and "Fashions of the City by the Sea" will provide a journey through 200 years of California's rich and colorful history. Authentic period costumes will mingle with today's Au Courant designer originals from Saks Fifth Avenue—La Jolla. Included in the show are '73 fall collections of American and European designers: Bill Blass, Geoffrey Beene, Emilio Pucci, Christian Dior, Oscar de la Renta, Yves Saint Laurent and Adolpho.

October 15: — Helen Delich Bentley, Chairman of the Federal Maritime Commission, will review progress plans for an American Bicentennial Fleet and the Port's proposed participation at a luncheon Tuesday for the American Association of Port Authorities' Convention.

The fleet, proposed by Mrs. Bentley last year, has received approval of the American Revolution Bicentennial Commission.

The fleet would be divided into 40 flotillas of six to twelve vessels each and consist of barges to be used as floating pavillions. Displays are to include major historical, industrial classification, the performing arts (composed and originated by Americans) and collections of maritime art emphasizing American tradition and dependence on the sea. These will appear at 40 U.S. ports between April 1975 and October 1977.

Before her appointment in 1969 as the Maritime Commission Chairman, Mrs. Bentley was Maritime Editor for the Baltimore Sun. She has produced many world trade and maritime shows for both television and film.

Mrs. Bentley has received numerous awards for her maritime writings, as well as her service to the industry. These include the American Merchant Marine Writers' award from the Propeller Club, the Distinguished Service award from the North Atlantic Ports Association, the Maritime Service award from the Maritime Port Council and the George Washington Freedoms' Foundation honor medal award in (Continued on Next Page Bottom)



# Japan Turns To The Sea To Relieve Crowding, Other Problems

Canada Japan Trade Council Newsletter  
May 1973

Japan has long used land-fill techniques along her coasts to create new industrial sites. She is now turning to other types of artificial "land" to accommodate her expanding economy and reduce overcrowding and pollution. Osaka's Itami Airport is now handling some 160,000 landings and take-offs a year, just short of the 175,000 capacity. A new airport could be built on the shore by the "landfill" method but this would require moving 300 million cubic meters of earth or 10 times as much as was moved to build the Suez Canal. The Marine Airport Study Committee of the Kozai Club has come up with another solution—a huge platform offshore about 10 kilometers.

Shown here is an artist's conception of the new 800-hectare airport and three possible methods of constructing it—solid fill, pilings or floating. It would require pilings 80 to 90 meters to reach bedrock through 40 meters of shoreline poze. This system is considered better than solid fill as this would interfere with coastal currents and cause erosion.

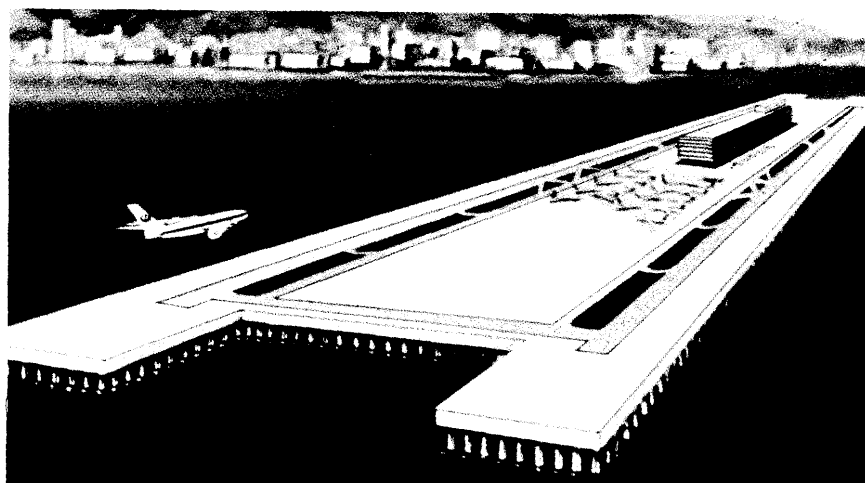
The third alternative, floating the field, would be equivalent to floating a 50 million ton ship. It would have the advantage of not being restricted by water depth but would be more expensive to build.

Using the piling system it has been estimated that three million tons of steel would be required and

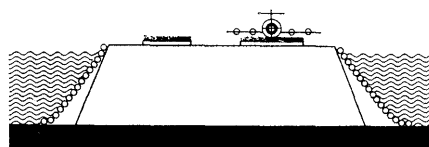
the cost would exceed \$1.6 billion. The amount of steel is 150 times as much as is used in a modern 36-

storey building. The Japanese planners realize that such offshore airfields will be costly but believe part of the cost could be written off as anti-pollution expenditure, noise, crowding and exhaust fumes being hazards of such large international airports.

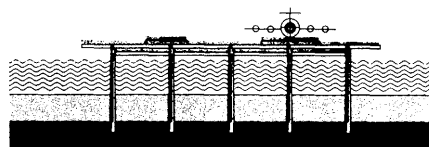
The planners are providing for an undersea train to take passengers and freight back and forth to the mainland. They think such an offshore airport could be operational at Osaka within five years. Japan is only slightly larger than Nova Scotia and slightly smaller than New Brunswick and only 20% of her land is usable. She has, therefore, turned to the sea.



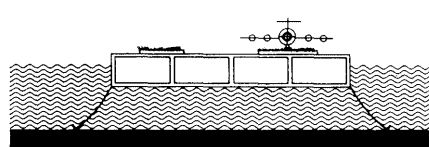
Fill or Island System



Pile or Caisson System



Floating System



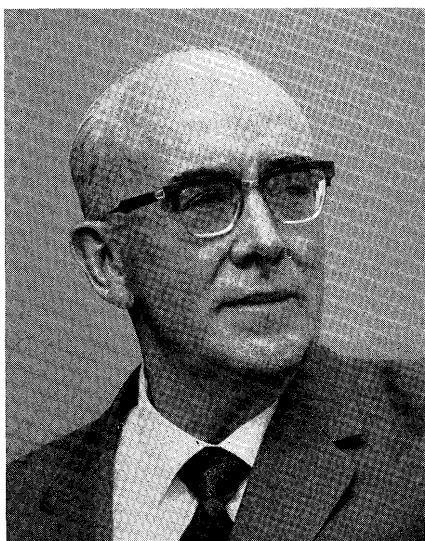
1971.

Mrs. Bentley received her Bachelor of Journalism degree from the University of Missouri and was granted an honorary doctor's degree in laws and letters by the University of Maryland.

## *Port of Baltimore Delegation Arrives in Tokyo*



**Mr. Harry R. Hughes**



**Mr. Joseph L. Stanton**

Baltimore, Md., October 13 (News from Maryland Port Administration):—A delegation from the port of Baltimore arrived in Tokyo on October 13 to begin an intensive 23-day trade tour to the major shipping and commerce centres of the Far East.

Comprised of representatives of the Maryland Port Administration, the Maryland Department of Transportation and the Baltimore maritime community, the delegation will spend a total of four days in Tokyo meeting with important members of the Japanese shipping community.

Among those taking part in the tour will be Harry R. Hughes, Maryland Secretary of Transportation, and Joseph L. Stanton, Maryland Port Administrator.

Also participating from the Port Administration will be Tadanobu Watanabe, director—Far East, who manages the Tokyo trade development offices; Joseph J. Giancola, director of trade development; and Robin E. Routley, director—South-east Asia, from the port of Baltimore's new Hong Kong office.

A highlight of the trade tour will

be the formal dedication of the Hong Kong office on October 18. In operation since July 1, 1973, the Hong Kong location is the fourth overseas

office and the eighth overall to be operated by the MPA, an agency of the Maryland Department of Transportation, on behalf of the port of Baltimore. In addition to Tokyo, other regional offices are situated in London, Brussels, Baltimore, Pittsburgh, New York and Chicago.

The extensive trade development tour is being undertaken by the trade delegation for the purpose of soliciting additional cargoes for Baltimore, the nearest North Atlantic port to the large producing and consuming centers of the U.S. Midwest.

Japan is particularly important stop on the tour itinerary as Baltimore's largest trading partner in Asia. In 1972, import-export foreign commerce between the port and Japan totaled over 2.9 million short tons, with a value of \$436 million.

Departing Baltimore on October 12, the port representatives will follow stop in Tokyo and Hong Kong with visits to such other major Asian trade areas as Singapore, Djakarta, Bangkok, Manila and Taipei.

The complete tour will last until November 3, when the group returns to Baltimore.



**Mr. and Mrs. Harry R. Hughes welcome Mr. Toru Akiyama (second from right) with Mr. Tadanobu Watanabe, Maryland Port Far East Director (third from right) and Mr. Joseph L. Stanton (right, back to camera) at the reception.**



**Dr. Hajime Sato, IAPH Secretary General receives a welcome greeting of Mr. Joseph L. Stanton (second from left) at the reception.**



**At the Maryland Port Trade Mission Reception held at Imperial Hotel, Tokyo from 6:00 to 8:00 pm on October 15th, His Excellency Mr. Robert S. Ingersoll, American Ambassador to Japan (fourth from left) is shown with (left to right) Messrs. K. Yokoyama, IAPH Deputy Secretary General, J. L. Stanton, Maryland Port Administrator, Y. Ariyoshi, Chairman of N.Y.K. Line, H.R. Hughes, Secretary, Maryland Department of Transportation, T. Akiyama, IAPH Secretary General Emeritus, Dr. H. Sato, IAPH Secretary General.**

## **Dundalk Terminal Breaks 1972 Record in First 8 Months of 1973**

Baltimore, Md., October 14 (News from Maryland Port Administration): — During the first eight months of 1973, Baltimore's Dundalk Marine Terminal has broken the container handling and tonnage records that were established over the full year of 1972.

Figures through the month of August show that the 550-acre terminal has handled 108,127 containers amounting to 1,234,632 tons thus far in 1973, according to the Maryland Port Administration, an agency of the State Department of Transportation.

This betters the former high figures of 106,085 boxes and 1,226,155 tons set during all of 1972 by 2,042 and 8,477, respectively, with four months still remaining to add to this year's totals.

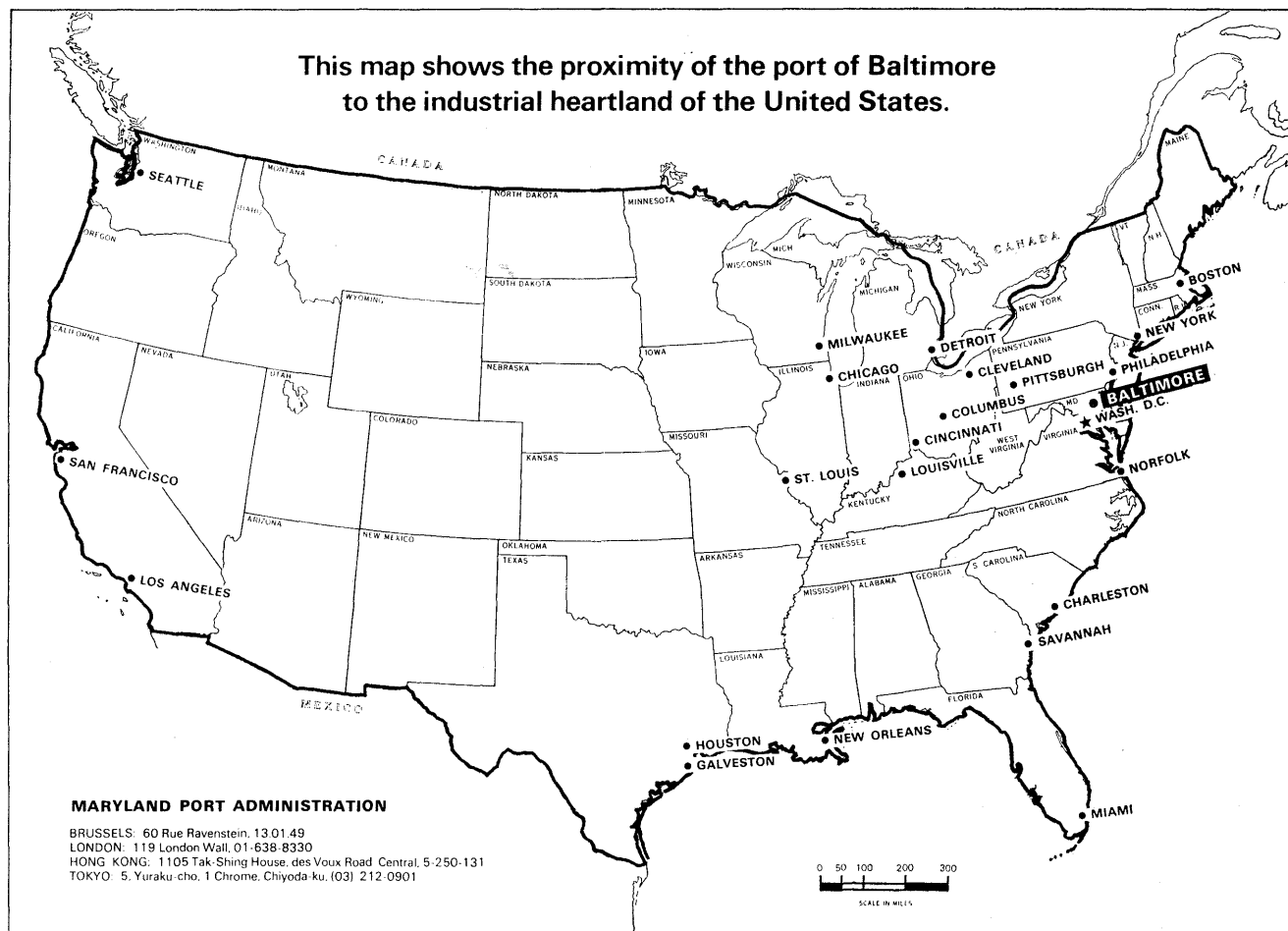
"We have an excellent chance of reaching the 2,000,000-ton plateau in container cargo this year at Dundalk Marine Terminal," Joseph L. Stanton, Maryland Port Administrator, said.

For the month of August, Dundalk's container facilities recorded an interchange of 13,419 containers with a tonnage of 154,243. These figures are 5,201 boxes and 60,858 tons higher than the same totals of August 1972.

As Baltimore's center for container activity, Dundalk led the port to the greatest container handling year in its history in 1972, when it handled about 68 per cent of the port-wide total of about 1.8 million tons of containerized freight.

The terminal's container facilities include seven 40-ton bridge-type cranes in operation at five berths, three consolidation sheds totaling 192,500 square feet of space and over 120 acres of heavy duty paved open storage.

Overall, Baltimore has the second highest container capacity among all U.S. East Coast ports, including a total of six berths especially for container handling, eight container cranes and almost 140 acres of paved backup area.



(See front cover also.)

## Baltimore Heads Toward Record Foreign Tonnage Year

Baltimore, Md., October 4 (News from Maryland Port Administration):—The port of Baltimore is heading for a record export-import year in 1973.

Through the first seven months of this year, the port's total foreign waterborne commerce registered more than 20.4 million short tons.

This figure is 15.1 per cent ahead of 1972's pace and is well on the road to eclipsing the yearly record of 32 million tons set in 1957, according to the Maryland Port Administration, an agency of the State Department of Transportation.

Of the overall increase in foreign trade through July, exports rose 27.2 per cent to a figure slightly over 6 million tons while imports also increased to a total of 14.4 million tons, a rise of 10.7 per cent.

Once again topping the list of ex-

ports for Baltimore was grain cargoes, which registered a total of nearly 2.37 million tons, an increase of 886,289 over the same period last year. The leading grain commodity was corn, up 95.2 per cent in 1973 to a figure of almost 1.5 million tons.

Other significant exports included coal, which reached a mark of 2.4 million tons, an 8 per cent rise over 1972, and iron and steel products, which jumped 93,151 tons over last year to a total of 314,497.

On the import side, petroleum and petroleum products were by far the port's leading commodity, hitting a total of 5.9 million tons, a rise of 14.5 per cent over 1972. Iron ore imports also showed an impressive rise of 16.7 per cent to slightly over 5 million tons.

Based on the totals for 1973 through July, Baltimore's marine terminals are handling foreign trade cargo at an average rate of 2.9 million tons per month. If this pace

continues through the rest of the year, the port will set a new foreign commerce record of about 34.5 million short tons for a single year.

In 1972, Baltimore handled a total of 29.1 million tons of import-export foreign trade, valued at approximately \$3.37 billion.



## More Photos of Port of Baltimore

→ The world seaport of Baltimore, showing the nearly 45 miles of developed shoreline facilities.



→ **RUKERT TERMINAL AND CANTON TERMINAL**—Rukert Terminals (foreground) and the Canton Terminals provide Baltimore with a variety of marine facilities for handling general cargo and bulk cargo. Located in a heavy industrialized sector of the city, these facilities provide a strong, private investment in generating international business through the port. Sea-Land Service operates its Baltimore terminal in this area (upper right), offering shippers another full container service from Baltimore and adding some 400,000 short tons annually to overall port tonnage.



