昭和44年11月15日第三種郵便物認可　昭和47年10月号　昭和47年9月20日発行　第17巻第10号（毎月1回20日発行）

PORTS and HARBORS

October, 1972 Vol. 17, No. 10

Port of Copenhagen

Amsterdam-Rotterdam Conference IAPH May 1973

The Publisher: The International Association of Ports and Harbors
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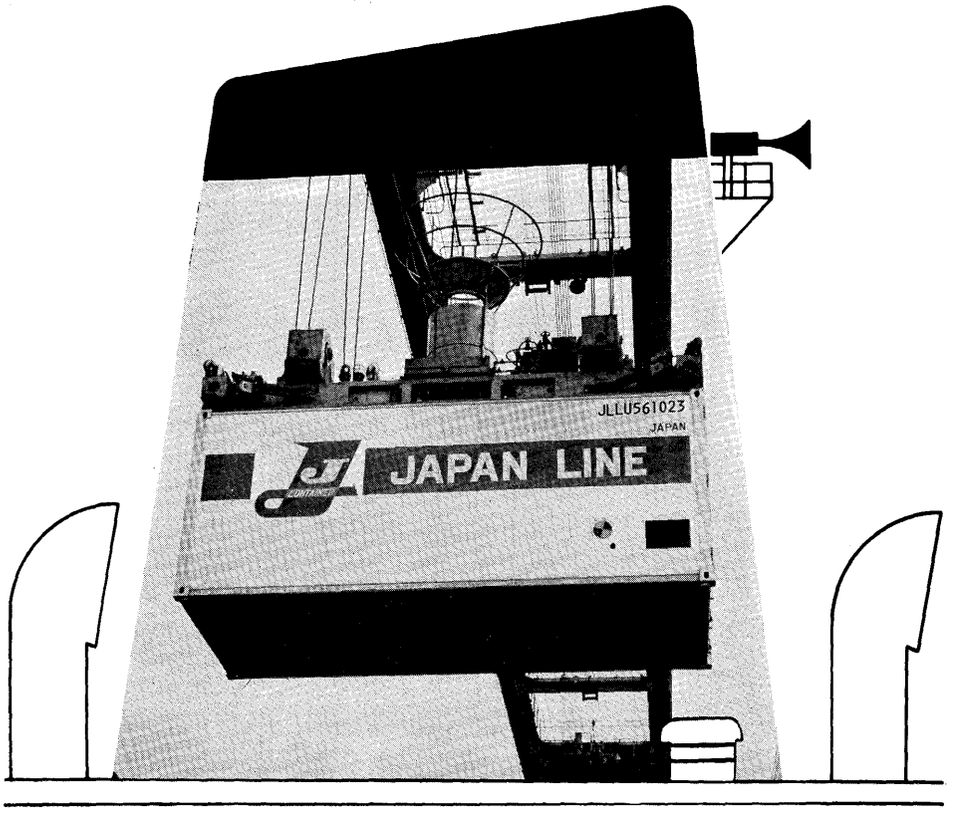

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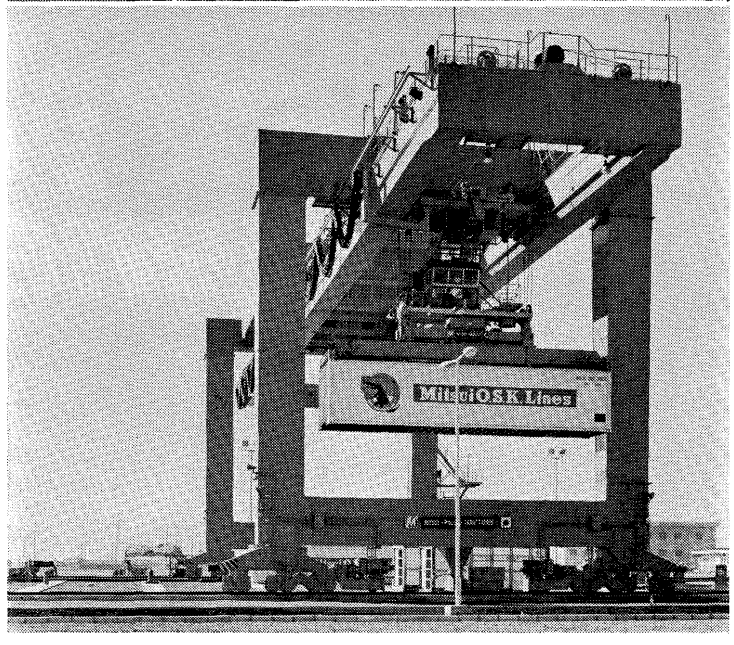

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PORTS and HARBORS

Editor: Yoshio Hayashi

Published monthly by

The International Association of Ports and Harbors

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

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Container terminals at the Port of Copenhagen.
See also photo on page 41.

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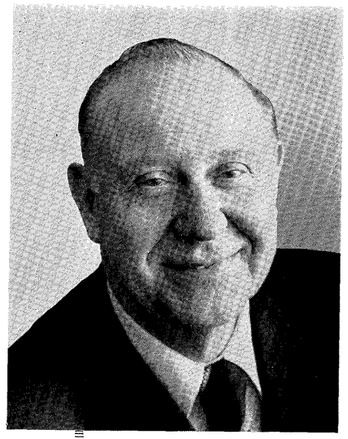
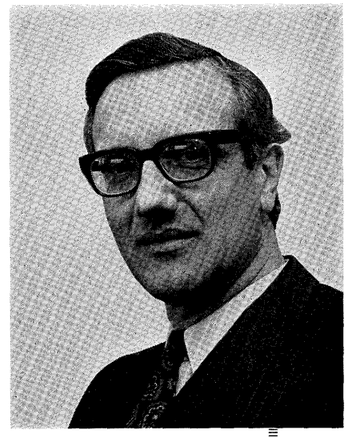


The Eighth I.A.P.H. Conference

Let Us Join in Amsterdam/Rotterdam



May I extend an invitation to all members of the International Association of Ports and Harbors to attend the Eighth Conference to be held in Amsterdam during the week of May 6, 1973.

The program, including business sessions and Ladies program arranged by the Organizing Committee in collaboration with the Executive Committee, promises to make this a memorable and fruitful Conference.

The efficient management of ports is more vital to international trade today than at any time in history. We can only meet this challenge by participating in a positive and productive program of technological development and information.

The Amsterdam meeting will present a change in format. Major and Minor papers will largely be replaced by panel discussions with accent on audience participation. This will provide a great opportunity for all members present to voice their opinions from the floor of the Conference.

This improvement, together with the subjects of current interest being presented by the Chairmen of the various Committees, will complete a program of unusual value.

May I express the hope that you will join us in Amsterdam.

A. Lyle King
President

It is a great honour to have the 8th Congress of the International Association of Ports and Harbours of 1973 here in the Netherlands. This then will be the first time that the congress will take place on the continent of Europe.

In Europe, Holland really is the country for ports and harbours. As delta of the river Rhine, Holland was predestined to develop into the most important Westeuropean junction of worldwide transportation streams.

But that is not the only feature of the Dutch ports. Based on the assumption that raw materials from overseas are cheapest in the ports where they arrive, also a marked seaport industrialization was established. The spectacular port development of Rotterdam is the outstanding example of world reputation.

The congress will be held in Amsterdam from 7–12 May in the modern, well equipped RAI congress centre, situated in the new southern Amsterdam area near some excellent hotels.

Much care is given to the congress program. Among other things it includes a one-day excursion to the port of Rotterdam; conveniently there is no need to change hotel as Rotterdam is quite near Amsterdam.

Very grateful indeed I am for the fact that five members of the Executive Committee have taken it upon themselves to be responsible each of them for one of the five conference topics. This involves for instance an outline of their topic, as well as the invitations for speakers. With this we aim at diversity and liveliness, by which the discussion—enough time has been reserved for that—will benefit.

For the ladies Amsterdam itself, as well as it's surroundings, offer such a variety of possibilities that a week will only be far too short! In any case there will be an attractive program: places of historical interest as well as flowers will play an important part in it.

We hope and trust, that the 8th I.A.P.H. Conference will attract many delegates, and that this congress will become a milestone in the history of the I.A.P.H.

The Chairman of
the 8th I.A.P.H. Conference.

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Amendments of By-Laws Adopted By Meeting by Correspondence

This is to announce that the International Association of Ports and Harbors adopted the following four bills amending the By-Laws and one resolution (repealing Montreal Resolution No. 5) at the meeting of the members (who are entitled to vote) by correspondence on August 26, 1972.