→ **LOCUST POINT MARINE TERMINAL**—The former Baltimore & Ohio Railroad property, now under long-term lease to the Maryland Port Administration, is being rebuilt and refurbished. Nearly \$15 million has already been spent to rebuild two piers (foreground), Pier 3 and Pier 4-5 complex (center), the latter the largest single general cargo pier in Baltimore. Direct truck and railcar loading/discharge available, with cargo handling for break-bulk, small containerships, heavy-lift, project shipments, heavy equipment and large movements of vehicles.



# *Commodity Traffic in The St. Lawrence Seaway*

**The St. Lawrence Seaway Authority  
Monthly Traffic Reviews  
(August and September, 1973)**

## **Iron ore, a major commodity in Seaway Traffic (August)**

Cargo shipped on the Seaway is comprised of three basic types: bulk, general and containerized. By far the most important of these is bulk cargo. In 1972, bulk shipments totalled 89 per cent of combined traffic and amounted to 64.5 million tons. Iron ore, the most significant item in this category, averaged over the last five years 29 per cent of bulk shipments and 26 per cent of total tonnage, with 16.1 million tons registered last year.

Iron ore is vital to the economy of the Seaway and all indications suggest that this traffic will be maintained for some time. A chief component in the production of iron and steel, its demand depends on the output of these two commodities. About 70 per cent of all U.S. and 90 per cent of Canadian steel and iron production facilities are located in the region served by the Seaway.

Iron ore shipments through the Montreal-Lake Ontario section of the Seaway originate from the Quebec-Labrador region. Iron ore from this region is also shipped to east coast ports in the United States and foreign ports overseas. The Seaway route, however, has two definite advantages over the Eastern coast ports which compete for this commodity. Vessels upbound for iron and steel producers in Lakes Ontario, Erie and Michigan can, on their return trip, transport grain for eastern Canadian markets or export markets or can transport coal to domestic users. Vessels carrying ore along the East coast, on the other hand, usually return in ballast. Furthermore, iron ore commands a higher price in the Great Lakes area than it does when shipped to overseas ports.

In 1959, Canadian steel mills were

getting 48 per cent of their supplies from the U.S.-Great Lakes area. By 1968, this proportion dropped to 21 per cent due to the growth of Canadian supplies. Supplies from other foreign sources, mainly Brazil, varied between 1 and 4 per cent during that period.

About 55 per cent of total Canadian steel output is located around Hamilton. More than half of the shipments to that area come from the Quebec-Labrador region and most of the rest from the Upper Lakes area.

Canadian iron ore supplies from the Great Lakes area to the U.S. ports represent about 4 per cent of American iron and steel production. Iron ore shipments from the Quebec-Labrador area, on the other hand, have provided an increasing percentage of U.S. requirements, from 8 per cent (1959-61) to 11 per cent in 1966-68.

The development and location of steel production has led to a definite pattern of iron ore movements. All iron ore shipments through the Montreal-Lake Ontario section were upbound and, in 1972, accounted for 49.3 per cent of total traffic. In the Welland Canal, 50.4 per cent of shipments were upbound and 7.2 per cent downbound.

Compared to the 1971 figures, iron ore traffic was up 1 per cent in the Welland section and down 6 per cent in the Montreal-Lake Ontario section in 1972. This was attributed mainly to labor problems which plagued the Quebec-Labrador mines. Prospects for 1973, however, indicate that shipments will exceed the previous 1968 high of 21.3 million tons as iron and steel production is expected to have a record year. Shipments which have benefited from an early opening of the Seaway have, from March 28 to June 21, increased on the Montreal-Lake Ontario sec-

tion by 38 per cent over the same period last year. The increase over last year to July 31 was 31.3 per cent. The corresponding increases for the Welland Canal are, for the same periods, 37 and 31.2 per cent.

Iron ore shipments in the 1970's should match the estimated 5 per cent annual increase in Canadian steel output. By 1985, expansion of Stelco and Dofasco is expected to channel to the Hamilton area about 60 per cent of all Canadian requirements, with about 75 per cent of such shippings destined for the Lake Ontario shores and 25 per cent to Lake Erie. About 80% of the iron ore destined for Lake Ontario is expected to come mostly from the Quebec-Labrador area and partly from Lake Superior.

American iron ore requirements, which are expected to originate from the same sources over the next twelve years, should increase by 30 per cent over the 1968 level.

In the light of these developments, projections for the Montreal-Lake Ontario section are in the order of 24 million tons by 1985 and 21 million tons on the Welland Canal. This represents an increase over the 1972 levels of 52 per cent and 65 per cent respectively.

## **General Cargo Traffic in the St. Lawrence Seaway (Sept.)**

The term 'general cargo', as distinguished from bulk cargo, refers to items of cargo that are ordinarily not suitable for mass mechanical handling or stockpiling as bulk commodities usually are. General cargo is very diversified and is generally of much greater value per ton than bulk cargo. Although it represents a small percentage of the total Seaway traffic, its contribution to the total toll revenue is quite significant since a vessel carrying general cargo is assessed at a rate of 90 cents per short ton as compared to the 40 cents per ton collected on low-value bulk commodities.

Commodities assessed under the general cargo toll rate roughly represent between 10 and 15 per cent of the total Seaway tonnage. Since 1959, this particular tonnage has increased by about 400% in each section of the waterway. In the Montreal-Lake Ontario section, general cargo traffic grew from 1.9 mil-

lion short tons in 1959 to 7.8 million tons in 1972. Growth in the Welland Canal was comparable, with general tonnage passing from 1.8 million tons in 1959 cumulated over the first fourteen years of Seaway operation (1959-1972) totalled 70 million tons in the Montreal-Lake Ontario section and 61 million tons in the Welland section, accounting, respectively, for 13 per cent and 9 per cent of the total Seaway tonnage.

In analysing the factors that have contributed to such as impressive growth it is essential to look at the components of the general cargo category. General cargo on the Seaway mainly comprises iron and steel products and other manufactured goods, the latter group consisting of a myriad of commodities either imported or exported to and from various U.S. and Canadian Great Lake ports. The movement of manufactured iron and steel on the Seaway is responsible for most of the growth in the general cargo category. These products, which represented only about 5 per cent of total general cargo in 1959 now account for as much as 70 per cent of this traffic. Other general commodities have shown relative stability over the years and the 1972 traffic figures are still at approximately the level attained in 1964.

A further breakdown could be made to include containerized general cargo which has exhibited substantial increases in recent years. The number of containers moving on the Seaway has grown from 7,854 in 1968 to 23,014 in 1972. Tonnage wise, containerized cargo jumped from 85,289 tons to 431,384 tons during the last five years.

So far this season, general cargo traffic has been a cause of disappointment to those associated with Great Lakes shipping. Indications at the end of August point to a reduction in both general cargo and container traffics, as compared to last year's figure for the same period. Cumulated statistics to the end of August indicate that general commodities are down by some 23 per cent in the Montreal-Lake Ontario section and 20 per cent in the Welland section. Containerized traffic during the same period declined by 34 per cent and 1.5 per cent in each section, respectively.

## *Melbourne—A Port Created by the Science of Dredging*

**Melbourne Harbor Trust**

Port Gazette, August, 1973

It is a matter of historical fact that most of the world's great cities are situated either on rivers or sea shores, the reason being of course that maritime commerce can thus be indulged to the fullest extent and Melbourne is no exception.

It was in June 1835, that John Batman, a pioneer-adventurer-pastoralist from Tasmania, who was born in Parramatta, N.S.W., discovered the Yarra Yarra River, so named by the aborigines, and rowed some 7 miles up the swamp bordered meandering shallow stream until he came to the rocky falls where Queen's Bridge now stands.

Landing just below the falls Batman uttered these historic words. "This will be the place for a village", and thus the city of Melbourne was born.

Although these figures, as first glance, might appear alarming, there are many factors that allow for optimism on the future of general cargo traffic in the Great Lakes. It should be pointed out, for example, that most of the fluctuations in this type of traffic are caused by world market conditions for manufactured iron and steel. As a result, movements of steel products in the Seaway are much more spasmodic than those of other commodities. During 1973, a world shortage of steel products, combined with currency realignments, has caused a decline of as much as 35 per cent on the Montreal-Lake Ontario section's total general cargo figures. Long-term supply and demand conditions for this particular group of commodities would justify some hope of resumption of the growth pattern observed during past seasons.

Another factor which has significantly influenced general cargo traffic in 1973 has been the high freight rates which may have deterred some ocean vessels from coming

As commerce is the life-blood of a city, or indeed any community, it was realized quite early in the life of the infant settlement that it was essential to provide shipping access up the river.

However, it must be remembered that the settlement was then part of New South Wales, hence it was governed from Sydney, and a deaf ear was turned to all overtures for money to provide improvements to the tortuous stream serving Melbourne.

Eventually in 1851, after much agitation for separation, the State of Victoria was created and in 1852, the Melbourne City Council and the Chamber of Commerce set events in train to create a Harbor Trust which in turn would build a port.

It took, however, until 1876 for the Melbourne Harbor Trust Act to

into the Great Lakes. At a time when the world supply of ships is limited, operators prefer entering into long-term contracts and aim at fast turn-around time for their vessels, thus rendering the Great Lakes ports less attractive insofar as general cargo is concerned. However, a return to a more normal situation can be expected in the near future and there are signs that the containerized trade is recovering. Containerized cargo traffic in the Welland section, down by 22.4 per cent at the end of June, is presently almost at par with the 1972 level of traffic, registering a slight decline of only 1.5 per cent.

In summary, as in the case of bulk cargo traffic, some yearly fluctuations are to be expected in the general cargo trade. In the long run, however, there is no doubt that the rich industrial North American hinterland will continue to generate enough general cargo traffic to account for between 10 and 15 per cent of total Seaway traffic.

be passed and on 1st January, 1877, the Trust came into being and immediately tackled the task of port development by engaging Sir John Coode, one of the foremost engineers in England, to come to Melbourne and prepare a comprehensive report on the River Yarra and Hobson's Bay.

The Coode report was received by the Trust in April 1879 and the dredging proposals contained therein were, in brief, that the River Yarra should be shortened by approximately one mile by cutting a channel across what was known as Fisherman's Bend (this was later known as Coode Canal) and containing the river in a properly regulated channel, duly protected at the sides so as to direct and exhaust the currents within a fixed and definite track.

In addition the sharpest curve on the new alignment would be 6,000 feet radius which would enable full advantage to be taken of the scour of the tidal and river currents and, although some dredging would undoubtedly be necessary for the maintenance of the full depth, this dredging would be reduced to a minimum bearing regard to the physical conditions to be dealt with.

It is recorded that in 1854 the maximum draught of a vessel was limited to some 10 feet to negotiate the river to Melbourne and Sir John Coode states in his report that "in the present condition of the river, vessels drawing more than 13 feet of water cannot ordinarily pass up or down without risk of grounding".

Incidentally Sir John estimated the costs for the river to be deepened to 20 feet as £1,163,200, and to 25 feet, £1,246,800, which for 1879 were enormous sums of money.

The Trust commenced in 1877 to improve the river but, as unfortunately the constitution of the Trust provided no borrowing power, it soon proved to be beyond the Trust's resources to carry out much work with revenue moneys, and considerable delay ensued in implementing the Coode report because the various interests, which had originally opposed the formation of the Trust, now opposed borrowing powers being granted.

However, in 1883 the Act was amended to include borrowing powers up to £1,000,000 and the Trust

pushed ahead with dredging the canal to shorten the course of the River Yarra, excavating first in the dry and then completing to 25 feet by bucket dredging, finishing this project in 1886.

From this date up to the present, dredging has been carried out by the Trust, largely using its own plant, but, occasionally as the necessity arose, having recourse to the employment of contractors' dredging equipment.

Dredging has produced and maintained a River Yarra regularly confined and curved, with a minimum bottom width of 400 feet (except in the vicinity of the Short Road Ferry where it is, at present, 275 feet but is scheduled to be widened to 400 feet by October 1973); the Victoria Dock with 21 berths for overseas ships inside the Dock and three longshore berths outside; the Appleton Dock with five longshore berths for overseas ships; the Swanson Dock with four berths especially built for the container trade; the Holden Oil Dock to handle the tanker trade; the Webb Dock with three berths completed and a fourth under construction to handle the Australian National Line's specialized operations in passenger, roll-on roll-off and container traffic, etc.; the piers at Williamstown and Port Melbourne and the great system of longshore berths spread along both sides of the Rivers Yarra and Maribyrnong namely North Wharf, South Wharf, Maribyrnong and Yarraville.

A dredged depth of 37 feet (guaranteed depth 33 feet) from the River Entrance to Victoria Dock thence a dredged depth of 32 feet (guaranteed depth 28 feet) upstream to Johnson Street Sewer and finally a dredged depth of 30 feet (guaranteed depth 26 feet) up to Spencer Street Bridge has been achieved. The Port Melbourne channel from Fawkner Beacon to Port Melbourne piers is dredged to 41 feet (guaranteed depth 37 feet) likewise the Williamstown Channel from its junction with the Port Melbourne Channel to abreast of Nelson Pier.

The Trust has not only had to carve the Port out of the primordial mud but has had to contend with a problem of maintenance dredging as any river port has the inevitable burden of siltation being invariably

sited on tidal area flood plains.

The Port of Melbourne, with both the Rivers Yarra and Maribyrnong discharging within its environs, has thus the run-off from some 2,200 square miles of catchment, and, although by the time these rivers reach the Port they have become relatively sluggish and dropped the heavier materials such as sand and gravel, there is still a large quantity of silt in suspension.

The River Yarra above Spencer Street Bridge is some 10 feet deep, but below the bridge, at North and South Wharves extending downstream to Johnson Street, the depth is maintained at 26 feet hence the velocity of flow is more than halved and there is resultant deposition of silt.

Similarly, but a much greater deposition of silt occurs where the Maribyrnong River, which is some nine feet deep upstream of No. 1 Berth, Yarraville, abruptly widens and deepens into a dredged channel maintained to a depth of 30 feet.

Deposition of silt and also sand in some localities, dependent naturally on climatic conditions, occurs over the whole of the Yarra and Maribyrnong Rivers within Trust territory and also the Channels in Hobson's and Port Phillip Bays.

Naturally with so much dredging necessary to maintain the Port and dredging being a very costly item there has to be a regular and scientific approach to the problem and nowhere is this better exemplified than in the Trust's approach to maintenance dredging.

On the Admiralty charts applicable to the Port of Melbourne appear all channels, each with its guaranteed depth, and these depths must be maintained, therefore the method employed by the Trust is to dredge four feet deeper than the guaranteed depth thus creating a compartment in which the deposition of silt will accrue.

This ensures that the bucket dredger will have between three and four feet face of material to operate in when carrying out maintenance dredging thus ensuring buckets full of silt—the requirement for both efficient dredging and effective transport of spoil in hopper barges.

By this means unit costs are minimised and output is increased



which enables the available dredging plant to deal with larger dredged areas.

In almost a century of dredging from 1877 to 1973 various dredgers have sculptured an underwater system of thoroughfares, swinging basins and mooring berths, and, in so doing, raised a total of 195,371,175 barge yards. Dredging of the Rivers Yarra and Maribyrnong has contributed 113,659,305 barge yards and Bay dredging the balance of 81,711,870 barge yards. Of the total quantity dredged 165,407,425 barge yards were deposited in deep water in Port Phillip Bay and 29,963,750 barge yards utilized in land reclamation. Dredging contractors' contribution over the period is 8,166,212 cubic yards in situ.

The Trust employs a permanent dredging force which is constantly on the job and at the present this consists of one bucket dredger attended by three modern selfpropelled hopper barges employed on three shifts for a five day week and, two Priestman grab dredgers attended by five dumbhopper barges and the requisite tugs, employed on day work for a five day week.

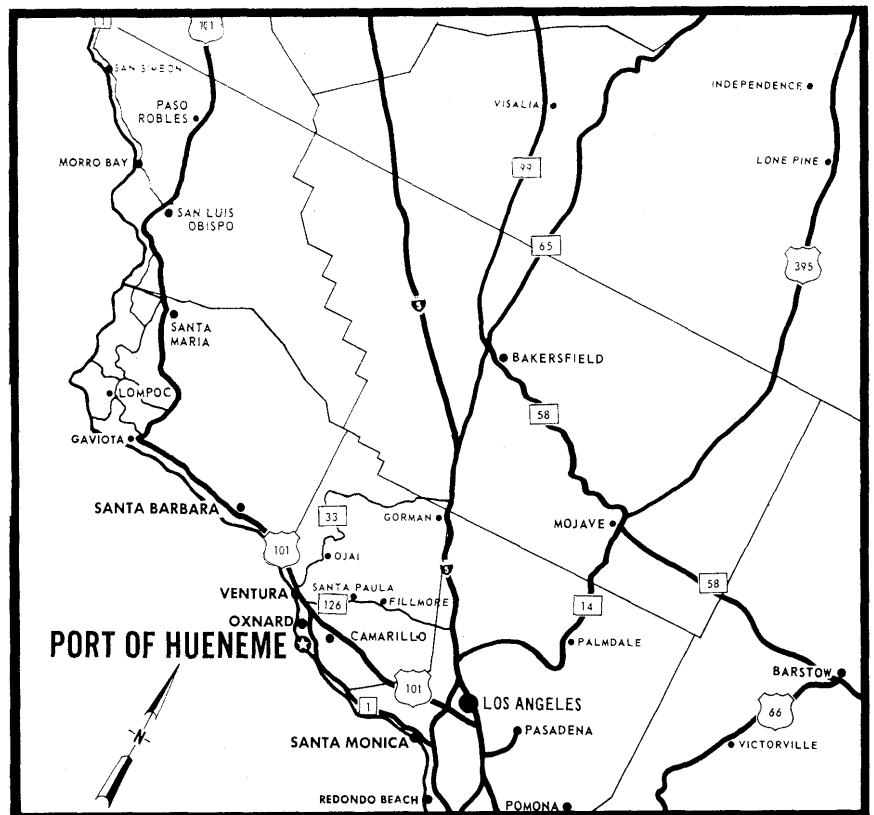
The principal bucket dredger at the present time is "A. D. Mackenzie", an oil fired steam dredger powered with a reciprocating triple expansion double action, high speed, totally enclosed engine and built by Lobnitz & Co. in Scotland in 1951. The engine, using twin belts, drives a bucket chain of 44 buckets, each of 28 cubic feet capacity, at 18 buckets per minute.