1. A bill to amend Sections 1, 7 and 12 of the By-Laws relating to action upon membership applications. (IAPH No. 1)
   At the present time applications for membership must be submitted to the Board of Directors except that the Board may, by resolution, delegate to the Secretary General the power to act upon applications for membership as Associate Members. Experience has indicated that this procedure is too time consuming and expensive. The proposed amendments would permit the Secretary General to act upon all applications for membership, to classify them in accordance with the By-Laws and to report upon his action to the Board of Directors and to the membership at the next Conference.
2. A bill to amend Sections 3 and 5 of the By-Laws relating to Associate Members and membership dues. (IAPH No. 2)
   One of the most critical problems currently facing the Association is that it must be based upon a sounder financial foundation. Its present financial difficulties stem largely from devaluation of the dollar which has decreased its income by approximately 17% per year and from the fact that the cost of servicing Associate Memberships exceeds the dues paid by such members. The effect of devaluation has been particularly severe since dues are payable in U.S. dollars and the bills of the Association are payable in yen, while the dollar has been devaluated by 16.88% in relation to the yen. Consequently, it is proposed that effective January 1, 1973, membership dues of Regular Members shall be increased from US $300.00 to US$350.00 per year per subscribed membership unit. In addition, Associate Members have been classified by categories which are related to the benefits which it is anticipated they will derive from membership in the Association.
3. A bill to amend Sections 31 and 37 of the By-Laws relating to the Resolutions and Bills Committee. (IAPH No. 3)
   It became particularly evident at the Montreal Conference that the procedures for the handling of bills and resolutions must be improved. Resolutions were being submitted to the Resolutions and Bills Committee after it had met and even on the day on which they were to be considered by the membership. The amendment adopts substantially the procedure which has been successfully used by the American Association of Port Authorities for a number of years. It is orderly and at the same time does not impede the prompt handling of matters of an emergency or urgent nature.
4. A bill to amend Section 47 of the By-Laws relating to the Special Port Development Technical Assistance Fund. (IAPH No. 4)
   The amendment would permit the use of the Fund for the purpose of publishing and distributing books or other publications to be used in the training of individuals in the port business. Receipts from the sale of any such books or publications would be deposited in the Fund.
5. A resolution repealing Resolution No. 5 adopted at the 7th Montreal Conference limiting advertising in the Membership Directory to Regular Members and Associate Members. (IAPH No. 5)
   This resolution adopted at Montreal last year, while well intentioned, has not worked out in practice and the Secretary General has recommended that it be repealed.

These bills and resolution were first taken up by the Executive Committee at the meeting held in Lisbon, Portugal in May 1972, following the recommendations of the Ways and Means Committee which met in Barcelona, under the Chairmanship of Mr. Bernard J. Caughlin, prior to the Executive Committee meeting.

Under Sec. 46 of the By-Laws of the International Association of Ports and Harbors, the By-Laws may be amended by a majority vote by correspondence of the members entitled to vote on an amendment or amendments proposed by the Board of Directors. As to the Resolution repealing Montreal Resolution No. 5 it was the advice of the Chairman of the Legal Counselors that since Montreal Resolution No. 5 was the resolution adopted at a Conference, its repeal should also be adopted by the general meeting.

Accordingly, the Board of Directors resolved at the meeting by correspondence on July 11th, 1972 to propose the above mentioned four bills and one resolution to the members for their final approval.

Therefore, in accordance with the provision of Sec. 39, Article IX of the By-Laws, the President of the Association called a meeting by correspondence of the Regular Members of IAPH on 26th of August, 1972, the date set for closing the counting of votes on the bills and resolution.

The result of the voting was as follows:

IAPH No. 1–Majority in the affirmative (one vote with condition)
IAPH No. 2–Majority in the affirmative (one negative vote on Sec. 2 and one vote without marking)
IAPH No. 3–Majority in the affirmative (one vote without marking)
IAPH No. 4–Majority in the affirmative (one negative vote and one vote without marking)
IAPH No. 5–Majority in the affirmative (one negative vote and one vote without marking)

IAPH No. 1
A Bill

To amend the By-Laws of The International Association of Ports and Harbors.

BE IT ENACTED by The International Association of Ports and Harbors in a meeting by correspondence on the 26th day of August, 1972, that the By-Laws of the Association be amended as follows:

Section 1. That Sec. 1 of the By-Laws is hereby amended to read as follows:

"Sec. 1. The membership of this Association shall be classified into Regular Members, Associate Members and Honorary Members. The Board of Directors shall have the power and it shall be its duty to review and to approve, disapprove or modify the classification of new members theretofore made by the Secretary General and to determine the classification of each member in accordance with this Article."

Section 2. That Sec. 7 of the By-Laws is hereby amended to read as follows:

"Sec. 7. Applications for membership shall be submitted to the Secretary General, shall state the number of membership units proposed to be subscribed and shall be accompanied by a fee equal to the first year's dues for the class of membership desired, which fee shall be deemed to include annual dues for the remainder of the calendar year in which elected. The Secretary General shall accept and promptly act upon each such application. Upon the approval by the Secretary General of any such application, such applicant for membership shall be deemed elected to membership in this Association. Such fee shall be returned in the event of non-election. The Secretary General shall also classify members in accordance with Secs. 1, 2 and 3 of Article I. Any such election to membership so approved by the Secretary General shall be promptly reported to the Board of Directors and to the members at the next Conference and shall be published in the official journal of the Association or other publication, if any.

"Honorary Members shall be elected to membership in this Association by resolution adopted at a Conference."

Section 3. That Sec. 12 of the By-Laws is hereby amended to read as follows:

"Sec. 12. The Board of Directors shall have power and it shall be its duty, in accordance with the provisions of the Constitution and these By-Laws and subject to control by bill or resolution adopted by this Association at any Conference or by correspondence:

"1. To fix the registration fee for each individual attending and determine the agenda for Conference;

"2. To prepare and propose to the Association at Conferences amendments to the Constitution or these By-Laws;

"3. To propose the names of meritorious individuals to the Honorary Membership Committee at a Conference for election as Honorary Members of this Association;

"4. To appoint and dismiss the Secretary General;

"5. To prepare and propose the budget and statements of account to the Association at or before each Conference and authorize the approval of the payment of bills;

"6. To procure or contract for an audit of the books and accounts of the Association for each two fiscal years, as provided in Section 23 of these By-Laws, and cause the same to be presented to the President at or before each Conference;

"7. To delegate to the Executive Committee from time to time such powers and duties of the Board of Directors as it may determine advisable or expedient;

"8. To promulgate rules and regulations for the execution and enforcement of the provisions of the Constitution of this Association, of these By-Laws and of any of the powers and duties of the Board of Directors;

"9. To determine policies and generally supervise the business and affairs of this Association, especially in the interims between Conferences;

"10. To appoint, prior to the holding of a Conference, a chairman for such Conference who shall for the duration thereof have the title of Chairman of the Conference and who shall preside at all functions of the Conference, other than plenary meetings of the members; and

"11. To assume such further powers and perform such further duties as this Association may from time to time determine by bill or resolution adopted at a Conference."

IAPH No. 2
A Bill

To amend the By-Laws of The International Association of Ports and Harbors.

BE IT ENACTED by The International Association of Ports and Harbors in a meeting by correspondence on the 26th day of August, 1972, that the By-Laws of the Association be amended as follows:

Section 1. That effective January 1, 1973, Sec. 3 of the By-Laws is hereby amended to read as follows:

"Associate Members

"Sec. 3. Associate Members of this Association shall consist of five classes, designated A through E.

"Class A Associate Members shall be divided into three categories, designated One, Two and Three. Category One shall be port users, such as shipping, stevedoring, warehousing businesses and port facility lessees and operators. Category Two shall be port related businesses, such as manufacturers of port related products and providers of port related services, other than port consultants. Category Three shall be port consultants.

"Class B Associate Members shall be governmental agencies, commissions or associations of any kind, other than those qualified to be Regular Members.

"Class C Associate Members shall be private or proprietary ports, such as those operated in connection with a steel mill or an oil refinery.

"Class D Associate Members shall be public or private corporations, individuals or agencies engaged in educational or journalistic activities related to port functions and individuals who are not connected with a port related business for profit.

"Class E Associate Members shall be individuals who are associates or employees of Regular Members or other Associate Members.

"The dues scheme for Associate Members is set forth in the table attached to these By-Laws as an appendix."

Section 2. That effective January 1, 1973, Sec. 5 of the By-Laws is hereby amended to read as follows:

"Membership Dues

"Sec. 5. Membership dues of the Association shall be as follows:

"Each Regular Member shall pay membership dues of U.S. $350.00 per annum per subscribed membership unit.

"Regular Members and Associate Members shall have the privilege of subscribing for any number of membership units.

"Class A Category One Associate Members whose annual gross sales are U.S. $5,000,000.00 or more shall pay membership dues of U.S. $300.00 per annum per subscribed membership unit; those whose annual gross sales are more than U.S. $2,500,000.00 but less than U.S. $5,000,000.00 shall pay membership dues of U.S. $200.00 per annum per subscribed membership unit; and those whose annual gross sales are U.S. $2,500,000.00 or less shall pay membership dues of U.S. $100.00 per annum per subscribed membership unit.

"Class A Category Two Associate Members whose annual gross sales are U.S. $2,500,000.00 or more shall pay membership dues of U.S. $300.00 per annum per subscribed membership unit; those whose annual gross sales are more than U.S. $1,500,000.00 but less than U.S. $2,500,000.00 shall pay membership dues of U.S. $200.00 per annum per subscribed membership unit; and those whose annual gross sales are U.S. $1,500,000.00 or less shall pay membership dues of U.S. $100.00 per annum per subscribed membership unit.

"Class A Category Three Associate Members whose annual gross sales are U.S. $500,000.00 or more shall pay membership dues of U.S. $300.00 per annum per subscribed membership unit; those whose annual gross sales are more than U.S. $250,000.00 but less than U.S. $500,000.00 shall pay membership dues of U.S. $200.00 per annum per subscribed membership unit; and those whose annual gross sales are U.S. $250,000.00 or less shall pay membership dues of U.S. $100.00 per annum per subscribed membership unit.

"Class B and Class C Associate Members shall pay membership dues of U.S. $300.00 per annum per subscribed membership unit;

"Class D Associate Members shall pay membership dues of U.S. $50.00 per annum per subscribed membership unit.

"Class E Associate Members shall pay membership dues of U.S. $30.00 per annum per subscribed membership unit.

"Any individual who held the status of Life Supporting Member as of the 12th day of June, 1971 and who had paid the sum of U.S. $150.00 or more per subscribed membership unit shall retain such status and not be subject to the payment of further annual dues.

"Honorary Members shall have the privilege of attending Conferences but shall not be required

Associate Membership Dues Scheme

Appendix

(to be effective as of Jan. 1, 1973)

Class	Categories	Such as	Grades	Dues per unit (in US$)	Annual sales proceeds of the member Organization
A	One—Port Users	Shipping, Stevedoring, Warehousing businesses and port facility lessees and operators	1st 2nd 3rd	300 200 100	US$5.0 million & up 2.5 〃 & up 2.5 〃 less
	Two—Port related Businesses	Manufacturers of port related products & providers of port related services other than port consultants	1st 2nd 3rd	300 200 100	US$2.5 million & up 1.5 〃 & up 1.5 〃 less
	Three—Port Consultants		1st 2nd 3rd	300 200 100	US$0.5 million & up 0.25 〃 & up 0.25 〃 less
B	Governmental agencies, Commissions or Associations	Any Kind		300	
C	Private or proprietary ports	Steel mills, Oil refineries		300	
D	Port study organizations and individuals	Those who are engaged in educational or journalistic activities related to port functions, and individuals who are not connected with a port related business for profit		50	
E	Individuals belonging to Regular Members or Class, A, B, C or D Associate Members			30	

to pay membership dues."

IAPH No. 3
A Bill

To amend the By-Laws of The International Association of Ports and Harbors.

BE IT ENACTED by The International Association of Ports and Harbors in a meeting by correspondence on the 26th day of August, 1972, that the By-Laws of the Association be amended as follows:

Section 1. That effective January 1, 1973, Sec. 31 of the By-Laws is hereby amended to read as follows:

"Referral of Bills and Resolutions

"Sec. 31. All resolutions and bills shall be referred to the Resolutions and Bills Committee for its consideration and recommendation to the Conference. Subject to the provisions of Sec. 37 of these By-Laws, debate or official action by the Association on resolutions and bills shall not be in order unless and until such resolutions and bills have been reported on by the Resolutions and Bills Committee to the Conference."

Section 2. That effective January 1, 1973, that portion of Sec. 37 of the By-Laws relating to the Resolutions and Bills Committee is hereby amended to read as follows:

"At least forty-eight (48) hours before the convening of a Conference of this Association, and preferably at least sixty (60) days before it is convened, the President shall appoint a Resolutions and Bills Committee, which shall consider and edit resolutions and bills and prepare resolutions and bills on subjects for same, referred to it, and which shall report its recommendations with reference to such resolutions and bills at a plenary meeting of the Conference on or before the closing day thereof.

"A meeting of the Resolutions and Bills Committee shall be held on the day prior to that on which the Conference is convened or on the day upon which it is convened, at such time and place as may be designated by the President or Chairman of the Committee. Notice of the time and place of the committee meeting shall be given to the members or to their delegates or proxies, by mail or by posting of a notice in the hotel or other place in which the Conference is to be held or in such other manner as may be practicable, but the failure of a member, its delegate or proxy holder to receive actual notice of the meeting of the committee shall not invalidate the committee meeting or any action taken thereat.

"If any person appointed by the President to the Committee fails to attend a meeting of the Committee, the President may, in his discretion, appoint another person in his place.

"So far as practicable, no other committee meetings or business functions shall be scheduled to be held at the same time as the meeting of the Resolutions and Bills Committee.

"All resolutions and bills to be proposed by any member shall be submitted to the Resolutions and Bills Committee either at or prior to the committee meeting in writing in the form in which the sponsor desires to have them adopted. The Committee shall consider all such resolutions and bills, and shall make a report to the Conference, stating with respect to each resolution and bill, whether the committee recommends its adoption, or recommends its adoption with amendments, or recommends against its adoption, or makes no recommendation with respect thereto. In addition, the report of the committee shall contain any resollutions proposed or originated by the committee itself.

"Members, delegates, proxy holders or representatives shall have the right to appear at the meeting of the Resolutions and Bills Committee and to acquaint the committee with their views as to any proposed resolutions or bills.

"The Resolutions and Bills Committee shall prepare its report and recommendations as promptly as practicable following its meeting, and the Secretary General shall cause a copy thereof to be posted at a place convenient and accessible to delegates, representatives and proxy holders, and if practicable, shall provide additional copies for distribution to them.

"No resolution or bill shall be moved, voted upon or adopted at the Conference except the following:

"(a) Resolutions and bills recommended by the Resolutions and Bills Committee for adoption; or

"(b) Resolutions and bills submitted to the Resolutions and Bills Committee at or prior to its meeting, but not recommended by the Committee for adoption; or

"(c) Motions to amend the foregoing, which must be strictly confined to the same subject matter as the resolution or bill to be amended.

"The report of the Resolutions and Bills Committee shall first be received and any resolutions or bills recommended by the Committee shall be voted upon. Thereafter, motions may be made from the floor to adopt resolutions and bills submitted to the Committee at or prior to its meeting, but not recommended by it.

"The foregoing provisions shall not apply to motions to recess or adjourn, to motions for closure, to go into Committee of the Whole or into executive session, to resolutions of condolence or appreciation, or to other motions relating to procedure or the method of conducting business.

"In the event that any matter shall arise subsequent to the meeting of the Resolutions and Bills Committee and prior to the adjournment of the Conference which requires action by the membership, and such action cannot be delayed until a vote by correspondence can be taken pursuant to Sec. 39 of these By-Laws, then the foregoing provisions of this Sec. 37 restricting those resolutions and bills which may be moved, voted upon or adopted may be suspended by a two-thirds vote of the Regular Members present and voting at the Conference, and in such event a resolution or bill proposing such action may be moved from the floor, voted upon and adopted without being referred to the Resolutions and Bills Committee."

(Continued on Next Page Bottom)

Ocean Oil Terminal Off Delaware Evaluated

Maritime Administration

(U.S. Department of Commerce News)

Washington, D.C., July 24, 1972: —The construction of a 200-acre artificial island off the Delaware coast to help this nation meet its steadily mounting need for imported crude oil is evaluated in a study released today by the Maritime Administration.