The present stand-by dredger is the B. D. "Geo Kermode", which is an oil fired steam dredger powered with a reciprocating triple expansion direct acting vertical engine and built by Fleming & Fergusson Ltd., in Scotland in 1914. The engine, through shafting and gears, drives a bucket chain of 40 buckets, each of 24.7 cubic feet capacity, at a speed of 12 to 14 buckets per minute.

The end of an era will be heralded when, towards the end of 1975, a new 800 litre (28 cubic feet capacity) bucket dredger costing approximately \$2 million will replace the antiquated bucket dredger "Geo Kermode". The "A. D. Mackenzie" will then be relegated to a place of lesser importance as a stand-by

# Port of Hueneme Mid-California Port for the World

Port of Hueneme, Oxnard Harbor District  
Port Hueneme, Calif., U.S.A.



## A Port for All Reasons

It looms up at you in its uniqueness through Pacific mists, this port with the strange name. But you'll remember it for more than its name . . . because this is Western America's port of today and of the future. This is metropolitan Southern California,

dredger. The new bucket dredger will be diesel-electric powered with all the technical sophistries of the day. The design by N. V. Raadgevend Ingenieurs bureau Propulsion of Leider, Holland, in close consultation with the Trust's engineers has been completed. Tenders for the dredger's construction will be invited in the near future and the construction is scheduled over some

but without congestion. This is Northern California's bay area but with traffic-free access and lower rates. This is mid-California's only deep-water port. This is the Port of Hueneme.

Think of a deep-water channel that ends just offshore, linked to a wide, natural sea canyon. Think of

24 months.

In conclusion it can be categorically stated that the Port of Melbourne is a Port that has been literally carved from the muddy depths of the River Yarra to meet the exacting and ever growing trade requirements of the City of Melbourne and the State of Victoria—a Port created by the science of Dredging.

an average entry time to berth of just 45 minutes, or a departure average of a scant half hour. Less pilot boat service. Less waiting time. Good highways and railways to and from the entire United States. Efficient operations. Low overhead. Great storage facilities.

If you're a business, think of nearby low-cost industrial land for sale or lease, and a five-minute delivery time from dock to door. Room to produce or process or store. The right zoning. Direct road, rail and pipeline easements. Quick access to the whole world. Think of money saved . . . a lot of it.

Canadian and Pacific Northwest service; Hawaii and Trans-Pacific service; Gulf Coast, European and South American service: all can benefit from the location, low costs and accessibility of the Port of Hueneme. And all who choose the Port of Hueneme can benefit from an expansion program just completed, leadership dedicated to growth and an awakening atmosphere of excitement.

No printed piece such as this will alone put cargo in a port. But perhaps with the help of this brochure those who need to reach the world through California and those of the world who must reach California and the United States will consider the Port of Hueneme. Hueneme . . . Y-nee-me . . . it's an idea whose time has come.

### **Centralized—To Meet Any Shipping Need**

Located between the major market areas of northern and southern California, the Port of Hueneme serves both, and through both, the rest of the United States.

The port area is connected with the major lines of the Southern Pacific Company through a local railroad company, providing complete access north, south and east. The port enjoys overland common point rates to destinations east of the Rockies.

Uncongested highway access is equally complete. To the north, U.S. Highway 101 serves such areas as Ventura, Santa Barbara, Lompoc, San Luis Obispo and other markets in the northern coastal region. In addition, this highway is the major north-south artery between Los An-

geles and San Francisco.

Looking inland, California State Highways 118 and 126 (Santa Paula Freeway) open up Bakersfield, Fresno and other agriculturally rich central valley markets of the state through connection with State Highway 99 and Interstate Highway 5.

But perhaps the Port of Hueneme's most important direction is south, where less than an hour's trip put the entire vast Los Angeles market area in the grasp of any shipper.

Directly south along the coast, State Highway 1 reaches the market through Santa Monica, while in a southeast direction, U.S. 101 enters through the San Fernando Valley. (In fact, in most cases this important Valley area can be reached more quickly from the Port of Hueneme than from any other Southern California port.)

Mileage. Time. Money. Whichever is most important to you, the Port of Hueneme is where the savings start.

### **A Port With a Past—And A Future**

The Port of Hueneme is not new to the world of shipping. In 1870, a century-long use of the one-time Chumash Indian village began when the coastal steamer *Kalorama* picked up the first major cargo shipment . . . fifty tons of grain "lightered" to her hold. Ocean cargo handling became a reality, and the Port of Hueneme reached out an arm to the world in the form of a 900-foot wharf with a mean tide depth of 18 feet . . . sufficient for most sailing vessels and coastal steamers plying the coastal trade at the time. Until this century, this pier was the only shipping point south of San Francisco.

A governing body for the port came into being in 1937 when the Oxnard Harbor District was formed, and directors quickly moved to turn an undersea phenomenon into a unique calling place for world shipping. Taking advantage of the deep, natural Hueneme Chasm, located several hundred yards west of the original pier, they dredged a channel along its crevice and a basin where it began in Hueneme Lagoon. Dredging and dock facility construction began in 1938 and were completed two years later. Commercial operations followed and continued for two more years.

In a way, today's port owes a big part of its capabilities to yesterday's war, since expansion of the harbor to its present capacity of six deep draft wharves with ten berths occurred when the United States Navy took over the port during World War II, in 1942. In one year during that war, the Port of Hueneme led all ports in the United States in dry cargo shipped by the U.S. Navy. Large volumes of material also moved from the port during both the Korean War and the recent conflict in Southeast Asia.

In 1947, negotiations began which led to the return from the Navy of the original wharf and adjacent land area to the Oxnard Harbor District on a lease basis. The Navy also provided additional berths, storage facilities, and pilot and tug services, all under a reimbursable agreement. Commercial cargo operations resumed.

Finally, in 1961, the Navy sold the formerly leased area to the District, allowing directors to develop and implement plans for expansion on a long-range capital investment basis . . . the foundation for today.

### **Flexibility, Convenience, Economy**

As more world shippers discover the unique advantages of the Port of Hueneme, import cargo capabilities at the port continue to expand in a diverse circle.

Lumber has always been an important cargo here, and the Port of Hueneme is a major tidewater terminal point for the flow of lumber to adjacent inland areas. But such cargoes as automobiles from Japan and Germany also have provided a major element of the port's activity. In one period alone during 1971, more than 70,000 cars were imported through the facility, and at one time approximately 12,000 were stored on the vast open storage area within the port complex. Also from Japan have come such items as the huge steel pipe used in the California State Water Project at Castaic. At least ten shipments of this pipe were received, and more are anticipated.

Existing facilities alone provide for the handling of such import cargoes as animals and animal products (both edible and inedible), vegetable

**(Continued on Page 26 Bottom)**

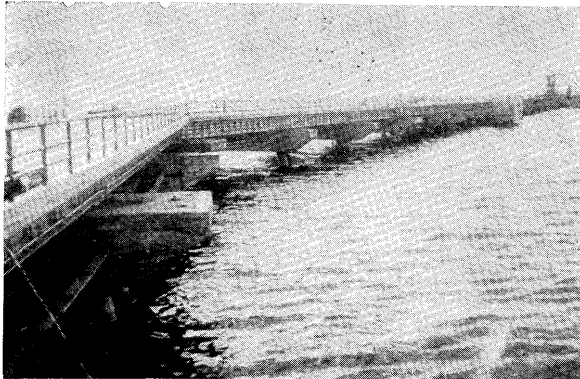


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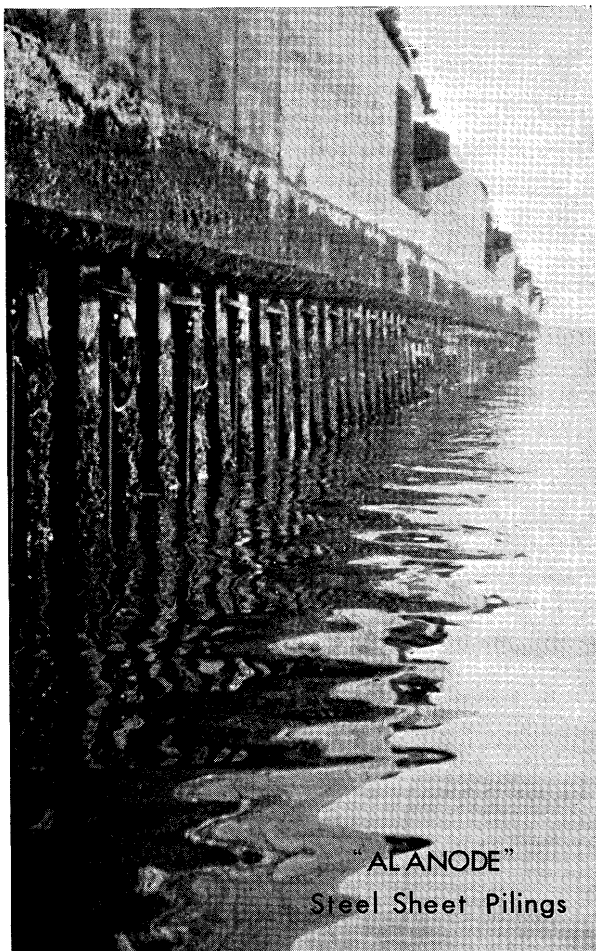
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## ***Port Financial Information—1972: New Statistics from the National Ports Council***

The most comprehensive survey of the finances of British port authorities ever produced is published today by the National Ports Council in *Port Financial Information—1972*.\*

The survey covers all statutory harbour undertakings having total revenues exceeding £300,000, with the exception of the British Railways Board and British Waterways Board. Undertakings included are Aberdeen, Blyth, Boston, Bristol, British Transport Docks Board, Clyde, Dover, Dundee, Felixstowe, Forth, Ipswich, London, Manchester, Med-

way, Mersey, Milford Docks, Milford Haven Conservancy, Preston, Shoreham, Sunderland, Tees and Hartlepool, and Tyne. These harbour undertakings, together with British Railways Board and British Waterways Board, account for some 92% of the tonnage of traffic passing through all seaports in Great Britain.

The authorities covered in the survey (excluding Sunderland) employed a total capital in 1972 of £595 millions, their capital debt totalling £417 millions. (Sunderland is omitted from these totals because owing to a change in ownership the port's 1972 accounts did not cover a 12-month period).

The total operating revenue of these 21 undertakings in 1972 was £173 millions (1971, £158 millions) of which £71 millions (1971, £66

millions) came from dues on ships goods and passengers, £74 millions (1971, £58 millions) from cargo handling, and the balance from other services and rents. Operating costs totalled £128 millions (1971, £117 millions), leaving an operating surplus before depreciation of just under £45 millions (1971, £41 millions).

After charging depreciation and interest, but before special items such as profits on sale of surplus land and buildings, etc., taxation and dividends payable, the net surplus of the 21 undertakings was £8.5 millions (compared with £6.3 millions in 1971).

The Council's Director of Finance, Mr. P. J. K. Webster, said today that although the 1972 return on capital for the industry as a whole showed a general and welcome improvement on the 1971 figures, the Council looked for further significant improvement in future years.

Mr. Webster also pointed out that the tables revealed provision by ports taken as a whole for depreciation of their assets that seemed inadequate to modern requirements.

'This is a matter which we are exploring urgently with the ports at the present time'.

With a total of 27 tables the new publication gives, for each of the undertakings covered, revenue account tables showing net surplus; operating revenue; expenditure; and interest charged; and balance sheet tables showing capital employed summaries; capital, reserve and other balances; movements in reserves and other credit balances; and analyses of fixed assets and depreciation; capital debt; reserves and other credit balances at both beginning and end of the financial year; and net changes in reserves and credit balances due to items not in revenue account—all for the financial years of the individual ports ending in 1972. Comparisons between 1971 and 1972 are given in tables of financial ratios/percentages and of total capital employed.

10th October, 1973.

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\* *Port Financial Information—1972*.  
Published by the National Ports  
Council, Commonwealth House, 1-19  
New Oxford Street, London WC1A  
1DZ. Price £1.00.

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### **(Continued from Page 24)**

food products and beverages, inedible vegetable products, textile fibers, wood and paper, nonmetallic materials, metal and metal manufactures, machinery and vehicles, chemicals and much more. But the Port of Hueneme's great flexibility and extremely large covered and open storage space capabilities make it ideally suited to handle nearly any import.

Exports at the port also have been diverse, and a reflection of the market area it serves. They include canned foods, chemicals, clays and earth, citrus fruit, cotton, dried agricultural products, household goods, vehicles, manufactured products, deep sea drilling equipment, fertilizer and minerals. Again, as with imports, flexibility is the key word, and coupled with convenience and economy, provides the Port of Hueneme with an unbeatable combination.

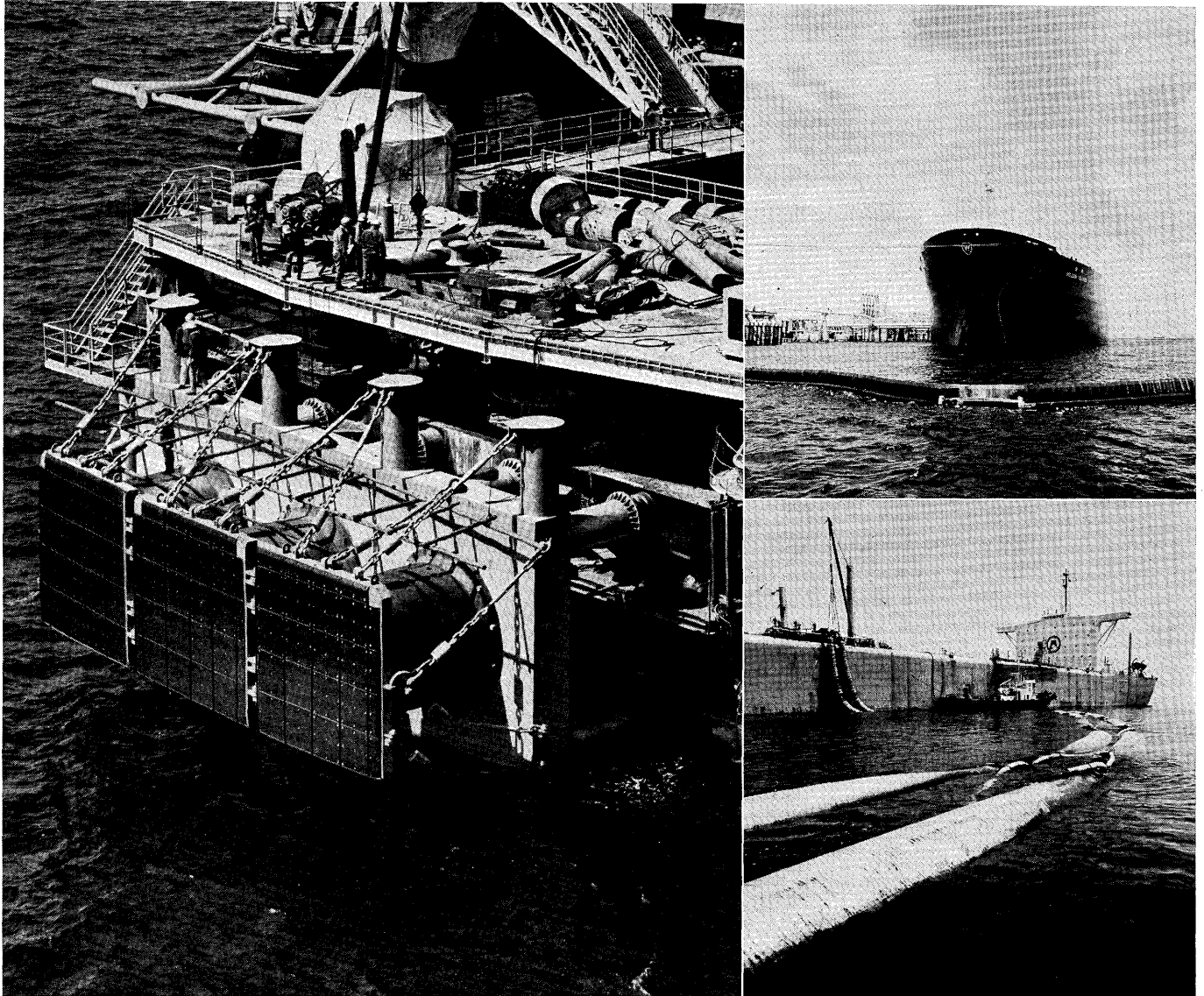
### **The Years Ahead**

What of the future of this Port of "y-nee-me"? What is its destiny? Will it be home for the 250,000-ton supertankers? Will it handle liquified natural gas to ease the energy crisis, or become a headquarters for shipping California citrus to the world? All of these are possible and even probable when its vast potential—geographically and economically—is fully realized by the shippers and importers of this and other countries. The destiny of the Port of Hueneme is to be whatever its users say it shall be, because it has the flexibility and the capacity to be great in so many ways.

Whatever your position in national or international commerce, why not join this awakening giant and measure your potential by our own . . . as limitless as the blue waters that bring you to Hueneme—mid-California port for the world!



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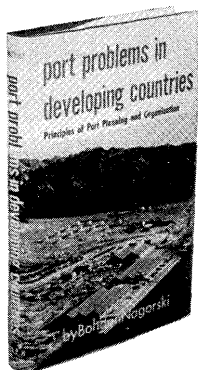
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# Orbiter Probe

## IAPH News:



Mr. Toru Akiyama was one of the lucky winners of a colored TV set at a recent party given by the Philadelphia Marine Trade Association on 3 October (in Tokyo). We believe the smile on Mr. Akiyama's face tells the whole story. Mr. Kelly, President, PMTA, on the left, is presenting Mr. Akiyama with the set as Charles Dickey of the Delaware River Port Authority referees the action. (Charles H. Dickey, Managing Director, Far East Delaware River Port Authority)

## Mr. Lunch in Japan

(Kimiko Takeda) Mr. John Lunch, Director-General of Port of London Authority accompanied by his wife and Mr. Alan Holland, Trade Development Manager, came to Japan on September 27th on the last leg of his Asian tour.

The party visited Osaka, Kobe, Awajishima Island and Kyoto from September 29th to October 2nd including Port of Osaka and Port of Kobe.

On the morning of October 4th, Mr. K. Yokoyama, IAPH Deputy Secretary General and other staff of the Head Office had talks with Mr. Lunch about IAPH matters, particularly on the Committee on International Port Development, of which Mr. Lunch is the Chairman.

On the evening of the 4th, a PLA's reception was held at the Imperial Hotel, Tokyo, where Mr. Toru Akiyama, Secretary General Emeritus, Dr. Hajime Sato, Secretary General and Mr. and Mrs. Yokoyama Deputy Secretary General were present.

From 14:30 on October 5th, a press conference was held at British Trade Center in Aoyama, Tokyo.

Mr. Lunch's party left Tokyo for London on the evening of October 5th, 1973. (See photos on next page.)

## Visitors from Boston

Mr. Robert W. Bennett, Assistant Secretary of Executive Office of Administration and Finance, the Commonwealth of Massachusetts, Mr. Richard D. Sweeney, Director, Trade Development, and Mr. Yasunori H. Matsui, Tokyo Manager, Massachusetts Port Authority, held a press interview at the Maritime Building in Tokyo on Tuesday, October 23, 1973 evening from 6.00 o'clock until 8 o'clock.

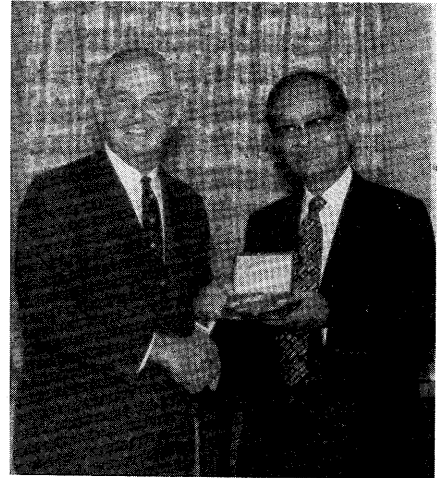
Mr. Bennett, who had been performing his mission of soliciting Japanese industrial investments and tourists to his state, was scheduled to fly back home the next day. Mr. Sweeney was scheduled to travel for three weeks with Mr. Matsui in Japan, Korea, Formosa, Thailand and Hong Kong before going back to Boston.

Mr. Sweeney is a native of Whitman, Massachusetts, who joined





At the reception, from left to right, Mr. Katsumi Ohno, former Japanese Ambassador to U.K. and President of Imperial Hotel; Mrs. Lunch; Mr. Lunch; and Mr. Goro Hasegawa, PLA's Tokyo Representative.



Prior to the PLA's reception on the evening of October 4th, Mr. Toru Akiyama (IAPH Secretary General Emeritus) pays a courtesy call to Mr. and Mrs. Lunch at their suite room in the Imperial Hotel. Mr. Lunch (left) presents a silver ashtray with PLA's insignia to Mr. Akiyama.

Massport April 2nd of this year. He graduated from Boston College, Chestnut Hill, Massachusetts in 1960 with a Bachelor of Arts Degree in

Economics. After spending two years as a Lieutenant in the United States Army stationed in Kaiserslautern, Germany, he joined Sea-

Land Service, Inc. in Elizabeth, N.J. From 1963-1969 he served in Boston with Sea-Land as a sales representative first for the Florida/Texas Divi-

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sion and then the North Atlantic Division upon its inauguration in 1966. In June 1969 he accepted the position of Government Sales Manager Europe based in Frankfurt, Germany. In January 1971 he was promoted to Special Accounts Sales Manager at Sea-Land's European home office in Rotterdam, The Netherlands and was further assigned the responsibility of International Accounts Sales Manager in August 1972. Mr. Sweeney is presently living in Norwell, Massachusetts with his wife Jean and three children. He returned to Boston from the Netherlands in August as Director of Trade Development for Massport responsible for all trade development activities in our offices in Boston, New York City, Rochester, N.Y., Washington D.C., Brussels, Belgium, and Tokyo, Japan.

### **Algeria to Host International Training Course in Port Management**

Geneva, 1 October (UNCTAD Press Release TAD/INF/667):—An international training course in port management, financed by a grant from the Swedish International Development Authority (SIDA), has been organized by the United Nations Conference on Trade and Development (UNCTAD) and will be held in Algeria from 15 October-14 December 1973. Twenty-five participants from seventeen French-speaking developing countries, all holding senior management positions in the ports industry, have been invited to attend.

Following a preparatory reading course undertaken in the participants' home countries, the residential part of the course, which will be held at Sidi-Ferruch near to Algiers, will last nine weeks. Four main subjects—port planning, port administration, port economics and port operations—will be covered. In addition to attending lectures and discussion groups in Algiers, participants will visit the ports of Annaba, Skikda, Oran and Arzew. There will also be study tours to the ports of Casablanca, Tunis, Marseilles and Genoa in order to give the participants an insight into how port problems are being tackled in different

countries.

Mr. Eric Williamson, Chief of the Ports Section of the UNCTAD secretariat, is Director of the Course. Mr. Hervé Le Dantec has been seconded from the Port of Marseille Authority to act as Course Tutor. Miss Janet Birrell, an UNCTAD staff member, is the Administrative Officer.

It has long been established that cargo-handling costs, together with the cost of ships' time in port, constitute a significant portion of the costs of international shipments. Port congestion obviously increases the cost of maritime transport. The course will seek to provide the training of the management skills on which the efficiency of ports depend.

The participants will come from the following countries: Algeria, Cameroon, Congo, Dahomey, Gabon, Guinea, Iran, Ivory Coast, Khmer Republic, Madagascar, Morocco, Mauritania, Mauritius, Niger, Togo, Tunisia, and Zaire.

### **Lloyds' Interest in ICHCA Study**

London, ICHCA Press Information:—An enquiry from The Food and Agricultural Organisation (FAO) to the International Cargo Handling Co-Ordination Association (ICHCA) for bibliography on the subject of "The Transportation of Meat and Meat Products", indicated the need for an international study to be carried out on this subject.

ICHCA have therefore set up an international working group to co-ordinate this study and the first meeting was held in London when Mr. J. J. Wilson, Senior Principle Surveyor in the Refrigeration Department of Lloyds Register of Shipping, was present to discuss his paper "Review of Marine Transportation of Refrigerated Cargoes".

The International Study of the Transportation of Meat and Other Perishable Commodities will comprise four parts. The four parts of this study are:—

1. Equipment already available, where and to what extent available. New equipment projected.
2. Existing sources and markets of meat and meat products

and other perishable commodities. Future sources of markets.

3. Existing methods used for refrigeration, preservation and packaging of meat and meat products and other perishable commodities. Methods that may be used in the foreseeable future.
4. Economics of current handling and transportation operations.

Delegates from Italy, the Netherlands, the UK and the US attended, and the study is also being supported in Argentina, Australia, Brazil and New Zealand. Represented in the discussions are Shipowners, Port Operators, Equipment Manufacturers and Technical Organisations. A final report will be published during 1974.

### **Welland By-Pass Canal Saves Users' Time**

Ottawa, September 27 (The St. Lawrence Seaway Authority):—A review of operating statistics has indicated that the use of the new Welland By-Pass has resulted in a reduction of vessel round-trip time by approximately 55 minutes. It has been determined that the total number of vessel hours saved during the first five months of operation (April-August) was 2,000 hours. It is estimated that this represents a total saving of approximately \$500,000.00 to canal users.

The By-Pass Channel which was designed to optimize safety, speed and efficiency, replaces that section of the Welland Canal which runs from Port Robinson to Ramey's Bend through the heart of the City of Welland. This section presented many hazards to navigation and caused traffic congestion to both land and water traffic. The new channel was built on a relatively straight course and provides a navigable width of 350 ft. Vehicular traffic crossings are provided by two tunnels.

The new By-Pass offers the fleet of lakers and the world's ocean vessels which use the Seaway system a new route along which obstructions such as bridges and narrow passing areas have been reduced to a minimum. Moreover, a modern lighting system

**(Continued on Next Page Bottom)**

## Canadian Port & Harbour Association Elects New Board of Directors

Toronto, Ontario, September, 1973 (Canadian Port & Harbour Association): — Commissioner Ken Fraser, of the North Fraser Harbour Commissioners, is the new head of the Canadian Port and Harbour Association (CPHA).

Mr. Fraser was elected president during the association's annual meeting held in Trois-Rivieres, Quebec,

allows safe transit after dark. The numerous improvements to the Welland section, including the new By-Pass, over the past decade have all been carried out as a result of the popularity of the system and the need to meet the ever-increasing demands of Great Lakes shipping.

September 9, 10 and 11.

The general aim of the association is to exchange information concerning port management and the development of waterborne transportation between world ports and ports in Canada. However, the CPHA also wants the public to understand the key role played by the nation's ports in protecting the environment.

"Take oil spills as an example," said one of the delegates. "People automatically associate oil spills with ships. But this is not always so. In fact, most oil spills that appear in harbours or port areas come from inside the community.

"The port authority, as a good corporate citizen, moves quickly to

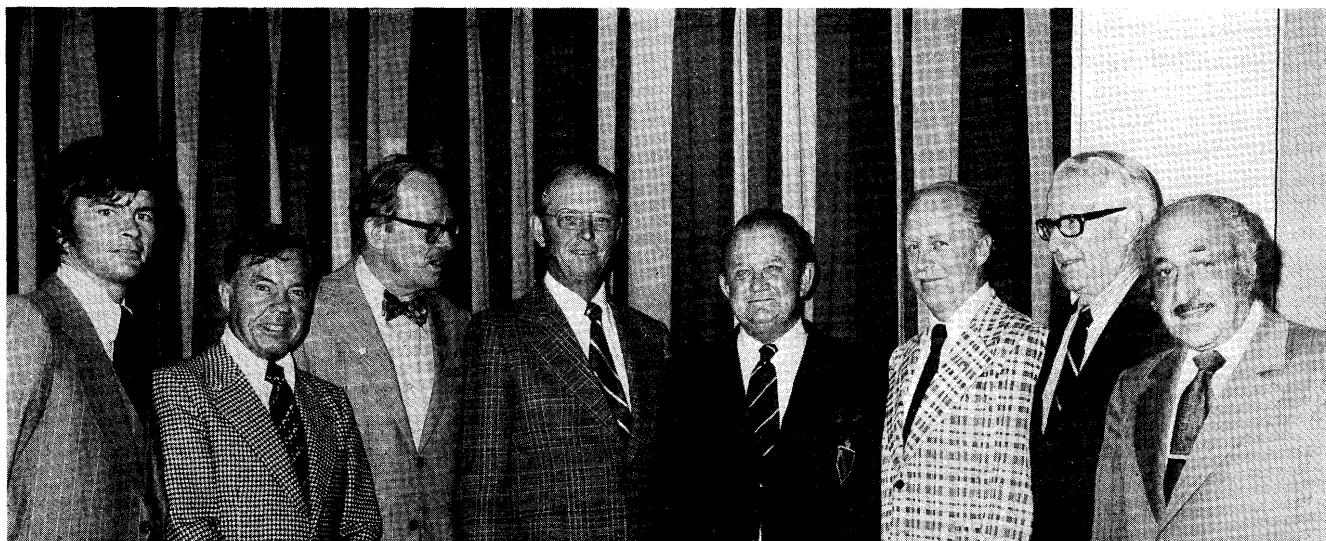
clean up any mess. And if the spill is from a ship then we generally collect our clean-up costs. But what if the oil seeping into the port area comes from industry or from the interior of the community, who pays for the mop-up operation?

"The port authority cleans up the mess because it happens to manifest itself in its own front yard. I realize that it is a difficult problem, but somehow it will have to be resolved," he said.

The association feels that new pollution controls and environmental legislation will have a great impact on the maritime industry and because of this a special committee brought in a report outlining some of the problems.

"Environmental considerations continue to play an important part in port planning development and administration," explained past president J.H.W. (Bert) Cavey of the Ministry of Transport, "and I believe this very important subject will receive renewed attention from all of us."

A special committee on pollution



A new slate of directors was elected to the Board of the Canadian Port and Harbour Association at its annual meeting held early in September at Trois-Rivieres, Quebec. Heading the association as president for the coming year is Ken Fraser, Commissioner, North Fraser Harbour Commissioners. Members of the board are, from left: Ian Brown, Toronto Harbour Commissioners, secretary-treasurer; Douglas Robinson, Chairman of the Nanaimo Harbour Commission, director; F. K. DeVos, Ministry of Transport, Ottawa, director; W. B. Rest, Toronto Harbour Commissioners, vice-president; Ken Fraser, new association president; J.H.W. Cavey, Ministry of Transport, Ottawa, past-president; Mowbray Alway, Commissioner, Hamilton Harbour Commissioners, director; and M. N. Beshwaty, port manager, National Harbours Board, Montreal, director.



**Boston, Mass.:—Logan International Airport, the eighth busiest airport in the world, is owned and operated by the Massachusetts Port Authority. Logan marked a ten percent increase, in 1972, over the previous year's passenger totals. December 28 marked the 10 millionth air traveler to pass through Logan during the calendar year 1972. (Massachusetts Port Authority)**

control, headed by the Port of Toronto's Brad Guest is tackling this complex problem and is preparing a report for the next annual meeting to be held next year in Vancouver during the early part of September.

Following the Trois-Rivieres meeting, members of the association went on a field trip to take a closer look

at Quebec's North Shore ports of Baie Comeau, Port Cartier and Sept Iles.

Other members making up the association's new Board of Directors include: W. B. Rest, Toronto Harbour Commissioners, vice-president; J. H. W. Cavey, Ministry of Transport, Ottawa, past president; Ian Brown, Toronto Harbour Commis-

sioners, secretary-treasurer; Douglas Robinson, Chairman of the Nanaimo Harbour Commission, director; F. K. DeVos, Ministry of Transport, Ottawa, director; Mowbray Alway, Commissioner, Hamilton Harbour Commissioners, director; and M. N. Beshwaty, port manager, National Harbours Board, Montreal, director.

## Groundbreaking Ceremonies for World Trade Center

Baltimore, Md., September 26 (News Release from Maryland Department of Transportation, Office of The Secretary):—Groundbreaking ceremonies for the World Trade Center are scheduled for Thursday, October 4, 1973, at 10:00 a.m. at Pier Two, Pratt Street, in Baltimore's Inner Harbor.

Participating in the ceremonies will be Louis L. Goldstein, State Comptroller; William Donald Schaefer, Mayor of Baltimore City; Harry R. Hughes, Secretary of the Maryland Department of Transportation; and Joseph L. Stanton, Maryland Port Administrator.

The structure will be financed through the State Department of Transportation's unique Transportation Trust Fund as part of the Maryland Port Administration's program of development and expansion of port facilities. To assure the continuation of Baltimore as a growing shipping center, the plan for port progress has scheduled more than \$250 million of transportation funds to be spent in the 1970's and 1980's for development of needed terminals, cargo areas, berths, a cruise building, and other waterfront facilities.