Results of the year-long study, which was performed for the agency by the New York engineering firm of Soros Associates, Inc., were announced today by Assistant Secretary of Commerce for Maritime Affairs Robert J. Blackwell, who heads the agency.

Estimated to cost $499 million to build, the offshore facility, located about 8-1/2 miles east of Cape Henlopen, Del., was shown to be economically competitive with other current alternatives and to offer particular advantages in terms of improved environmental protection and minimized ship traffic congestion. In addition, proximity of this location to existing industrial and refining facilities not only minimizes transshipment costs but also permits maximum utilization of these facilities without encroachment on present recreational areas for new industrial facilities.

Mr. Blackwell said that the construction of deepwater terminals is vital to this nation's ability to meet its growing energy requirements economically.

"Numerous studies by both private industry and the government clearly indicate that U.S. consumption of energy will more than double in the remainder of this century. Much of this increased demand will be for petroleum and its products," he said.

"Yet, because domestic energy resources will remain essentially constant through this period, we will have to depend increasingly on foreign sources for the oil we need to maintain our standard of living."

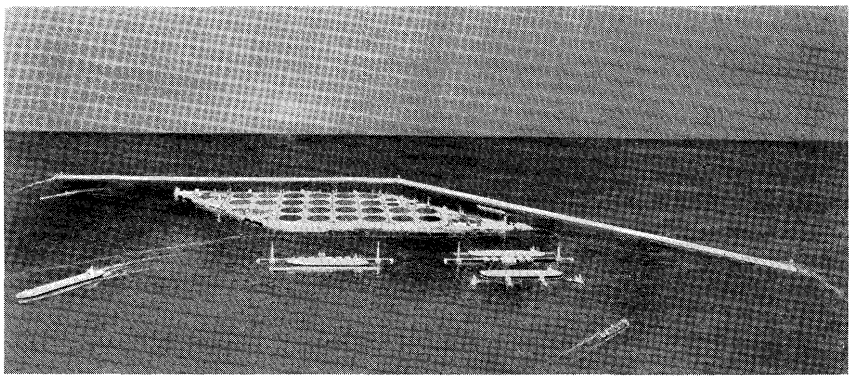
The Commerce Department official went on to note that importing this oil economically requires the use of mammoth tankers, exceeding 200,000 dead-weight tons in size. "The economies of scale in oil transport," he explained, "are such that even after allowing for terminal and transshipment costs, increasing tanker size from 65,000 tons to 326,000 tons, for example, could reduce the overall transportation cost per ton of oil from about $9.93 per ton to $7.42, a savings of over 25 percent.

"Considering that we are talking about importing 200 million tons of oil annually through North Atlantic ports by 1980, these savings can amount to about a half billion dollars a year at that time," he stated.

"But the United States is prevented from capitalizing on these economies at the present time because depth limitations in East and Gulf coast ports restrict them to handling tankers of at most 80,000 tons," Mr. Blackwell added.

Summing up the problem, he said:

"Thus, where we need the oil the most—on the East and Gulf coast



IAPH No. 4
A Bill

To amend the By-Laws of The International Association of Ports and Harbors.

BE IT ENACTED by The International Association of Ports and Harbors in a meeting by correspondence on the 26th day of August, 1972, that the By-Laws of the Association be amended as follows:

Section 1. That Sec. 47 of the By-Laws is hereby amended by adding thereto a new subsection (h) reading as follows:

"(h) The Fund may also be used for the purpose of publishing and distributing books or other publications to assist in the training of individuals in the port business. Any receipts due the Association which are received from the sale of any such books or publications shall be deposited in said Fund."

IAPH No. 5

RESOLUTION Repealing Resolution No. 5 Adopted at the Seventh Conference of the International Association of Ports and Harbors.

WHEREAS, this Association adopted Resolution No. 5 at the Seventh Conference held in Montreal, Canada in June, 1971 limiting advertising in the Membership Directory to Regular Members and Associate Members; and

WHEREAS, it is now deemed to be in the best interests of this Association that said resolution be repealed;

NOW, THEREFORE, BE IT RESOLVED by the International Association of Ports and Harbors in a Meeting by Correspondence on the 26th day of August, 1972 that Resolution No. 5 adopted at the Seventh Conference of this Association shall be and the same is hereby repealed.

we cannot get it in these massive tankers because we do not have the 60 to 100 feet of water required to accommodate them."

Mr. Blackwell noted that there are several possible solutions to this problem, including dredging existing channels, using single-point mooring systems at sea, or using shallow-draft tankers. All of these possibilities, he added, suffer from serious constraints-physical limitations affecting the ability to meet the forecasted requirement economically. An offshore terminal, as recommended by the Soros group, however, seems to be one practical solution to this problem, he said.

The Soros study concentrated on the U.S. North Atlantic coast because of the greater, more immediate need for imported oil in this area, although the study notes that the Gulf Coast will not be far behind in requiring a deepwater terminal for mammoth tankers.

As envisioned by Soros, the Middle Atlantic deepwater terminal could be built in three stages—an interim terminal, a first-stage terminal, and a second-stage, or more fully developed, multi-purpose terminal.

The interim stage terminal would consist of an island of about 100 acres, protected from ocean waves by a dog-legged breakwater about 11,500 feet long. It would contain two berths for tankers of up to 350,000 tons, as well as six shallow-draft berths for feeder vessels of 30,000-60,000 tons, which would service refineries in the New York-New Jersey area and along the Delaware River. Alternatively, a pipeline could be used in place of feeder ships.

The annual throughput for this interim-stage terminal of 100 million tons would be increased to 200 million tons per year in the first stage development.

The first stage terminal would have an area twice the size of the interim-stage project, and all facilities for ships would be doubled, as well.

In the second, or final stage of development, the terminal would be enlarged to 500 acres, and the breakwater lengthened by 7,500 feet. In addition to handling a throughput of 300 million tons of oil annually, the terminal would be able to handle dry bulk commodities—such as iron ore and coal. In this concept, the terminal would consist of six deep-draft berths for tankers, two deep-draft berths for dry bulk carriers, and 13 shallow-draft berths for feeder operations.

The study concluded that the interim stage terminal would cost $499 million while the stage one terminal would cost an additional $288 million and the second-stage terminal an additional $531 million.

"In each case," Mr. Blackwell emphasized, "pollution control systems would represent about 10 percent of the cost."

Some of the pollution-control features included in the Soros design, he said, include containment booms that would be placed around each berth, spillways on the island to control spillages from storage tanks, and a facility for treating oily waters and waste, including ballast water. Advanced traffic control and collision avoidance systems would also be used to protect the ships and the environment.

"This terminal would be as pollution-free as modern technology will allow," the Assistant Secretary stated.

In addition, he said, the location outside of Delaware Bay was selected for this study's analysis because accidental spills in the open ocean are not as dangerous to the fragile marine life systems as those which occur in protected waters.

To emphasize this point, Mr. Blackwell noted that the U.S. Coast Guard considers that oil spills in the ocean must be ten times greater than those in close-in waters to warrant the same degree of concern.

Mr. Blackwell stated that the Soros report fills an important need by providing interested parties with data on using the offshore-terminal approach to alleviate the nation's energy crisis economically.

Copies of the detailed study by Soros Associates will be available from the National Technical Information Service, Springfield, Va., in about six weeks.

Canada Will Benefit from New Sea-Level Canal in Panama

(Canada Japan Trade Council News Letter, June-July 1972)

There is every indication that Canada, along with her major trading partners, will be making more, selling more, buying more and moving more in the next two decades. This world-wide trend poses problems of more effective transportation for all. In the case of Canada, with her great distances and critical dependence upon trade, the challenge is particularly pressing. But it is no longer one confined to transportation within our own boundaries. To secure maximum benefit from new transportation technology and to move exports and imports most advantageously, Canada will have to take her share of responsibility in the international field.

A Japanese shipyard has just delivered to the owners a new containership capable of carrying almost twice the normal cargo in two-thirds the time now required for the voyage from Japan to Europe via the Panama Canal. Such a development would appear to hold limitless possibilities for operation of ever-larger containerships, comparable to the pattern followed in producing today's giant bulk carriers. Theoretically it is possible. The technology and skills exist. Unfortunately, however, other factors rule out such a development in the near future. This is to the detriment of nations such as Canada, and areas such as B.C. and the Maritime Provinces, which have a big stake in containerization.