The 30-story pentagonal Trade Center tower was designed by the architectural firms of I. M. Pei and Partners of New York, and Richter, Cornbrooks, Matthai, and Hopkins of Baltimore. The building will have approximately 313,000 square feet of rentable office space and will house the offices of port-oriented businesses as well as the headquarters of the Maryland Port Administration of the Maryland Department of Transportation.

Five massive claw-shaped concrete piers—one located at each corner of the structure—and a central core will support the building. Additionally, there will be 65-foot clear spans on each floor with almost 60-foot long glass areas on each side. The Trade Center, located in Waterfront Park, and planned to link Baltimore's waterfront to the city, will be the neighbor of the U.S. Frigate Constellation.

J. W. Bateson Company, Inc., of

Dallas, Texas, was low bidder to construct the Trade Center at a cost of \$21,033,000. The bid was at least two million dollars less than original estimates. The State Board of Public Works gave approval in August 1973 for the World Trade Center, first proposed almost nine years ago.

Structural engineers are Weiskopf and Rickworth of New York; mechanical and electrical engineers are Henry Adams, Inc., of Baltimore and Cosentini Associates of New York. Foundation consultants are Mueser, Rutledge, Wentworth, and Johnston of New York.

The Trade Center is expected to be completed by the Spring of 1976.

## For Increased Traffic

Buffalo, N.Y. (Niagara Frontier Transportation Authority News Letter, July/August 1973): — The Niagara Frontier Transportation Authority has launched a concerted effort to attract additional general cargo liner ships, container feeder ships and other steamship lines to call on a regular scheduled basis at the Port of Buffalo.

The marketing program is being directed by Matthew Carroll, manager of the NFTA's Marine Division, and Arthur Lancaster, trade development consultant for the NFTA.

The program's purpose is to overcome the decline in general cargo tonnage imports and exports, with a special emphasis on the Port of Buffalo.

The Authority executives have distributed a general questionnaire to major industrial firms in the area in an attempt to get a projection on the potential tonnage produced by local firms for export and possible imports. The replies to date indicate that approximately 100,000 tons of general cargo could be shipped through the Buffalo Port Terminal complex.

Conferences are presently being held with steamship lines in an attempt to secure regularly scheduled service to the Port.

## Managers Appointed

Charleston, South Carolina, August 30 (News from South Carolina Ports Authority: — Charles M. McSwain has been appointed national manager of special accounts

for the S.C. State Ports Authority.

McSwain's appointment to the newly created position is effective August 31, according to Charles A. Marsh, director of Trade Development for the Ports Authority.

Donald C. Bradham will succeed McSwain as Charleston-Southeast Regional Sales Manager. Bradham, an employee of the Ports Authority since 1961, has served as McSwain's assistant since last October.

In his new post, McSwain will provide special adjunct services to the SPA's offices at New York-Northeast Region; Chicago-Midwest Region; Greenville/Spartanburg-Central Region, and Charleston-Southeast Region. He will have responsibilities in all aspects of the Ports Authority's nationwide sales program.

Brandham's Charleston-Southeast Regional Office will service an area south of the District of Columbia which includes all or portions of eight (8) southeast states.

McSwain, 44, is a native of Gaffney, S. C. He joined the Ports Authority in 1959. He was a supervisor in the Operations Division and served as manager of the Ports Authority's Charleston cold storage operations prior to joining the sales staff in 1969. He was named Charleston Regional Manager in October, 1970.

Bradham, a native of Indianapolis, Ind., is a veteran of 27 years in the transportation field, having served 15 years with Southern Railway before joining the Ports Authority as traffic manager in 1961.

## 1973—1974 Cruise Guide

Hollywood-Ford Lauderdale, Fla., 9/27/73 (Port Everglades News): — Port Everglades' 1973-74 Cruise Guide, a 40 page booklet listing all fall and winter sailings, is now being distributed. Single copies may be obtained at no charge by writing to: Port Director, Port Everglades Authority, Port Everglades, Florida 33316.

## Another Record Tonnage Year in Sight

Houston, Texas (Special), 10/3/73 (Port of Houston News Release): —The Port of Houston appears



headed for another record tonnage year based on statistics through the month of August which show the Port running 30% ahead of 1972 which, in itself, was a record year.

Through August the Port had handled 56,876,835 tons of cargo compared to 43,542,386 for the same eight month period a year ago. The grand total for the year was 71,430,789 tons for the year.

Of real significance is the tremendous jump in the amount of general cargo foreign trade handled which, at the end of August, stood at nearly 4,000,000 tons as against 3,000,000 tons a year ago at that time. It is general cargo, requiring considerable handling, which generates the most economic activity in any port and for this reason the growth in this category is considered most significant.

The continuing heavy export of wheat and other bulk grains is the main factor in the Port of Houston's excellent tonnage mark this year and more than 1,260,000 tons were shipped during the month of August, alone. Total foreign bulk cargo through the first eight months of 1973 is more than double the same 1972 period and stands at 18,000,000 tons as against just over 8,000,000 tons a year ago.

Coastwise bulk shipments are also up, largely bulk petroleum, and stand at 16,000,000 tons through August of 1973 as compared to just over 13,000,000 tons a year ago. Internal barge traffic is slightly down at 15,392,599 tons as against 16,719,227 at this time last year, although local barge traffic for the eight month period was 2,622,450 tons as compared to 1,803,800 in 1972.

Container movement at the Port is up some 80% in the first eight months of 1973 and more than 80 thousand 20-foot units or their equivalent were handled as compared to 44,589 a year ago. Of this total 45 thousand containers moved in foreign trade as compared to only 17,000 containers a year ago. The remainder were in the domestic container service between Houston and the East Coast, with 35,675 units handled in the first eight months as compared to 27,518 during the same period in 1972.

## Port Delegation Returns from Soviet Trade Trip

**"PROGRESS" September, 1973  
Port of Oakland, Calif., U.S.A.**

The Soviet Union's new major seaport in the Far East, Nakhodka, is building for a boom in cargo tonnage and shipping traffic, and its expanding services could include a direct steamship link with the United States.

That was evident to a six-man delegation from the Port of Oakland which recently visited Nakhodka at the invitation of the Far Eastern Shipping Company (FESCO), which operates the port and transportation services.

The Oakland delegation was headed by Mayor John H. Reading and Port Commission President Thomas L. Berkley and included Port Commissioners Ted Connolly and Robert E. Mortensen, Port Executive Director Ben E. Nutter and Public Relations Director Charles Shifert.

"We were invited by FESCO, the Soviet steamship line that regularly calls at the Port of Oakland, to visit the line and to see port operations at Nakhodka," Berkley said. "We felt it was important to make personal contact with the port and

steamship people and, hopefully, to improve our relationship and trade with the Soviet Union."

### Sister Port

As a result of warm and friendly meetings between the Oakland port people and their Nakhodka hosts, which included the Mayor of the city, N. Kuksov, and Valentin P. Biankin, President of FESCO, a sister city and sister port affiliation were proposed.

"Mayor Kuksov and Mr. Biankin were most interested in establishing that kind of relationship with Oakland," said Reading, "and we expect to receive confirmation shortly that a sister port and sister city affiliation can be finalized," he said.

The Oakland port group was impressed with the cargo activity at the Port of Nakhodka and the major expansion projects underway. During their two-day visit to the port, located 55 miles east of Vladivostok, all 18 of its berths were occupied, and an additional 22 ships were waiting at anchor. The berths are served by 80 cranes and handle large exports of coal and timber.

### Container Berths

Besides the berths at Nakhodka, construction of a new container terminal is nearing completion. The facility includes two berths, served by two Japanese-built container cranes and two "transtainer-type" cranes for moving containers on and off rail cars. It will open next month for FESCO's container service to Japan.

These port facilities, through which approximately 9.5 million tons of general cargo move annually, have made Nakhodka the largest Soviet Far Eastern port and the country's gateway to the Pacific. It

The same ratio is reflected in the container movement during the month of August where nearly 11,000 containers were handled as against 7,000 a year ago and the movement in foreign trade was about twice what it was in August last year or 6,336 of the 20-foot units or their equivalent in 1973 as compared to 3,429 of these units in August 1972.

There were 3,238 ships which had entered through August as compared with 2,746 in 1972, and of these 297 were American cargo vessels, 1,938 were foreign cargo vessels, 495 were American tankers and 508 were foreign tankers.

is also the Far Eastern gateway to the interior of the nation and Eastern Europe via the trans-Siberian railroad, which has its terminus less than a mile from the Nakhodka docks.

When the first phase of the development at nearby Vostochny is completed in 1975, eight additional berths will be placed in service. The facilities at Vostochny will include two berths for coal shipments, two for logs and wood products, one for wood chips, two container berths, and one for roll-on/roll-off vessels.

Eventually, the port plans to have 62 berths and Nakhodka port officials expect to increase the annual tonnage by 35 million tons, including 10 million tons of coal, making Nakhodka one of the Soviet Union's most important general cargo ports.

The first phase of development at Vostochny, which will include, in addition to the eight-berth facilities, an extension of the trans-Siberian railroad and living quarters and services for dock workers, will cost \$1.5 billion.

Soviet trade through Nakhodka, which is mainly centered with Japan, largely consists of raw materials from the Siberian area, including coal, logs and wood products, paper and paper pulp and aluminum ingots. Natural gas from Siberia will also move through Nakhodka via pipeline, and it has potential for trade with the United States.

#### **Oakland-Russia**

When direct two-way trade of general cargo between the United States and the Soviet Union develops, FESCO, which presently operates 12 ships in trans-Pacific service, will be in a position to offer service between Oakland and Nakhodka. FESCO President Biankin said that the ships currently in service, which include two new container ships, would be available for that route, and could be supplemented by additional container ships that are under construction in the Soviet Union and may be assigned to FESCO.

Any Soviet-U.S. trade would be divided between Soviet and U.S.-flag vessels, and American-flag container lines, including Sea-Land,

United States Lines and Seatrain, all based in Oakland, have expressed interest in the trade route.

Biankin told the Oakland port group he would like to see general cargo from Western America bound for Europe move trans-Pacific to Nakhodka and then via the trans-Siberian railroad to Europe. While he concedes the enroute time may be longer than trans-Atlantic, he agrees that the transportation cost savings may offset that in the eyes of the shippers.

#### **FESCO**

FESCO, headed by the 44-year-old Biankin, not only operates the steamship line, one of the largest in the world with 300 vessels, but also operates 10 Far Eastern Soviet ports, including the huge Nakhodka-Vostochny facilities, ship repair and building yards, and educational establishments for navigators and maritime personnel.

The line began service to British Columbia four years ago, and general cargo service to Oakland and other U.S. West Coast ports in June, 1970. The first container ship, Alexander Fadeev, entered service last June.

#### **New Meat Inspection Facility**

New Orleans, La., October 5 (Port of New Orleans News Release):—Construction is underway on a new inspection facility for frozen or canned meats adjacent to the Nashville Avenue wharf at the Port of New Orleans. The new venture is known as New Orleans Inspection Services, Inc. and will be located in the two-million-cubic-foot frozen food warehouse of New Orleans Cold Storage & Warehouse Co. Ltd.

The new inspection room is to be completed by mid-November and will be seven times larger than the current inspection facility in the warehouse. Albert S. Kingett, meat inspection expert who is a veteran of projects in Newark and Philadelphia, joins N. O. Cold Storage in the venture, according to N. O. Cold Storage President Philip G. Kuehn. Kuehn took over the leadership of the company in May of 1973. Clarence E. Boyd joined the firm

in August as manager of the Nashville Avenue warehouse, one of two New Orleans sites operated by the firm.

"We are firmly committed to the proposition that the Port of New Orleans shall and must become one of the major meat importing ports in the United States," said Kuehn. "The creation of New Orleans Inspection Services Inc. is a major step in this direction."

The new facility will be in full compliance with United States Department of Agriculture requirements. The warehouse is served by railroad spur tracks and truck loading bays. Considerable tonnage of frozen meats from Australia and Argentina have been handled at the plant during the past several years.

"This new inspection facility will be a major asset to the port," said Port Director E. S. Reed. "We can expect substantial increases in imports of frozen and canned meats."

#### **U.S. Customhouse at the World Trade Center**

New York, October, 1973 (News from The Port Authority of New York and New Jersey):—The new United States Customhouse at The World Trade Center opened for business on October 15, marking the beginning of a new era of service for importers, Custom House brokers, steamship lines, and other members of the Port of New York-New Jersey's world trade community. For the first time, with the consolidation of U.S. Customs Services in The World Trade Center, the bi-state Port will be able to offer international businessmen a full range of international trade services on one location.

All imports must clear through Customs; therefore customs documentation and clearance represents the hub of the administrative processing in moving goods into the United States. This was a significant factor in the assumption, made at the outset of the planning for The World Trade Center, that the Customs Service should be included as the keystone of foreign trade operations conducted in the Trade Center.

Consolidation of the U.S. Customs

Service on one modern and specifically designed facility will permit more efficient handling of the increased volume of business anticipated over the next fifteen years than in the outmoded quarters now occupied by Customs Service personnel.

The new eight-story Customhouse, located on the northwest corner of The World Trade Center site, houses Entry Control, Merchandise Control, Cashier Branch, Baggage and Cargo Branches, Carrier Control, Customs Patrol Officers, Duty Assessment Teams, Fines, Penalties and Forfeitures Unit, Imports Compliance Unit, and Customs Information Exchange.

The new Customhouse, which contains some 770,000 square feet of floor space, includes truck loading and unloading positions in the sub-grade areas reached by ramps from surrounding streets, thus eliminating the need for truck operations at curbside. The most modern and efficient facility of its kind in the world, the new Customhouse includes a 5,000-square-foot exhibit area describing the history and activities of the law enforcement branches of the United States Treasury Department.

In addition to the United States Customs Service, more than 300 world trade firms and organizations are housed in the project. These include exporters, importers, freight forwarders, custom house brokers, steamship lines, agents and brokers, international banks, trade associations, foreign government trade offices, and others involved in international trade.

The World Trade Center, which opened for business in December, 1970, is being constructed by the Port Authority of New York and New Jersey. Its purpose is to expand the flow of international trade by bringing together businesses and government agencies involved in the marketing and processing of this trade.

### Shipside Refrigerated Area

New York, Oct. 11 (News from The Port Authority of NY & NJ): —In order to maintain the competitive position of the New Jersey-New



**San Francisco, Calif.:**—**"THAT OLD GANG OF MINE"** might have been the refrain recently in San Francisco, when key "red tape" cutters met to review progress in reducing, simplifying and standardizing trade and shipping paperwork and procedures. Longtime facilitators at the "Operation Update" sponsored by the Marine Exchange included (from left), committee chairman J. J. Greene, vice president, General Steamship Co., Ltd.; Harold Harriman, deputy director of the Office of Facilitation, U.S. Department of Transportation; Arthur E. Baylis, executive director of the National Committee on International Trade Documentation (NCITD); Howard Henke, NCITD general business committee chairman, Union Carbide Corp.; and George F. Begnal, NCITD technical committee co-chairman, General Electric Co. Included in four days of sessions by the Golden Gate was discussion of a proposed March, 1974 Pacific Basin Facilitation Conference, early trans-Pacific shipping data transmission tests, major progress in eliminating Latin American consular invoice requirements, and a number of progress reports on significant advances in reducing U.S. "paperwork." (Marine Exchange of the San Francisco Bay Region, 10/11/73)

York Port as a leading East Coast center for importation of frozen meat and other perishable commodities, a new, 50,000 square-foot refrigerated area at shipside will be developed at Port Newark by next spring, it was announced today by Port Authority Chairman James C. Kellogg, 3rd, following the monthly Board meeting at One World Trade Center.

The new temperature-controlled space, to be built in Transit Shed 153 on the south side of Port Newark, will permit vessels to discharge their entire refrigerated cargo at once, and to have it picked up at will directly from shipside during the free time period. At present, refrigerated cargo can only be discharged at the rate at which it can be delivered. Shipside refrigerated space is available at competing East

Coast ports, and this has put the New Jersey-New York Port to a great disadvantage.

Transit Shed 153 will be leased by the Port Authority to Refrigerated Express Lines Pty., Ltd., which will construct the temperature-controlled area within the shed by next May. The company is a major transporter of frozen meat from Australia in breakbulk vessels.

Several other commodities can be handled at the refrigerated terminal, including frozen fish and imported fruits and vegetables. The line will shift to the new shipside facility at Port Newark a considerable amount of this type of cargo now discharged at other East Coast ports.

The new refrigerated area in Shed 153 will include 30,000 square feet of freezer space for the handling of



**San Francisco, Calif., California Marine Affairs and Navigation Conference, 10/25/73):**—PAUL SORENSEN, new president of the California Marine Affairs and Navigation Conference, was recently congratulated by Joseph E. Bodovitz (center), executive director of the California Coastal Zone Conservation Commission, and Col. J. V. "Jack" Foley, newly-assigned Los Angeles District Army Engineer. Sorensen, Port of Oakland chief engineer, presided at the San Diego meeting of the 18-year-old organization of commercial ports and recreational harbors, at which Bodovitz was a featured speaker. Elected also to serve 1973-74 terms were Bob Hoffmaster, Port of Long Beach chief engineer, as vice president and K.C. "Kris" Klinger, general manager of the Ventura Port District, as treasurer. Robert Langner was reelected executive director.

two ships simultaneously. The remaining 20,000 square feet will be chill space for the handling of fruit and other perishables. Long-term storage cargo will continue to be handled in the Port Authority cold storage warehouse as at present.

The cost of the new facility, which is not to exceed \$1.6 million, will be borne equally by the new tenant and the Port Authority. The rent for the facility under a five-year lease will be based on \$2 per ton of revenue cargo using the terminal.

### Crises in Navigational Dredging

San Diego, Calif., 9/28/73 (News Release from CMANC, California Marine Affairs and Navigation Conference):—"With a little bit of luck, lots of common sense, and some give-and-take by all, maybe we can prevent ultimate closedown of many major U.S. harbors' is the hope of J. Monroe Sullivan, chairman of a special dredging conference set for Saturday, October 13 in San Diego.

The Port of San Francisco consultant heads up a participants' list

which includes officials of the Environmental Protection Agency, U.S. Bureau of Sports Fisheries and Wildlife, California Water Resources Control Board and Department of Fish and Game, and the Army Corps of Engineers.

Planned by the California Marine Affairs and Navigation Conference, the one-day session is also sponsored by the American Association of Port Authorities, Port of San Diego and World Dredging Association.

Non-agency input will be assured by the Sierra Club, the Port of Los Angeles and C-MANC's S.F. Bay Region dredging committee.

Heavy advance registration noted by Sullivan indicates major interest in the theme, "ecology, economics and dredging—a balancing point for navigation." He cited Federal and state regulations and "guidelines" as presently threatening to prevent, delay or make extremely costly necessary dredging of access channels. Concern over possible detrimental effects of dredging, expressed by agencies and environmentalists, will also be aired at the sessions

which begin at 10 a.m. at the Travelodge Inn, Harbor Island.

"If this approaching impasse is not resolved, the outcome can only be drastically reduced ship traffic and major inhibition of recreational boating," the chairman commented. "Our hope is that the dialogue—and strong participation from all attending—will help find the necessary common ground."

### Shipping Paper Cutters Meeting in S.F.

San Francisco, Calif., 9/27/73 (Marine Exchange of The San Francisco Bay Region):—Key U.S. government and industry leaders in the campaign to cut world trade and shipping "red tape" will gather in San Francisco for an "operation update" session October 4.

The Thursday event will include U.S. Department of Transportation and Bureau of the Census officials, plus representatives of the National Committee on International Trade Documentation. Sponsored by the San Francisco Marine Exchange, the program will open at 10 a.m. at the Westbury Hotel and continue through a luncheon session.

On hand to describe recent major breakthroughs in the battle to reduce excessive documentary and procedural impediments to the nation's world commerce—estimated to add up to \$7½ billion annually to the cost of doing business—will be NCITD executive director Arthur E. Baylis, acting director of DOT's office of facilitation Harold Harri-man, and Census Bureau deputy foreign trade chief, Joseph Freeman.

Outlook reports will also be made by NCITD's technical committee co-chairman, Robert Porter of Eastman Kodak Co., and George Begnal, of General Electric International.

Exchange facilitation chairman J. J. Greene, vice president of General Steamship Corp., Ltd. will preside at the roundup meeting, which will include discussion of trans-Pacific satellite relay transmission of ships' manifests, testing of new Customs import documentation procedures, commodity coding, intermodal paperwork needs, efforts to eliminate use of consular forms, and other ele-

ments of the ongoing national program.

Reservations are obtainable from the Exchange, 303 World Trade Center, San Francisco (415 982-7788).

## PPI Symposium

Brussels, 9 October, 1973:—The First International Symposium on Transport and Handling in the Pulp & Paper Industry will be held 1-3 April, 1974 at Rotterdam Hilton, Rotterdam, The Netherlands.

The Symposium is being organized and sponsored by PPI (Pulp & Paper International), the leading journal for the international pulp and paper industry to rationalize and improve its transport and handling procedures. Further information may be obtained from:

Pulp & Paper International  
123a Chaussee de Charleroi  
Brussels 1060  
Belgium

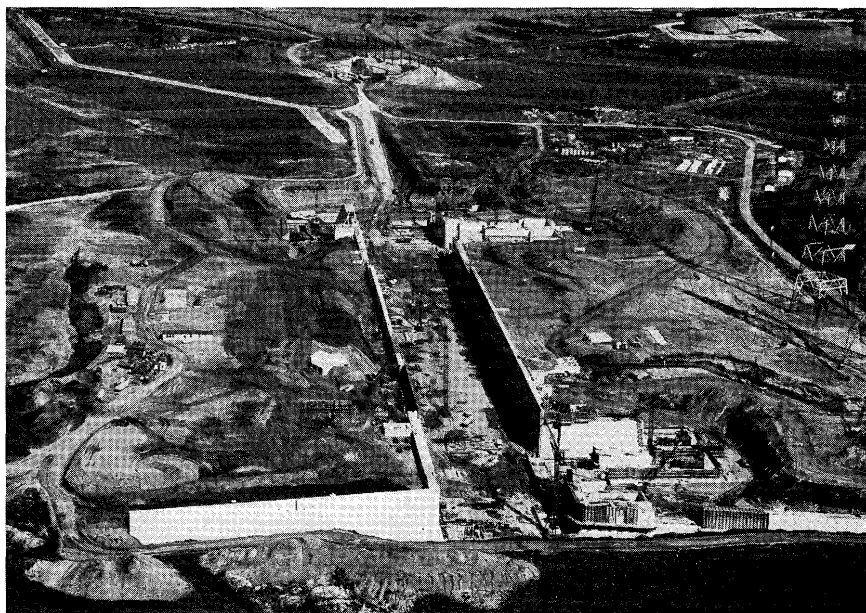
## "Ocean Engineering"

"Ocean Engineering" is an international journal published bi-monthly by Pergamon Press Ltd., Headington Hill Hall, Oxford OX3 0BW, England. The Editor-in-Chief is Alan A. Johnson, Polytechnic Institute of Brooklyn, New York, USA. More information may be obtained from the publisher.

## 7,000 Hectares for the New Port

Antwerp, 21.9.1973 (Port of Antwerp):—On April 1, 1971 the construction of a sea lock (360 m × 50 m) on the left bank of the river Scheldt started. This date can be considered as the take off of the vast expansion project for the port of Antwerp, aiming at the development of an area of 7,000 hectares (the present port located on the right bank of the river covers over 10,000 hectares).

Since then the works continued. Today a first zone of 1,250 hectares has been expropriated and expropriations are carried out in the second zone of 1,600 hectares. The works at the lock entered the last phase; the cost, including the bridges over the lock, amounts to 2.7 billion



**Antwerp:—Vast expansion being carried out at the Port of Antwerp. See news below.**

Belgian Francs (about \$67.5 million).

Several industries are already established in the new area. The German chemical companies Bayer (200 hectares) and Haltermann (34 hectares) and the French Progil (160 hectares) as well as two electric power stations, a thermic station in operation on a site of 65 hectares and a nuclear station under construction on 87 hectares.

Other works carried out include construction of roads and railroads. End of June the building of a tunnel under the future canal dock was allocated for an amount of 1.4 billion Belgian Francs (\$35 million). Completion of the lock and the first dock is scheduled for 1975.

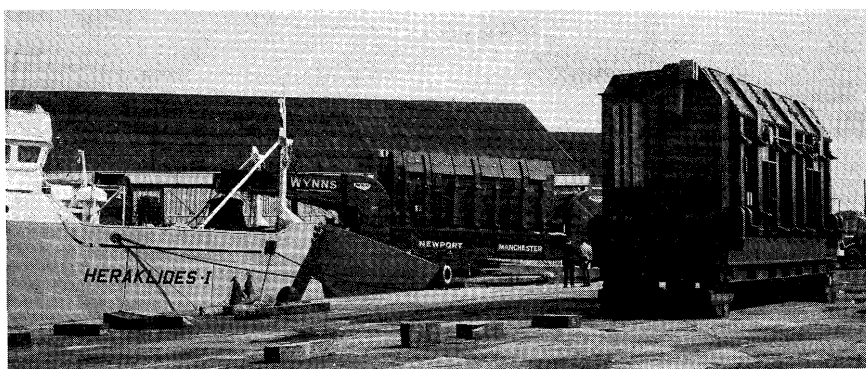
## Grains Trade to Switzerland

Ghent, Belgium (Port of Ghent Information Periodical, 2-73):—Since June 1972, Euro-Silo, Ghent, located at numbers 96 and 97 of the "Schepen Sifferdok", has made an innovation in European transport. Overseas grains are now being regularly conveyed via Ghent to Switzerland by train instead of being shipped via the Rhine. End of February, 60 trains, each carrying 1,200 tons, had already transported 72,000 tons from the port of Ghent to Basle.

A few interesting data with regard to this trade:

- Euro-Silo, Ghent, can store about 48,000 tons. The plant is equipped with pneumatic elevators having a capacity of 1,000 tons per hour. A fully automatic system assures the discharge, the loading, the measuring, the storage and the repartition of cereals and similar products;
- goods traffic to Switzerland is assured by closed waggons having a carrying capacity of 96 m<sup>3</sup> or approximately 60 tons;
- it only takes 6 minutes to load a wagon by means of conveyorbelts. Thanks to this continuous system a complete train of 20 waggons is loaded in 2 hours' time;
- the train covers the distance of 600 km between Ghent and Basle in less than two days. From Basle the waggons are directed to their final destination and within six days they are ready to return to Ghent;
- besides Basle and Ghent, the transport pattern also includes Dijon in France, as French cereals are brought to Ghent by the same train to be distributed in Belgium and overseas;
- thus the waggons only run empty between Basle and Dijon, which is





**Manchester (The Port of Manchester):—HEAVYLIFT—**Recently two 270-ton Ferranti transformers were winched aboard the heavylift vessel *Heraklides I* at the RO/RO berth, Manchester Docks.

The transformers, plus their ancillary equipment, totalled approximately 650 tons—the largest such consignment Ferranti have ever shipped to an overseas market. Bound for the Portsmouth Naval Dockyard, Virginia, the transformers are to be used on the Tennessee Valley Project.

The loading operation was fairly complicated as the vessel had to swing twice to return stern on to the loading ramp in order to discharge the heavy-duty traction units.

The *Heraklides I* (127 NRT) is a multi-purpose vessel. The opening bow allows heavylifts onto the flush-deck whilst the stern ramp gives access to a lower deck which can carry cars in two tiers. Built in Spain during 1971, the vessel was subsequently sold to French owners and was on charter to Sutcliffe International Freight Services for the Manchester operation.

but a short distance. That way freight cost can be kept low.

This achievement, based upon co-operation between Swiss firms and Euro-Silo, Ghent, has added to the Swiss economic security.

### Pipeline Across Firth of Forth

Alton, Hampshire, England, 2nd October (Press Information from Bos Kalis Westminster Group):—Land & Marine Engineering Limited, of Bromborough, Cheshire, who

specialize in the construction and laying submarine pipelines and who recently pulled ashore at Cruden Bay, Aberdeenshire, the first oil pipeline to the U.K. coast from the British Petroleum North Sea Forties Field, are now involved in the land-line section of the operation.

In a contract awarded them by British Petroleum Development Limited, Land & Marine are constructing, laying and testing a 914 m (36 inch) diameter pipeline across

the Firth of Forth from Bo'ness to Torryburn.

The crossing is approximately 5 km in length and will form part of the pipeline to carry North Sea oil from the Forties Field ashore at Cruden Bay, down the East Coast of Scotland and across the Forth to B.P.'s Grangemouth Refinery.

A construction area approximately 500 m long by 50 m wide has been reclaimed from the sea adjacent to the Oil Harbour at Bo'ness with 80,000 tons of inflated fill from the nearby Kinneil Colliery Tip and it is on this site that Land & Marine are forming eleven 400 m strings.

The pipe is API 5LX60 36" diameter with a wall thickness of  $\frac{5}{8}$ " and is coated with 3 mm of coal tar enamel and  $2\frac{1}{8}$ " of heavy density (Ilmenite) concrete as a weight coating. This concrete is reinforced with BRC Mesh 36, weight 3.84 kg per square metre. The pipes are being concreted on the site and then welded into strings before the joints are made good, each string being supported on concrete plinths at 15 m centres over which they will be rolled during the pulling procedure.

Dredging . . . On the north side of the Forth a  $1\frac{1}{2}$  km causeway has been laid from which a trench will be excavated by using conventional draglines and from which approximately 750 m pipes will be backlaid. The dredging is being carried out by Westminster Dredging Company's floating grab crane "W.D. Challenger", with a 14 cu m grab. The excavated material is loaded into hopper barges of 1,000 cu m capacity and towed by tug to the Oxcars dumping ground. The line of the trench is being controlled by Trisponder equipment, and the trench profile is being checked continuously using hydrographic echo sounding equipment.

The launching itself will take place over a period of 4/5 days continuous pulling using two of Land & Marine's 150 ton capacity hydraulic winches and the total pulled weight of the line in water will be approximately 300 tons.

The trench will be backfilled after the pipeline is in position so that the pipe is at least 2 m below the bed level.

The work is scheduled for completion by the end of the year.

Land & Marine Engineering Limited are members of the Bos Kalis Westminster Group.

### **Felixstowe Go All the Way to Meet the Customer—in New York, Montreal and Toronto**

Felixstowe, 22 October (News from Port of Felixstowe):—Next month, in their most ambitious overseas 'meet the customer' campaign so far, the Port of Felixstowe are holding receptions for leading shipping lines and existing and potential users in New York, Montreal, and Toronto. Led by Mr. Stanley Turner, group managing director of the Felixstowe Dock & Railway Company, the port will be 'at home' in the Plaza, Toronto, on November 14 and 15, 1973, respectively.

Since 1971, when the first presentation in the current series took place in Hamburg, Felixstowe has held seven successful receptions throughout Europe. During this time, the cargo handled at this major British East Coast port has increased by nearly 30 per cent to the present record of more than three million tonnes a year.

Already over half the major North Atlantic container operators are using Felixstowe and, in the past 12 months, more than 127,000 containers—equivalent to well over 160,000 TEU's—were handled through the port. Within the past few weeks, the 700 ft. extension to the container quay has been brought into use together with a third Portainer crane.

According to Mr. Turner, "One of the main aims of these receptions is to meet the customers and attract traffic for existing users and shipping lines. Nevertheless," he says, "we also find these visits an excellent way to generate new business and, as only one direct result of our Paris reception earlier this year, in November DD Ferries are launching a new daily roll-on/roll-off service between Felixstowe and Dunkirk—our first direct link with France".

But the port will judge the trip successful if they simply succeed in pin-pointing for many more leading

American and Canadian shippers, the geographical advantages of Felixstowe as the nearest UK port to Rotterdam with fast, easy access throughout Britain via the Freightliner rail network and road distribution, plus excellent short-sea feeder services to the rest of Europe and Scandinavia.

Regular transatlantic and Gulf container services using Felixstowe include American Export Lines, Hapag Lloyd, International Cargo Lines, New England Express, Sealand, Atlantic Gulf Services, and United States Lines. The newest North Atlantic operator attracted to Felixstowe by its speed of turnaround and reputation for reliability is Manchester Liners who have a weekly container service direct from Felixstowe to Montreal and return via Rotterdam.

At each reception, the port's own film 'Growthport' is shown and, by the end of the Toronto reception, the Felixstowe team is confident that some 500 more customers and prospects will have fresh information and up-to-date impression of Felixstowe—Britain's fastest growing port, ideally placed for UK markets and only six hours sailing from Europort and the rest of the EEC.

### **PLA Leasing Mill Sites**

London, 1st October (News from PLA):—Albion Sugar Ltd., associated with Starch Products Ltd., both belonging to the Dutch Royal Scholten-Honig Group (RSH), has signed an agreement with the Port of London Authority for the lease of mill sites Nos: 4 & 5 alongside the PLA's highly successful Tilbury Grain Terminal.

The companies are to develop the sites, totalling some 22 acres, for a new maize milling complex to produce glucose, dextrose and other starch sugars and syrups, together with native and physically and chemically modified starches and derivatives in a concentration and expansion of their U.K. activities. This will be a phased multi-million pounds project.

The PLA are to extend the Tilbury Grain Terminal discharging jetty and facilities to provide for the additional coaster traffic the devel-

opment will bring, as well as the anticipated growth in transshipments.

RSH Tilbury Mill will incorporate in their development a buffer silo to be linked to the PLA high speed conveyor system running from the discharging jetty to the site boundary. There will also be a facility for reverse operation to cater for exports. It is aimed to have the new facilities in operation by late 1975.

The RSH group were greatly influenced in their decision by the availability of land adjoining the well proven Tilbury Grain Terminal and additional acreage at the PLA estate north of the Tilbury Docks for which they have an option for a further 25 acres.

Angus Cameron, PLA Assistant Director-General, welcoming the development said: "This is a logical expansion of grain handling and milling facilities which will bring good business and job opportunities to the port. Last year our Tilbury Grain Terminal set a new record of 1.8 million tons handled and this additional traffic gives us a realistic target of 2 million tons by 1978 as well as new export business through the terminal and other PLA facilities: We welcome this confidence in Tilbury's established performance and will aim to give the service and reliability on which the terminal's success has been built in a highly competitive business".