The chief factor limiting size of containerships is the route they must follow to achieve maximum time-saved benefit. The Japan-Europe—and the Japan-Maritime Provinces—container route lies through the Panama Canal. The Panama Canal, as it now exists, cannot handle ships larger than 65,000 deadweight tons.

By today's standards, this is a small vessel. With modern containerships already close to this limit, and many of the most cost-effective bulk carriers barred by their size from using the Canal, the time has come to provide new trans-Isthmian facilities fitted to modern requirements.

The economic triumvirate of Canada, Japan and the United States have a common interest in such a project. Seventy percent of present traffic through the Panama Canal is to, from or between U.S. ports. Japan and Canada stand second and third to the U.S. as users of the Canal. Considerations of Pacific and North American defence aside, a modern trans-Isthmian facility is an economic necessity for all three countries. It becomes even more compelling in the light of prophecies such as that made recently by former U.S. Treasury Secretary, John B. Connally, that a Pacific Common Market may well emerge in the foreseeable future with the U.S., Japan and Canada as major partners in it.

On December 1, 1970, the President of the United States received a report from the Atlantic-Pacific Interocean Canal Study Commission, a body constituted by Act of Congress in 1964. It was the newest and most comprehensive of several such studies undertaken since World War II. This Commission recommended construction of a new, sea-level canal and modernization of the existing canal. The new canal would be capable of taking ships of 150,000 DWT and, under controlled conditions, vessels of up to 250,000 DWT. In consideration of all political, economic and ecological factors, the route recommended by the Commission lies about 10 miles west of the present Canal in the Republic of Panama.

It would be only 36 miles in length compared to the 43 miles of the old, lock Canal. It could be built by conventional methods in 12 to 14 years or by controlled nuclear blasting in a shorter time. Cost for construction by conventional means was estimated at about $3 billion at 1970 prices. Nuclear assistance in building would probably reduce cost as well as time. The Commission, however, did not believe existing technology or political considerations would permit use of nuclear blasting.

Significantly, the Commission stated that foreign participation should be welcomed but not expected. True internationalization of the canal "does not appear to be attainable" but "multi-national participation in its financing and management" would be "advantageous". This is one area where Canada, supported by Japan, could well take the initiative in pressing for three-power co-operation in a project urgently required by all three nations and one which promises equal benefits to all participants. A new sea-level canal able to handle modern bulk carriers would make possible the economical transportation of, for example, Western Canada's high-grade coking coal to the Eastern seaboard. Such a modern facility would equalize the pressure on Canada's internal transportation system and open more world markets to Canadian exports on the basis of swift, reliable and economical sea-borne transportation.

Honourable Mitchell Sharp, Secretary of State for External Affairs, told the Standing Committee of the House of Commons on External Affairs and National Defence on October 27, 1970, that "for a great trading country like Canada, economic growth cannot be fostered at home without working to improve the health of the world economy" and, at another point, "Fostering economic growth for Canada means working for the good health of the international trading community."

Canadian initiative and support in the matter of providing an international transportation link, geared to modern conditions, would be in the spirit of the policy announced by Mr. Sharp.

Dredging Projects In Developing Countries

by Mr. H. C. Frijlink

Managing Director, NEDECO

(Reprinted from IADC periodical "TERRA" 1)

Mr. H.C. Frijlink is a Managing Director of the NEDECO, engineering consultants organization at The Hague, The Netherlands. This is a foundation, established in 1951, which coordinates and stimulates the activities of Dutch consulting engineers working abroad. It has the backing and cooperation of large consulting firms and of public and private institutions in the fields of civil, hydraulic and structural engineering, transportation, economics, operation and management.

Through its organizational set-up, NEDECO has the advantage to be able to secure for all projects an extensive potential in different scientific and technical fields and build up a team specifically adapted to the particular requirements of any given problem or study, independent of its nature and scope.

NEDECO has carried out a great number of studies on the technical and economic aspects of development planning all over the world, covering all phases of project development from the preliminary investigations and feasibility studies up to preparation of contract documents and construction supervision.

In principle, there is little difference in dredging techniques as performed in well-developed countries against those in developing countries. However, in the fields of planning, financing and execution other criteria and methods are applied, mainly in view of the general scarcity of development purposes on the one hand, and the remoteness from main centres of dredging activities and from repair yards on the other hand. Moreover, in Western countries there is usually a wealth of hydrographic and morphological information available, so that planning and execution may be done in a more simple and efficient way than would appear possible in many young countries.

In the following, special reference is made to dredging with the aim of deepening a channel in an estuary or a river for navigation purposes: the problems are here particularly complex in view of the movement

of sediments which often counteracts the deepening by dredging, whilst also the dumping of spoil may be affected by currents. These phenomena of sediment transport, by themselves only understood in an approximate way, greatly complicate the physical problem of dredging in flowing water, and render it difficult to predict the ultimate effect of deepening. However, much of the following reasoning applies equally to dredging for reclamation purposes.

Planning

As dredging involves the expenditure of valuable and often scarce foreign currency the preparation of a dredging project in a developing country has to be done with meticulous care to avoid unjustified investment, or disappointing results. Costs and benefits of the project should be carefully calculated, and refined econometric methods are then often applied to assess the priority of a dredging project within an entire development plan. Feasibility studies for dredging projects in developing countries often involve many millions of dollars. They may take at least one year, sometimes many years, in order to measure accurately seasonal effects of tides and river flows. Model studies, with movable bed or with density effects reproduced, may be required, as will be explained later in this article. Even so, trials by test dredging are sometimes deemed necessary to assess the effect of a major project —and even then it may still be difficult to estimate the amount of maintenance dredging that will be required to maintain the desired depths.

Expenses on such large-scale surveys, studies and tests are often justified, because the increased understanding can very well lead to a reduction of the annual maintenance quantities (due to a better-chosen alignment) or by decreasing the unit-cost of dredging due to a cheaper method of dredging, a less frequent repetition of the maintenance, or even a positive contribution of the dumped spoil in concentrating the flow into the dredged channel. It is therefore essential that the project be carefully prepared and designed before realization is started. During the execution a continuous check and supervision by the planners is also required, in order to keep the performance effective and learn from the results to the benefit of other projects. It should never be forgotten that channel dredging is not so much the excavation of soil, but rather the creation of a deep channel. If the work can be partly done by nature, so much the better because that saves efforts and money!

From the author's experience, the following examples of major predredge investigations, sometimes with model investigations and test dredging may be mentioned—some comments in retrospect will be given.

Escravos investigation, including a model study

The aim here was to provide deeper access to the Niger Delta Ports, for which purpose a channel had to be dredged across a sand/mud bar. To concentrate the flow, to prevent sand from a littoral drift from accumulating in the channel, and to provide shelter for (cutter) dredging operations, two harbour moles were constructed in the early 1960's at great cost (more than US$30 million).

Due to the unexpected development of the trailing hopper suction dredger, the last argument is now Less valid. Moreover, some sedimentation of soft silt occurs within the channel (in spite of the expectations from the model investigation) so that some annual maintenance dredging (albeit with light equipment) had to be done. Although the harbour moles do serve a most useful purpose these comments in retrospect show how imperfect our insight in the mechanics of tidal channels is (or was, fifteen years ago) and how prudent the economic considerations for justification of a dredging project still have to be.

Bangkok Bar siltation study

Here, too, a field study of some eighteen months was followed by an extensive model study. The cost of maintenance dredging could be reduced due to the results of the studies by introduction of agitation dredging in a specific part of the tidal cycle, and in a specific season in part of the channel.

The total cost of a further deepening could be assessed fairly accurately, and also the benefits of a partly new alignment of the 18 km long approach channel could be estimated —we shall return to the benefits thereof later on.

Guiana coast survey including the estuaries of the Surinam, Courantyne and Demerara Rivers

A model study was not done here, but test dredging in the first estuary (giving access to the Port of Paramaribo) is expected to be done next year.

River Niger test dredging

After four years of morphological, hydrographic and hydrological studies, the specific aim here was threefold: to judge the merits of a dustpan dredgehead vs. a cutter suction dredger; to devise the best method of river dredging; and to assess the stability of dredged channels in the Niger. The results here were promising, but economic considerations do not justify large-scale operations as yet.

During such integrated studies, much benefit is derived from close contact with the dredging industry —there is an exchange of technical and scientific views between independent consulting engineers and dredging contractors.

Sometimes experts from contractors are seconded to consultants' staff for particular problems of studies, as it is recognized that—especially in a rapidly developing technique such as dredging—only a full exchange of know-how in planning and in execution may lead to optimum results.

Sometimes planning aslo involves the design of special dredging equipment—more often, however, capital dredging is put out to tender, and it is left to contractors to bring in the most suitable dredgers.

Financing

The matter of economics has already been mentioned several times, and economy has to be considered before financing of dredging projects (certainly those in developing countries!) can be negotiated.

In the first place there is the matter of design criteria of a dredged channel. The width may follow from the size (beam) of the ships expected, e.g. a width of four times the beam. The depth, however, depends on the size and the draught of the ships expected; on the keel-

clearance required; and on the water level (tide or river level) prevailing at a certain time when passage through the channel is required. For access routes to ocean ports the question arises whether the ships may pass at high water only, or at all tides. To answer that question, a statistical analysis of the frequency of occurrence of a certain water level is required, and this should then be compared to a similar frequency curve for the draughts of arriving and departing vessels. Taking into account the increasing cost for increasingly deeper dredged channels, versus the decreasing cost of transport by deeper drawing vessels, an optimum depth can be computed by which the total cost of transport is minimized.

A computation of the optimum depth in an access channel was made a few years ago. The purpose here was to evacuate ore in chartered bulk carriers—viz. in vessels of a general type which could be found on the charter market, and of no special design. On the one hand, bigger and deeper vessels can transport the ore to its destination overseas at a lower cost per ton, while on the other hand a deeper channel would have to be dredged and maintained at a greater cost.

The sum total of these functions yield total cost per ton as a function of the vessel's size and therefore of the channel depth required. The curve thus obtained clearly reflects a minimum value for a certain optimum depth. The calculation is repeated for a range of quantities of ore—the larger the annual exported volume of ore, the lower the cost, per exported ton, of dredging the channel. It is clear that for each annual tonnage there is an optimum economic depth.

The picture is completed by adding to the shipping and dredging cost the rail cost from the mine to the port (again depending on the annual tonnage) and the constant transloading cost from rail into ship. Thus, the total transportation cost ex-mine into the receiving port is obtained.

Such an optimization process, as described here in its simplest form, may lead to certain design widths and depths, and may provide an economic justification for the investment in dredging.

Some remarks should, however, be made:

a. in the optimization procedure, it is assumed that all costs and benefits are in the same pocket', e.g. benefits should accrue (through taxation or otherwise) to the organization responsible for maintaining the channel;

b. for general cargo and for a range of ships using the channel such as containerships, dry and liquid bulk carriers, the optimization process is much more complicated, but economic justifications for investment in deepening access channels should and can still be made;

c. the optimization depends on a number of data, viz.:

1. volumes to be dredged initially;
2. unit price for initial or capital dredging;
3. volumes of maintenance dredging required;
4. unit price for maintenance dredging;
5. volumes of shipping expected to pass through the channel in its future lifetime;
6. cost of shipping.

Each of these figures shows a certain degree of uncertainty, e.g. unit prices may depend on world market conditions; volumes to be dredged follow from hydrographic surveys and/or from hydraulic model tests and their interpretation; shipping depends on economic development. The planners, and possible financers, are used to taking the most acceptable estimate or average for each of these figures, and based on these averages there follows a justification or otherwise of the project, mainly in the form of a return (or interest percentage) on the invested capital. If this return percentage is acceptable, i.e. higher than the opportunity cost of capital in the region, and if the project had indeed a justified priority in the development plan, then it is usually not very difficult to find finance for the execution of the dredging project. International lending agencies such as the World Bank (International Bank for Reconstruction and Development), or regional agencies (African and Asian Development Banks, the Interamerican Development Bank) or donor countries (often grouped in consortia organized by the World Bank for a certain country) may make loans available for such justified development projects, against commercial rates of interest.

However, as the number of well-conceived development projects is rising, and capital is becoming increasingly scarce, the lending agencies are raising their requirements as to the viability of a project. In the first place, they do not only expect a long-term economic soundness, but also a short-term financial viability: annual costs, interest payable on loans and other expenditures should be shown to be in balance with receipts. In the second place, lending agencies are no longer only interested in the expected return on capital invested in a development project—they also want to know what risks are involved in the investment: what is its sensitivity e.g. the effects of an increased unit cost of dredging, or a decrease in shipping, or larger volumes to be dredged, on the earning power of the project. This leads to a risk analysis, a computation process applied to calculations of economic and financial return.

In short, this calculation involves a probability analysis of each of the estimates made. E.g. there may be a 50% probability that unit cost of capital dredging for a specific project in the near future is, say Dfl 3,—per m^3. There may also be a 10 per cent chance that it is only Dfl 2,50 or on the other hand there may be a 10% probability that the cost may be as high as Dfl 4,—/m^3. As a result of this reasoning, probability distributions of each of the component factors may be obtained, and by mathematical processes the probability of the return on capital may then be computed. Thus the lending agency not only considers the average expected return on the capital, but also the likelihood that is much less, or much more. It is clear that a project with a 'flat' probability curve of returns may be less attractive than those with 'steep' curves, where the risk of a failure or misinvestment is smaller.

For dredging projects, where the uncertainties are greater than for e.g. bridges or locks, this risk analysis is of special importance.

A risk analysis made by the World Bank, has e.g. shown that a realignment of the Bangkok Bar Channel, as recommended in the feasibility studies mentioned earlier, seems to

have no priority among other port and harbour projects in Thailand in view of a number of uncertainties.

As indicated earlier, it may not be difficult to find an international lending agency prepared to make a loan towards a dredging project that meets these stringent economic and financial criteria. Reference is made to general information such as the 'Guidelines for the Procurement of World Bank loan's in which the general conditions have been set out.

However, if the project is not 'hard and fast', then it may be more difficult to make a loan. There is a possibility that although not yielding an economic rate of return, the project still deserves priority e.g. for its social importance (regional development or reclamation for town expansion). In such cases, it may be possible to obtain a 'soft' loan from the International Development Agency, a World Bank affiliate. Then there are possibilities for bilateral assistance. As said before, co-ordination through a World Bank organized consortium is desirable, in order to maintain the priorities of development, and to avoid an unjustified increase in debts of a developing country.

This danger is still greater if a contractor should make a loan towards financing a dredging project to be executed by himself—it is generally felt that this is not a desirable proposition.

Execution

The two alternatives mentioned—direct management or by contractors —may be considered extremes. There are some other possibilities, such as hire of equipment (on a time or a performance basis), or management contracts (with lump sum payment, fee on a cost-plus basis, or fee plus performance bonuses). A very rough division may be made by stating that, in principle, capital dredging is best suited for contracting, and direct management may be justified for maintenance dredging on special occasions.

The division between capital and maintenance work is often made with respect to equipment in the first place. This is, however, a rather doubtful distinction. Whereas it may be that certain types of equipment are to a certain degree biased towards one of the two types of work, most equipment can function for both. In principle the difference is that maintenance works are recurring, whilst capital works are a 'once only' contract.

Regarded in this context, therefore, maintenance works offer prospects for more continuous and permanent employment than do capital works, which is a reason why the always fluctuating capital works are much less suitable to be undertaken by the employers' own organization.

Moreover, the risk factors in both types of work differ greatly. The *'once only'* aspect of capital works postulates a lack of experience in that area. The suitability of the soil for dredging, that is to say the selection of the type of equipment and the production thereof has to be 'forecast' on a limited amount of data (bore holes, tests). Such forecasts, even with the present state of technology, are at best still very inaccurate. Further, the working conditions (waves, currents, winds) and the rate of resilting during the execution period—again determining the selection of equipment and the production thereof—introduce another group of uncertainties. Contractors with their large organization and their great experience in different parts of the world can mostly meet sudden unexpected developments much easier than a government organization.

Maintenance dredging on the other hand primarily concerns freshly deposited sediments and excludes practically all other formations. Moreover, the recurring nature of maintenance dredging offers the possibility of obtaining an intensive knowledge of most of the relevant factors, thereby partly eliminating the risk factors and enabling the optimum employment of equipment and application of working methods for the work.

It may, however, be mentioned that in present times the more or less static character of maintenance works is changing into a much more dynamic one. This is due to the revolutionary changes taking place in the shipping industry, in the ports and to a certain extent by developments in the dredging industry. Giant tankers and bulk carriers demand channels and berthing basins of steadily increasing dimensions, therefore maintenance requirements also grow in a dynamic manner so that the available equipment becomes inadequate, is no longer tuned to the job and becomes uneconomic to run.