Mr. Alfred Ellis, Chairman of Starch Products Ltd., said: "The decision for development of the project at Tilbury is a satisfying culmination to many years of endeavour. RSH Tilbury Mill will contribute substantial savings in foreign exchange and increased earnings through exports to the benefit of Britain's balance of payments. This will be a most modern plant in the design of which environmental aspects have been taken fully into consideration to ensure pollution free operation".

### **First Roll-on/Roll-off Terminal for Fleetwood**

London, 30 August (B.T.D.B.):—A contract worth in the region of £¾ million has been awarded by

the British Transport Docks Board to Harbour and General Works Limited of Morecambe, for construction of a roll-on/roll-off terminal at Fleetwood. This is the first roll-on/roll-off berth to be built at the port.

The terminal will be situated at the western side of Fleetwood Harbour in the River Wyre and will be used for roll-on/roll-off services to Ireland. Work on the site is scheduled to start immediately and the terminal is expected to be in operation by the autumn of 1974.

Commenting on the announcement, Mr. A. Winfield, Fleetwood Docks Manager, said, "Fleetwood is expanding fast and is once more becoming an important port in the north-west for traffic to Ireland. The port has the capacity for further development in the inner tidal harbour and at riverside berths and I believe Fleetwood's potential is once again being realized. The Docks Board's investment in this new riverside berth reflects their confidence in this method of cargo handling and transportation."

The terminal has been designed to accommodate vessels with a maximum overall length of 130 metres and a beam of 20.5 metres. Vessels will lie alongside four dolphins and access to the stern door will be gained by a 75 metres long hinged bridge ramp approached by means of an access jetty. The bridge will be operated by electric winches carried on a steel portal structure and supported on two steel and concrete dolphins, which will also function as stern dolphins for the vessel. The jetty will be spanned by a footbridge to carry an existing public footpath. A marshalling area of 3.25 hectares will be provided adjacent to the terminal.

The berth will be dredged to provide a depth of 5.5 metres below mean low water spring tides.

The construction of the bridge ramp and machinery will be carried out by Butterley Engineering of Ripley.

## ***Extracts from Statement for Publication By Mr. Eldon Griffiths, M.P., Minister Responsible for the Maplin Development Made to Leading British Journalists on 19 September 1973***

(This information was released in Tokyo on October 4, 1973 by Mr. John Lunch, Director-General of Port of London Authority.)

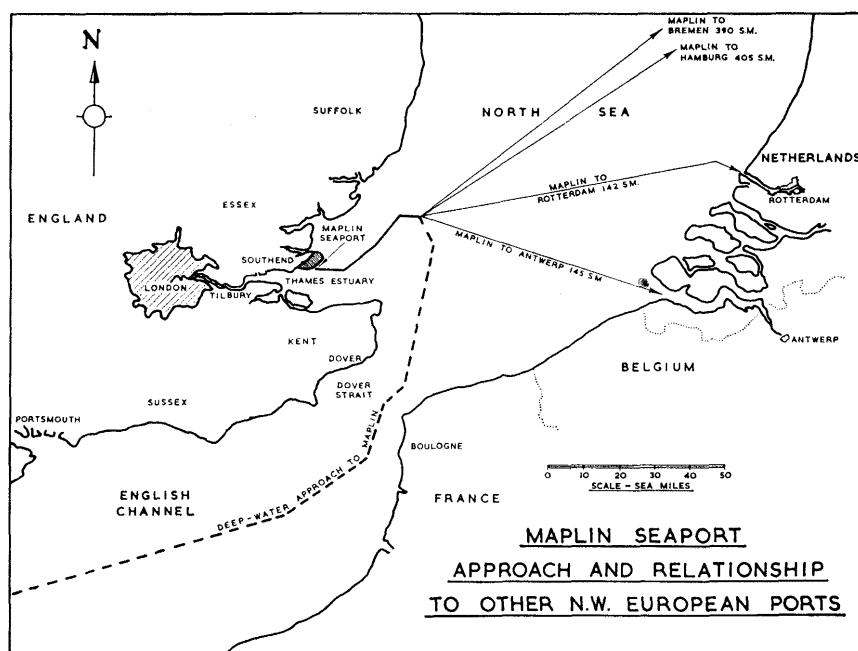
"... The question now arises: Have we in Britain enough vision and confidence in the future to undertake projects like the Channel Tunnel and Maplin? There is a need for both if we want to win our share of the world's increasing trade. There is no doubt that our engineers can build them, and no doubt that can afford them provided that we have the foresight, the courage and the will. All over the world men are building for the future—just as our Victorian ancestors built for the future we are now enjoying. . . ."

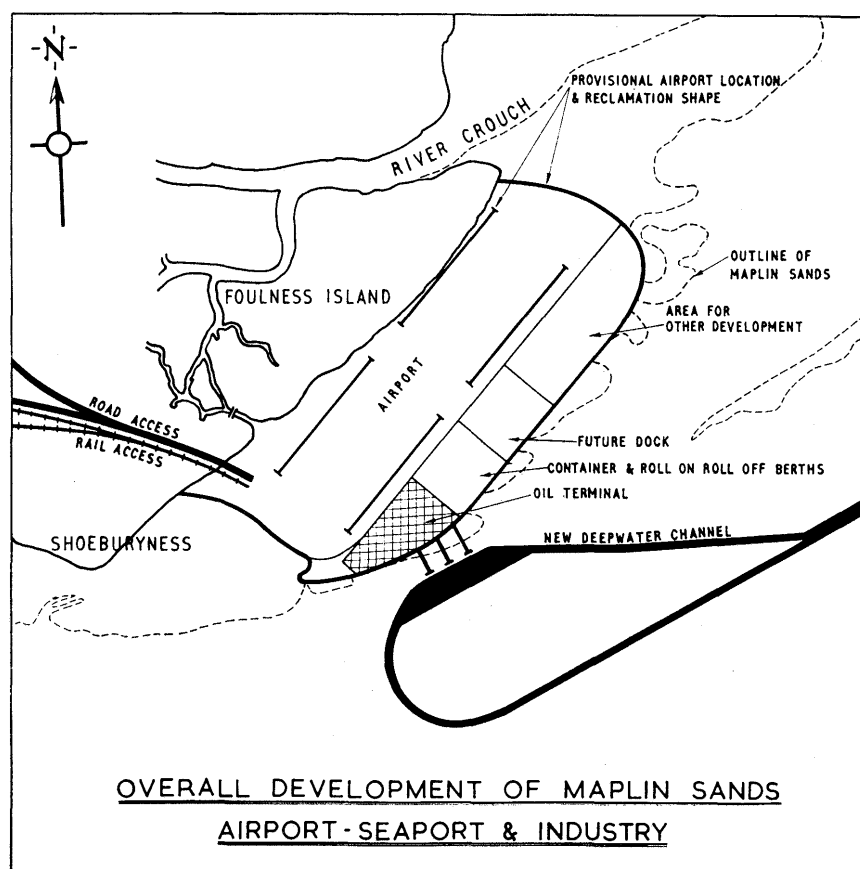
"... Will it be said of modern Britain that in the 1970s we lost our nerve, and national self-confidence? That investment in tomorrow is

something for the Japanese, the Germans, the French, the Russians and the Americans—but no longer for the British . . ."

"... outside the jaded and sometimes inward-looking world of Westminster, Whitehall, Fleet Street and the City, many British people take pride in British endeavours and believe—with the Government—that Britain CAN DO. . . ."

"... So the Tunnel goes ahead, subject to Parliament's approval, and MAPLIN GOES AHEAD, with the comprehensive report which we have promised to make to Parliament before reclamation commences. There has been no "postponement" of Maplin . . . all that has happened is





that a "target" date for the airport, set before the immense amount of detailed planning work we now have done had been undertaken, has now been superseded by a "planning date", a project engineering deadline . . ."

" . . . our decision in favour of Maplin rests firmly on the grounds of national need, social responsibility and regard for our future environment . . ."

" . . . The basic facts about Maplin are that the Government . . . see in Maplin enormous opportunities for the future. First, the opportunity to create the world's most modern and best equipped airport on a site on reclaimed land. Second, the opportunity to produce the site for a seaport located on the edge of deep water so that very large ships will be able to use it without having to negotiate narrow water; and also the opportunity to speed up the release of land for housing and other development in existing dockland areas of London." (Mr. Lunch's note: the airport is scheduled to be completed late 1982, and the seaport earlier, i.e. before 1977.)

### Southampton is U.K.'s Second Seaport

London, 2 October (B.T.D.B.) :— The port of Southampton handled trade valued at £581.7 million during the second quarter of this year and in this period for the first time has become the U.K.'s second seaport in terms of trade, say the British Transport Docks Board.

Customs figures for the period show that Southampton dealt with 8.5 per cent of the U.K.'s total trade, second only to London's share of 18.3 per cent and moving Liverpool out of its traditional position. Even after excluding petroleum traffic from the figures, Southampton's total of £532.2 million was still the second highest for a U.K. seaport.

In terms of tonnage the Docks Board has announced record dry cargo figures for the port so far this year. For the first eight months of 1973 dry cargo imports through Southampton are 50 per cent higher than in the same period last year, at 1,521,086 tonnes. Similarly, exports through the docks have risen to 1,039,747 tonnes, an increase of

375,772 tonnes, giving a total dry cargo trade of 2,560,833 tonnes up to the end of August.

Oil traffic through the port this year has declined by over half a million tonnes, but nevertheless, say the Docks Board, with total trade reaching 20,532,231 tonnes in the first eight months Southampton seems set for another record year.

The number of passengers using the port during the same period has risen by 96,224 to 1,583,276.

### More Passenger Ships

Amsterdam, September 1973 (Amsterdam News Letter) :— Amsterdam remains one of Europe's top tourist draws and the number of visitors arriving aboard cruise ships continues to grow each year.

Part of the allure is the municipally-operated Passenger Terminal Amsterdam (PTA) a few hundred metres behind the Central Railway Station and thus near Amsterdam transportation and entertainment hub. This year well over 40 cruise vessels called in port, and P&O Lines, Chandris Cruises and Lauro Lines based a number of cruises from the Dutch Capital.

### German Minister of Transport Will Open Europort 1973

Rotterdam (Europort Press Release) :—The world's greatest maritime exhibition Europort which will be held from 13–17 November incl. in the Rai-Building in Amsterdam, continues its tradition of attracting official interest.

In previous years this famous International Trade exhibition was opened a.o. by the former Prime Minister of the Netherlands, Mr. P. de Jong, by Dr. J. M. A. H. Luns in his function of Minister of Foreign Affairs, by Dr. P. van Vollenhoven as deputy for H. R. H. Princess Margriet, and by Mr. Christopher John Chataway, Minister for Industrial Development of the United Kingdom.

The opening ceremony of Europort '73 will this year be performed by the His Excellency Dr. L. Lauritzen Bundesminister für Verkehr (West German Minister for Transport) It will take place in the pre-

(Continued on Page 45)

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# First Annual Report 1971-1972

## Port Hedland Port Authority Western Australia

(The report is an elaborate multi-colored 20-page brochure, but here is quoted only the introductory part.)

### Port Hedland Port Authority Act—1970

The Port Hedland Port Authority is a corporate body established by the Port Hedland Port Authority Act of 1970, proclaimed on the 15th June, 1971.

The Authority consists of a Chairman and four members, appointed by His Excellency the Governor. Two of the members appointed by the Governor being nominees of Mount Newman Joint Venturers, and Goldsworthy Mining Limited respectively. Each member holds office for a period of three years, and is eligible for re-appointment from term to term.

As from 1st November, 1970, E. A. Richardson, Esq. was appointed Chairman, and Messrs. R. L. Evans, J. D. Hardie, A. E. Rogers, B. C. Ryan were appointed members. Mr. N. L. Smithson and Mr. D. E. Moore were simultaneously appointed as deputies to Messrs A. E. Rogers and B. C. Ryan respectively.

Under the terms of the Act, the Authority has the exclusive control of the Port and is charged with the maintenance and preservation of all property vested in it. The Authority maintains navigational channels and aids, wharves, cargo sheds, roads and all ancillary facilities necessary for the effective operation of the Port.

Port and Developmental Works such as dredging of channels, provision of wharves, etc. may be un-

dertaken by the Authority subject to prior approval of the Hon. Minister for Works.

The Authority operates the Port's pilotage and signal services, and provides plant, labour and supervision for both shore cargo handling operations and mooring and unmooring of vessels.

Funds for capital works undertaken by the Authority are provided by allocation from State General Loan Fund, private borrowings secured against Debentures or Inscribed Stock, and by the retention of depreciation and reserves from revenue.

### Chairman's Report

The first year of administration by the Port Hedland Port Authority has been a busy one with an increase in port throughput of 2.9 million tons over 1970-71.

Preparatory Works on a new land-backed berth continued, and at the end of the financial year all was ready for the major construction work to commence.

A Hydrographic contract covering periodic survey work of the port and channels was let for a three-year term. After a two-month trial in early 1972, a contract for the provision of a helicopter service to handle marine pilot transfer was effected, and this service commences in July, 1972. It is intended that a Bell 47 single-engined helicopter specially fitted to operate over water in day/night conditions, will be used to transport Marine Pilots between the Port Authority Helipad and the entering or leaving vessel. A back-up Pilot Launch will be retained, on contract, to handle unsuitable vessels.

Six houses for Port Authority

staff were built on locations in Cooke Point and Port Hedland, completing in March this year.

State Shipping Service inaugurated their unit load service to the North West with vessels "Wambiri" and "Beroona," and the introduction of this service has seen a marked improvement in turn-round and tonnage rates.

With one exception, the Port Hedland staff of the Harbour and Light Department, accepted the proffered new employment with the Port Authority, and transferred to the Authority on 15th June, 1971.

I take this opportunity to thank the Harbour and Light Department for their assistance during the transition period, and to record members' appreciation of the efforts of the Port Authority staff which have contributed so much towards the success of our first year of operation.

E. A. RICHARDSON,  
Chairman,  
Port Hedland Port Authority.

### "RAMADAN"

London (Gray, Mackenzie & Co., Ltd., September Bulletin-1973):—The month of Ramadan is expected to commence about the 27th September.

During this month moslems may not consume food or drink between the hours of sunrise and sunset, and this may effect the efficiency of those engaged in manual work. Also at several ports working hours are restricted and these two factors may cause or aggravate congestion at some dry cargo ports.

### Trade Review

Melbourne Harbor Trust Port Gazette, August, 1973:

A 15 per cent fall in trade for the financial year ending 30th June, 1973, was recorded by the Port of Melbourne.

Total trade for the current period amounted to 14,228,546 tons compared to 16,703,546 tons for the previous period, an adverse difference of 2,475,000 tons.

In reviewing the different cargo categories handled during the year the dominant mode of cargo carriage

(Continued from Page 43)

sense of many important international guests on Tuesday 13th November 1973 in the Rai-Congress Centre—Amsterdam at 10 a.m.

was in containers, which amounted to 4.8 million tons as compared to 3.7 million tons (up 30%) over the corresponding period.

The largest proportion of containerized cargo was handled at Swanson Dock, the port's four berth container complex. A throughput of 3.7 million tons was handled by the complex of which Nos. 1 and 2 West Swanson Dock handled 2.9 million tons while the two common user berths on East Swanson Dock handled 964,185 tons. The total number of containers for the year amounted to 251,380 as against 216,888 for the 1971/72 period.

Besides Swanson Dock other specialized areas of the port which handled considerable throughput tonnages of general cargo were the three berth roll-on roll-off complex at Webb Dock and the two roll-on roll-off berths at North Wharf.

A throughput of nearly 2.6 million tons was handled at Webb Dock in the financial year as compared to 2.4 million tons in the previous period, while at the two North Wharf berths nearly 650,000 tons of cargo was handled during the year compared to 547,000 tons last year.

The overall comparison of all sectors of trade during the year recorded increase with the exception of Coastal Imports which fell by 2,820,022 tons (89%) due to the loss in the carriage of crude oil in tankers from Westernport to the Port of Melbourne.

In the other sectors overall totals for Imports Overseas amounted to 4,664,722 tons up 52,910 tons; Interstate 2,607,337 tons up 15,767; while Exports Overseas was 4,097,760 tons up 9,065; Interstate 2,315,403 tons up 181,063 tons; and coastal 179,769 tons up 86,217 tons.

The principal items of Overseas Imports all registered gains with the exception of iron and steel which fell by 26,575 tons.

Wool with 919,800 tons was easily the biggest export item during the year; substantial gains were also recorded in Butter 58,607 tons up 24,330 tons; Meats 376,730 tons up 44,526 tons; Preserved fruit 202,307 tons up 60,853 tons; while considerable falls were recorded in Malt 210,930 tons down 52,631 tons; and Oats

16,171 tons down 13,327 tons.

## Decline in Trade

Sydney, 16th August (The Maritime Services Board of N.S.W. News Item): — The total trade of the New South Wales ports declined to 54.1 million tonnes during the year ended 30th June, 1973, from slightly less than 56 million tonnes during the previous financial year.

This was revealed in figures released in Sydney to-day by The Maritime Services Board of N.S.W.