Under the conditions discribed above it, it is obvious that relatively small autonomous organizations which are endeavouring to execute the necessary dredging works solely with their own organization and equipment face increasing difficulties, not only in satisfying their requirements for capital dredging works, but also for maintenance dredging.

The obvious alternative is to obtain assistance from larger, more elastic organizations (contractors or other forms of equipment, staff and expertise pools). The establishment of such a pool for Asian countries is now being considered under the aegis of ECAFE.

There are also other considerations. Many developing countries are often isolated from the main centres of contract dredging (the US, Europe or Japan). The high mobilization and demobilization costs of dredging equipment have consequently an unfavourable effect on contract prices, especially if relatively small quantities are concerned. This circumstance is probably the main reason why, after initial (capital) dredging works had been completed by contractors, many ports in developing countries are left to silt up.

In such countries, there is usually a backlog in maintenance dredging, which may still have to be cleared by contract. Meanwhile, existing equipment in the country may be reconditioned, repaired or renewed. Contractors could then also play the very useful role of training local staff and personnel; contractors may also be required to leave their equipment for future maintenance dredging—it should then be transferred after termination of the contract to a governmental organization.

In conclusion, it may be stated here that many contractors fully realize the importance of well-run and well-equipped governmental dredging organizations, that may carry out by direct management those dredging works for which they are by nature best suited. It is gratefully noted that most prominent contractors are prepared to assist in

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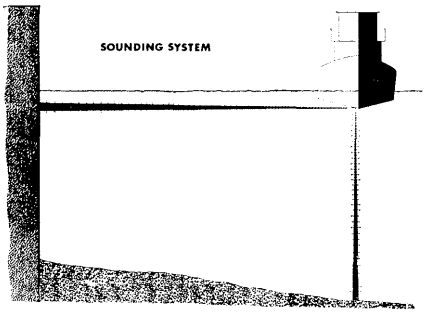
Port of Portland Providing Simple Plotting of Berth Depths

A. J. Heineman

Assistant Director of Marine
Port of Portland



Portland, Oregon, June 30: — Several years ago the Columbia River Pilots Association indicated that the sounding information available for the berthing areas in Portland Harbor needed improvement. The Corps of Engineers provide periodic surveys of the channel areas, plotted on charts at 1:5000 but do not have the responsibility for the slips and dock front areas which are outside the channel limits.

The Port of Portland Commission, local sponsor for the navigation channel, owns and operates a 30 inch cutterhead pipeline dredge as a part of its industrial development program, and in partnership with the federal government for the dredging of the 40-foot channel in the Columbia and the Willamette Rivers. As a consequence the Port has always had the capability and equipment for hydrographic survey work. Unfortunately, due to the time required and the high cost of tag line surveying methods, Port crews were only able to survey the publicly-owned facilities.

It seemed that electronics could provide a simple inexpensive method for solving the problem. Two fathometers and the 60 foot dredge tender W.L. WILLIAMS provided the answer. The W.L. WILLIAMS constructed in 1959 was equipped with a Raytheon recording fathometer.

The addition of a small portable fathometer to the bow of the WILLIAMS for horizontal positioning was the solution to provide an inexpensive, rapid, accurate complete set of surveys for the Portland Harbor berthing areas.

The bow mounted fathometer equipped to sound in a horizontal direction to Port or starboard provides the tug captain with a distance reading from the fender piling along the pier. As the vessel proceeds along the berth running lines at a distance

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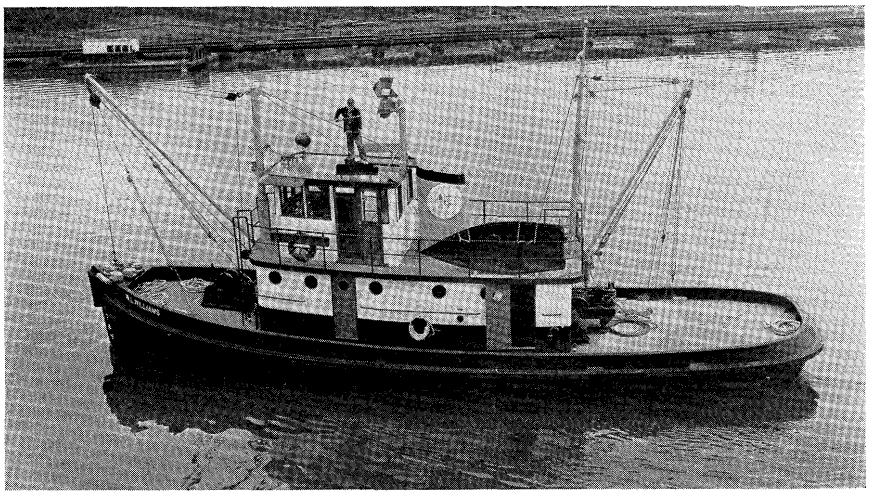
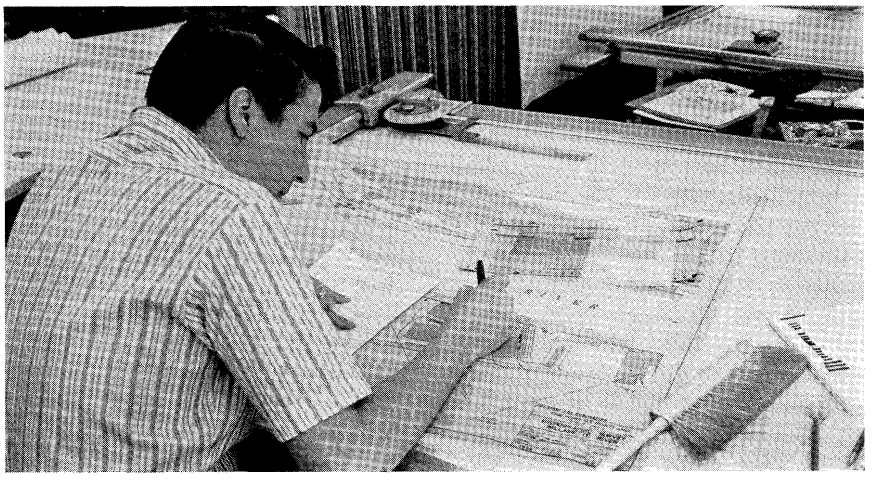


60 foot Dredge Tender, W. L. WILLIAMS, constructed in 1959.



Plotting dockfront soundings from takeoff sheet. Note 100 foot station marks on fathometer chart.

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setting up such organizations, and they are actively engaged in doing so in a number of countries, thereby making a very real contribution to development aid.

However, it is most essential that execution is and remains separate from the planning. Those involved in actual dredging activities should have no say whatsoever in the question of whether dredging is done; priority aspects, target depths and even alignment and spoil dumping locations belong to the territory of the planners alone, and those should be part of the public authority that is financially responsible for the works.

This however, is not different for developed or developing countries. If may therefore be hoped that in the near future, there will no longer be such major differences or distinctions between dredging projects in developing countries, and those in the rest of the world, as was indicated in the introduction of this article.

New Terminal Is Nearing Completion at Kharg Island-Iran

I. O. E. & P. C.

(Iran Oil Exploration & Producing Company)
from Gray, Mackenzie & Co. July Bulletin-1972

During the past eighteen months construction of a Sea Island Terminal capable of accommodating vessels up to 500,000 DWT has been in progress and this is due to be operational in September of this year.

The new terminal is situated on the western side of Kharg Island one mile off shore, in position:—

29° 13′ 30″ NORTH
50° 17′ 06″ EAST

and consists of a Central Island with three mooring dolphins each to the North and South lying in a position 334° 154′ true.

Two berths only are provided numbered 11 and 12 details as under (Berths 1 to 10 inclusive are on the I.O.E. & P.C. Main Jetty on the Eastern side of Kharg Island).

Berth No. 11—Situated on the west side of the central platform, this berth can accommodate vessels of up to 500,000 DWT, with a depth of water alongside at mean low water of 106 ft.

Berth No. 12—Situated on the east side of the central platform, this berth can accommodate vessels of up to 300,000 DWT, with a depth of water alongside at mean low water of 98 ft. This berth will not be able to use the dolphins designed for vessels up to 500,000 DWT on Berth 11 and is restricted therefore to the 300,000 DWT limit.

Both berths are fitted with rigid arm "Chiksan"—type loading arms of the following sizes and number:—

(1) **Berth No. 11**
(Cargo) 24″—4 loading arms.
(Bunker) 16″—2 loading arms.