The total trade for the twin metropolitan ports of Sydney and Botany Bay amounted to 25.4 million tonnes in 1972/73 compared with 27.8 million tonnes in 1971/72. The major fall was in the Port of Sydney where the trade for the last financial year declined by almost 2 million tonnes.

The principal factors contributing to the decline were the decrease of more than 1.3 million tonnes in the overseas export to wheat coupled with a decrease of almost 400,000 tonnes in the overseas export of coal.

There was also a 10% fall in the trade of the Port of Newcastle from 15.3 to 13.7 million tonnes and again the main factor contributing to the decline was the falling off in coal exports.

Of the four major ports of the State, the only one to show an increase in trade was Port Kembla where a record 14 million tonnes were handled in 1972/73 compared with 12.2 million tonnes in the previous financial year.

All sections of the Port Kembla trade recorded an increase but the major increase related to imports from interstate of ironstone which reached almost 6 million tonnes during 1972/73 compared with 4.5 million tonnes the previous year.

## As We Go to Press

Nagoya, August 1973 (Nagoya Port News, No. 1): — **Inaugural message for the Port News (4-page tabloid) by Mr. Mikine Kuwahara, President of Nagoya Port Authority, Governor of Aichi Prefecture:**

The role of any modern port and

harbor is taking on the increasing complexity and manifold diversity of the far-reaching rationalization seen today with transport and the accompanying revolution in distribution. Port of Nagoya is no exception to this. It has been quick to move with the times, building container wharves, a ferry terminal and roll-on/roll-off facilities to meet an ever new, fast-moving situation.

The purpose of this modest publication is simply to keep you posted on the latest at our Port of Nagoya and to provide you with up-to-date information on some of the great advantages that are yours whenever you use its fine facilities.

Port of Nagoya is Japan's third largest port and one of the truly great ports of the world. While contributing in no small way to both the local and international economy, it also is becoming more and more a part of people's lives here, in what is surely one of the most promising, exciting areas in the entire world. Thus, if these pages help to make the "action" at Port of Nagoya even a little better known to our friends everywhere, it will have served some purpose.

## Cargo Handling Surpasses 70 Million Tons in '72

Nagoya, August 1973 (Nagoya Port News, No. 1): — Port of Nagoya statistics for 1972 are just out. Ships of call numbered 61,269 and gross tonnage totaled 87,153,199, a 3.4% gain over the previous year. Cargo traffic climbed to 70,305,250 tons, a 1% increase over 1971.

Foreign trade cargo handling volume came to 32,242,000 tons, some 1.4 million tons below figures for the year before. This decrease can be laid to the sharp drop in exports to America as well as fewer imports of raw materials. Domestic cargo, however, rose to 18,063,000 tons, two million more than earlier figures. The added 900,000 tons of cargo handled by long-distance ferries since their inception in February of a year ago, were one great contributing factor.

Containerized cargo volume exclusive of feeder outputs to other ports reached 1,041,000 tons, an

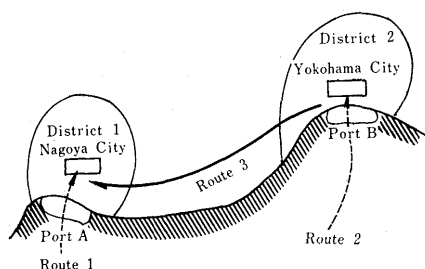
18.3% increase which evidences the ongoing growth of containerization. The 2.6% decrease in the number of ships calling at Nagoya in 1972, despite a 3.4% increase in overall tonnage, underlines the present trend to greater ship size.

### Economic Benefits from Port

Nagoya, August 1973 (Nagoya Port News, No. 1):—Since 1969, the Nagoya Port Authority has conducted a "Quantitative Analysis of Port of Nagoya's External Economy Effects in the Tokai District." Results of this study point to a 40% "external economy" benefit from the Port on the overall Tokai economy as gathered from total production figures for the 4 prefectures of Aichi, Mie, Gifu and Shizuoka. Although the favorable influence of Port of Nagoya on the surrounding economy has generally been acknowledged as considerable, only one other port in Japan (Kobe, 1967) has made a similar analysis to ascertain the close connection between the port and regional economy.

In another phase of the same research, a provocative series of speculations were made, based on the hypothetical situation in which "Port of Nagoya does not exist."

Port of Nagoya was considered, for example, as Port A and Yokohama Port as Port B. Raw materials from abroad actually reach destinations in Nagoya or Yokohama by respective routes 1 or 2; following arrival at either of the above ports, the materials are then transported inland. For the sake of convenience, the study treated Nagoya City as the center of given inland area No. 1 and Yokohama City as the heart of inland area No. 2. Assuming that the maritime shipping costs from the materials' place of origin to Port A or B are the same—and by and large this is the actual situation—any discrepancy in cost to the recipient in Nagoya as opposed to Yokohama could be shown as the difference in overland freight changes when one uses either the port of route 1 or 2. If this overland transport cost alone is taken as the determining factor, then the port with cheaper overland costs in transporting the materials to the recipient's door could be said to have the economic edge.



But when Port of Nagoya was considered hypothetically non-existent, another factor emerged: the recipient of the above materials in this case would be forced to avail himself of the route 2 port because no route 1 port exists. Thus the materials shipped via route 2 port now would have to be shipped overland, reaching Nagoya from Yokohama by a third, overland route. This, naturally, means that transport costs for route 3 will run considerably more than with route 1 port, and a considerable loss results to the recipient of the raw materials in Nagoya. This is equally true for any firm which might otherwise be exporting materials through Port of Nagoya.

With this in mind, figures for none regions of Japan were calculated as to transport cost per product/category (textiles, machinery, etc.) and time/distance. Then a cost-analysis was run for various alternate means of transportation on the supposition that there was no Port of Nagoya, using the new different trade coefficients and a Regional Industry Relationships Chart.

The outstanding finding, as mentioned earlier, was that the Tokai district economy, taken in terms of total industrial output, enjoys a 40% "external economy" benefit from the Port of Nagoya; and if seen for its further effect on the internal industrial economy, Port of Nagoya fulfills an even greater role. This study makes it quite clear that, since the Port figures so importantly in the economy of the four prefectures of the Tokai District of which it is center, then there is no progress, as it were, without Nagoya Port progress.

### External Economy Effects

Japan's four great industrial zones (Tokyo-Yokohama, Nagoya, Osaka-Kobe and Kitakyushu all have heavy

chemical production at their center. Such industry locates around the port and related industry springs up nearby, with business and people coming in, too. Easy access to the port assures lower transport charges which cut back all-round production costs and offer immense location advantages.

A highly favorable business location encourages a greater influx of people, better wages, more consumption and smoother labor supply. This wave, in its turn, only adds to the location advantages, entraining a subsequent influx of offices, educational and socio-cultural institutions.

This overall situation in which the establishment of one condition triggers the birth of one favorable condition after another and multiplies economic benefits is what is meant by the "external economy" effect.

### Port Seminar

Tokyo:—The 10th Group Training Course in Ports and Harbors Engineering, 1973 (fiscal year) was opened August 24th in Tokyo by the Overseas Technical Cooperation Agency (OTCA) of Japan to last until December 17th, 1973.

A reception was held in honor of participants sponsored by six industrial groups of Japan on September 5th from 6.00 p.m. at Seiyoken Restaurant in Ueno, Tokyo where Mr. Yoshio Takeuchi, Director General, Bureau of Ports and Harbours, Ministry of Transport, Dr. Hajime Sato, Director General of Japan Port and Harbor Association (IAPH Secretary General) and OTCA and government officials were present.

Altogether 14 participants were registered from the following countries: Argentina, Bangladeshi, Burma, Costa Rica, Guatemala, India, Iraq, Mexico, Pakistan, Peru, Philippines, Sri Lanka, Thailand and Venezuela.

### Coastal Barge Service Considered

Whangarei, N.Z., "Points North", July, 1973, published by The Northland Harbour Board:—A proposal to link Port Whangarei with Auckland by a once-weekly barge service is contained in a report on coastal shipping services currently under

scrutiny by the Minister of Transport, Sir Basil Arthur.

The report was prepared by the Dillingham Corporation of New Zealand, and was based on authoritative freight estimates and other data from east coast port authorities, including the Northland Harbour Board.

It propose a national tug and barge network covering nine provincial ports and the port of Onehunga with terminals at Auckland and Wellington.

The network is divided into three distinct routes, requiring five 2000 h.p. tugs and eighteen 1000 ton capacity barges used in a continuous cycle.

Port Whangarei is in Route 1, which also takes in Auckland, Tauranga, Gisborne, Napier and Wellington.

The Dillingham report, or "schematic model," proposes that under the Route 1 sequence, a tug with one loaded barge would arrive at Port Whangarei from Auckland once a week. There, the barge would discharge and load in one operation and return to Auckland.

Route 1 would utilize two tugs and nine barges.

Two barges would remain at the terminals, Auckland and Wellington, during the week, while the two tugs towed the other four barges between ports.

The Whangarei barge, number nine, would lie in Auckland during the week for discharge and filling with cargo for the North.

Route 2 will link Onehunga with Wanganui, Nelson and Wellington and, Route 3, Onehunga, Taranaki, Timaru and Bluff.

Preliminary costings on the tug and barge network suggest that charges would be competitive with rail and in some cases cheaper.

The cost of setting up the operation would be considerable. The tugs and barges alone, if built in New Zealand, could cost as much as \$11 million.

### Pakistani Award for Westminster

Alton, Hampshire, England, 2nd October (Press Information from Bos Kalis Westminster Group):—A



**The signing in Karachi of the contract awarded to Westminster Dredging (West Africa) Limited, an associated Company of Westminster Dredging Company Limited, for dredging at the new Port Qasim approaches some 15 miles south of Karachi. The dredging by Westminster will confirm the potential of Port Qasim to handle large tonnage vessels and to create a deeper harbour approach channel. Seated centre is Commodore Mahmud-ul Hasan (Chairman, Port Qasim Authority); with Mr. S. Z. H. Rizvi (Port Director) on his left. On the right is Mr. D. Billyeald (Overseas Director Westminster Dredging Company Limited) and Mr. W. J. v.d. Doornmalen (Westminster Dredging Company Limited).**

contract for trial dredging on the outer bar at the entrance of Port Qasim, some 15 miles south of Karachi, has been awarded to Westminster Dredging (West Africa) Limited, an associated company of Westminster Dredging Company Limited, by the Port Qasim Authority.

Under the contract Westminster Dredging will be using trailing suction hopper dredgers "W.D. Seven Seas" and "W.D. 53" which will be partly manned by Pakistani crews.

The main purpose of the dredging, under the contract, is to ascertain how the final channel through the bar will stand up to the action of the sea and what siltation may be envisaged in the future.

It will also confirm the potential of Port Qasim, a new port being built for the import and export of bulk cargoes, to handle ships of 50,000-tons or more. A secondary

benefit of the project will be the creation of a channel for ships of 15,000-tons to enter the new harbour from April, 1974.

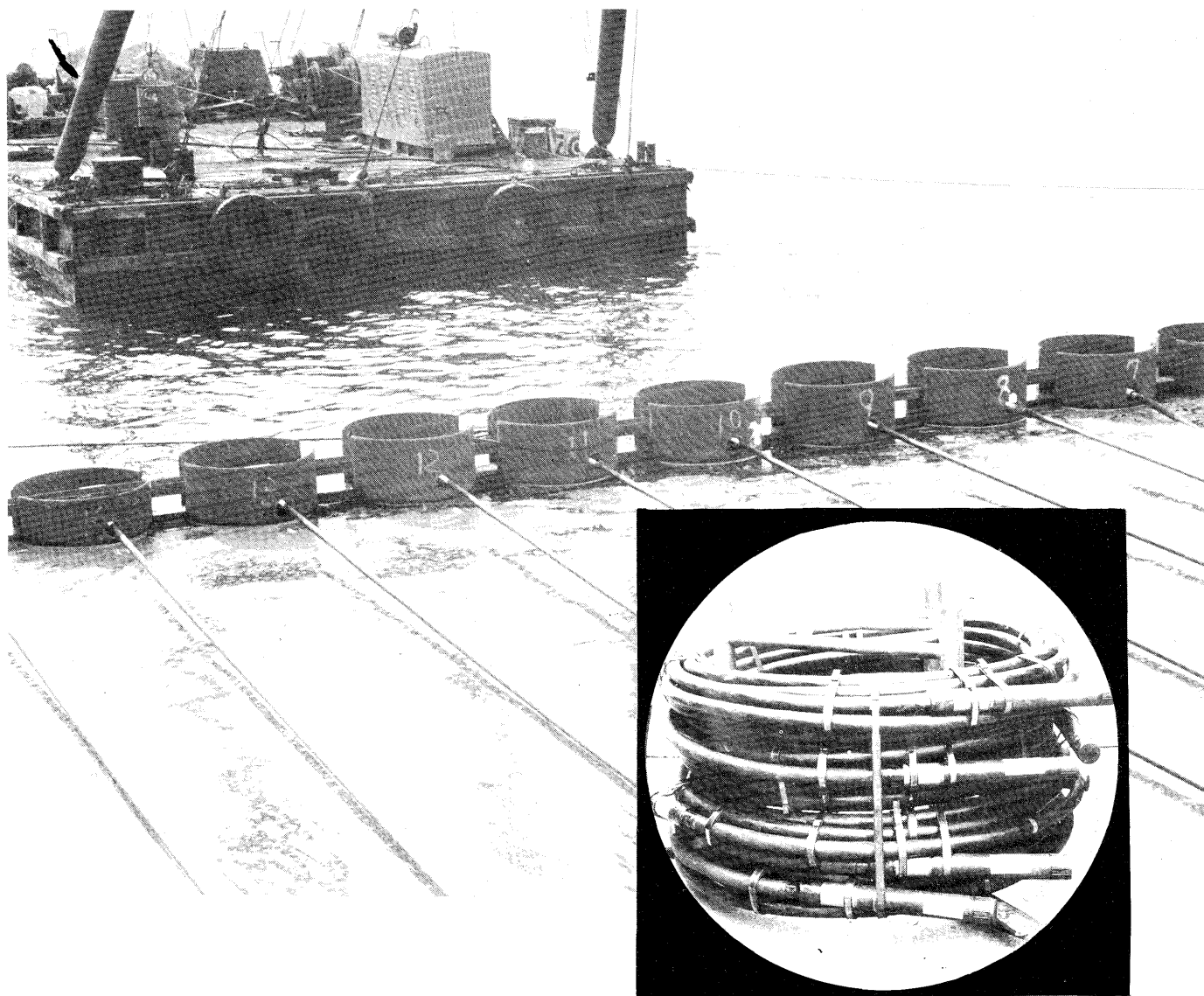
In view of the extreme congestion at the Port of Karachi and the difficulty in handling iron ore, coal and bulk carriers, a Government directive was recently issued for the establishment of a deepwater cargo port at Phitti Creek, Port Qasim.

Extensive feasibility studies showed Phitti Creek, some 15 miles south of Karachi, as a most suitable site, and the Pakistani National Assembly passed a Bill in June 1973 establishing the Port Qasim Authority for the planning, development and management of the Port.

Westminster Dredging Company Limited, a member company of the Bos Kalis Westminster Group, expect to complete the trial dredgings in about 20 weeks.

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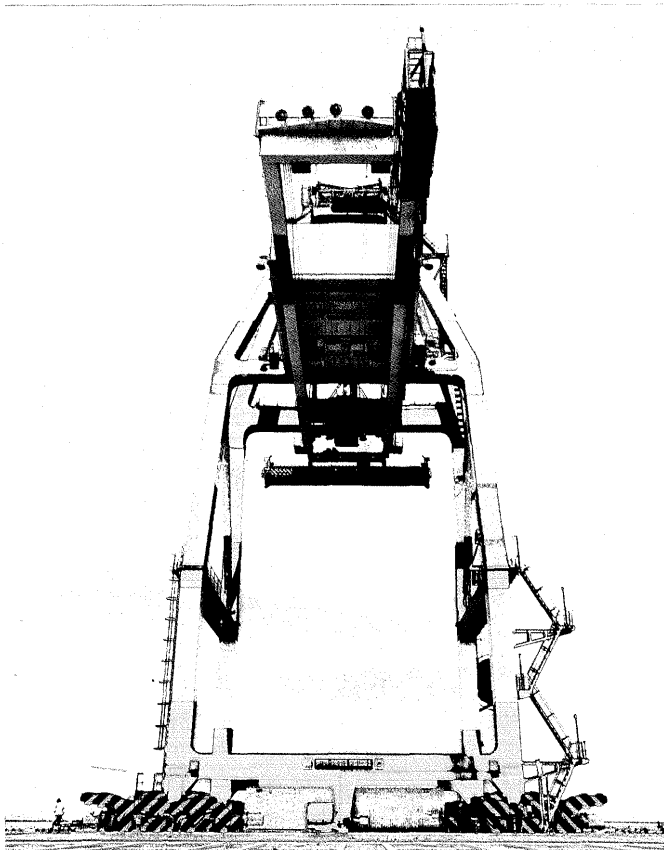
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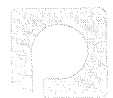
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