(2) **Berth No. 12**
(Cargo) 16″—4 loading arms.
(Bunker) 12″—2 loading arms.

All Chiksan Arms are fitted with clamping devices to cut down connecting time. The terminal installation is designed to provide a total loading rate of 30,000 L/T per hour to each berth. However, the actual loading rate obtained by a vessel on either berth will be governed by:—

(a) The number of loading arms which can be connected to the vessel
and

(b) the loading rate being supplied to a vessel on the other berth, if the latter is occupied at the time.

ARRIVAL PROCEDURE:

Upon arrival at Kharg Island all vessels should proceed to the Eastern Anchorage, where final instructions will be passed by "KHARGPILOT" by VHF. The vessel will either be required to anchor in a position 2 miles east of the I.O.E. & P.C. Main Jetty or will proceed direct to the Sea Island. In case of the latter a pilot will embark in the Eastern Anchorage and the vessel will be taken around the south of the Island for berthing. PLEASE NOTE THAT IT IS FORBIDDEN FOR ANY VESSEL TO PROCEED DIRECT TO THE SEA ISLAND AREA WITHOUT A PILOT ON BOARD.

QUARANTINE AND CUSTOMS:

It is anticipated that the Quarantine and Customs representatives will board on arrival at the Eastern Anchorage. However this has at present not been finalized. Radio Free Pratique can be granted upon despatch of a standard quarantine cable.

TUGS:

For the purpose of berthing 3 tugs will be used, while 2 tugs will be used for unberthing. The horsepower of tugs available are given below:—

2 Tugs of 3,000 bhp.
4 Tugs of 1,650 bhp.

GANGWAYS:

Gangways are provided by the Terminal.

LOADING:

All loading operations will be controlled from the Central Control Room on the Island Terminal itself.

BUNKERS:

Owners should note that while it is possible to take bunker fuel oil at both berths NO PROVISION EXISTS TO SUPPLY MARINE DIESEL OIL.

SHORE LEAVE:

Shore leave will not be permitted while the vessel is alongside the berth.

CREW CHANGE:

Crew changes are prohibited alongside and must be undertaken before berthing or after unberthing. Agency representatives will, however, be permitted to board alongside on Agency business etc.

EARLY DEPARTURE PROCEDURE:

The Oil Company operate an Early Departure Procedure and it is anticipated that most vessels will use this method of despatch. If EDP is accepted documents will be signed by the Master in blank form and the cargo figures will be agreed later by radio. EDP

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of 15 feet, 40 feet, 75 feet and 100 feet from the pier, the surveyor marks the fathometer chart at each 100 foot station marked on the face of the pier. The deckhand swings the bow mounted fathometer so that soundings can be made in both directions, thereby reducing time required at each berth.

10 to 12 berths can be covered in one day's operation. The completed sounding chart is sent to the Engineering Department for plotting on sheets with a scale of 1:2000.

The dock front soundings are taken at least once each year and together with the Corps of Engineer channel soundings, provides the pilots and dock owners with complete information for the safe navigation of vessels. Accuracy is also improved through the use of electronics by the fathometer reporting the minimum depth in the survey alignment, in contrast with the single point sounding of the former lead line method. Crew size is reduced from 5 men to 3 and greater speed has resulted in the production of the complete set of soundings for at least 76 berths on a budget of about $3,500 per year.

or not, all documentation will be affected ashore.

FIRE FIGHTING APPLIANCES:

The Sea Island is equipped with foam and water fire-fighting equipment and all tugs fitted with similar equipment.

MEDICAL ATTENTION:

The distance from the boat harbour to the Sea Island is about seven miles and true emergencies will be dealt with according to circumstances. A helicopter may be used to transport a Doctor to the Ship or an injured person to the shore. Routine medical and dental visits to the shore clinic will be arranged by Agents.

RADIO COMMUNICATIONS:

Vessels arriving for the Sea Island Terminal should send all messages to us via Abandan Radio Station (Call sign EQZ), cables being prefixed "KHARG IRAN FOR GRAY".

PROVISIONS:

Provisions can be provided. However, ample notice should be given of requirements and these can only be delivered before berthing or after unberthing.

WATER:

No Fresh water is available.

REPAIRS:

No repair facilities are available.

PORT RULES & REGULATIONS:

Masters should use the present I.O.E. & P.C. Instruction Manual applicable to the existing Main Jetty, as it is not foreseen that this will change for the Sea Island.

CREW MAIL:

All mail to be addressed as at present for vessels loading at Kharg Island.

The Island Terminal is completely exposed to the prevailing winds and we envisage days when small craft will not be able to proceed to the Terminal or Anchorage and therefore we recommend Tanker Owners/Operators to make it a practice to fully utilize the "GRAY SWIFT" Tanker Supply Service for Crew Changes, Mail, Ship's spare Parts, Provision, Bonded Stores, Films, Electrical Repairs etc., and thereby avoid the possibility of delay. For further details contact the operators Messrs. Gray, Mackenzie & Co. Ltd., P.O. Box No. 70, Dubai,—Telegrams GRAY DUBAI—Telex No. GJ425 A/B GRAY DUBAI.

Oakland Distribution Terminal Expands Import-Export Services

Port of Oakland

Oakland, Calif., August 9:—The Oakland Distribution Terminal, which recently completed its first year of operations, has grown and rapidly established itself as a means of providing shippers customer service that cannot be surpassed in the West, Port of Oakland Executive Director, Ben E. Nutter said today.

The distribution terminal, located adjacent to the Port's mammoth Seventh Street Terminal and Outer Harbor facilities near container yards of three transcontinental railroads, performs two basic functions, Nutter said:

*It offers a consolidation service to importers in which small shipments are combined to achieve lower volume inland freight rates, and

*Provides an export service to shippers and freight forwarders who have found delays and split deliveries costly.

The standard consolidation offered importers includes container pickup at the steamship terminal, container unloading and reloading into high-cube piggyback or truck trailers and consolidating that cargo with other freight to achieve the lowest inland rate possible.

Nutter said that all quantities of freight ranging from 1,000 lbs. up to any volume of cargo received at one time can be consolidated. There is no service charge to the importer —he merely pays a proration of the lowest applicable rail or truck charge along with the other shippers whose freight makes up the load.

Another important ODT service is designed for through container movements. In that type of operation an individual shipper's containers are drayed from the steamship line container yard to railroad piggyback yards, located just minutes away. There the vans are matched with other containers or trailers moving to the same destination, again achieving the lowest available freight cost.

Transloading, a service for shippers who by themselves have sufficient cargo to achieve low inland rates, is a third major import service of ODT. Here freight is transloaded from containers into trucks or piggyback trailers to attain maximum cube. Again, no charge other than the appropriate freight rate is levied.

Nutter noted that by using ODT, shippers need deal with only one company, making communications, documentation and claims more efficient. "Shippers, as a result, have better freight control."

Throughout the entire import process, data regarding car arrivals, container numbers and OS&D is relayed to shippers promptly.

For exporters, the essence of the new Oakland Distribution Terminal service is this: all consolidated shipments are unloaded at ODT, freight is separated and consigned to outbound vessels at the Port of Oakland, frequently without cost to shippers.

This allows shippers and forwarders having multiple shipments arriving at the Port in carload or truckload quantities the advantages of delivery to one location, even though portions of the shipment are destined to sail on more than one steamship line.

Containerized freight it stuffed at ODT and drayed to the container yard of the ocean carrier the shipper selects. "That selection is a large one," Nutter said, "as Oakland offers some 40 containership sailings each month, far more than any other West Coast port."

Oakland Distribtuion Terminal is operated by Marine Terminals Corp., the largest stevedoring and terminal operator on the Pacific Coast.

"In looking at distribution facilities at other ports, including those run by other port's personnel, we found that shippers needed the type of expertise that only a service-

(Continued on Next Page Bottom)

Port of Los Angeles Is Water Oriented

Among the assists by oil companies with facilities along Dominguez Channel to maintain a high quality of water at Los Angeles Harbor is the recent installation of $650,000 worth of special equipment by Standard Oil Company of California.

Called an Air Pressurized Recirculated Chemical Flocculation system, it treats ballast waters from ocean-going vessels, and has a capacity of 25,000 barrels per day.

"It's of the newest, latest design," stated G. Hanson, Standard's San Pedro Terminal superintendent. He noted that this is the first major oil company in the harbor to use the system.

In the process the ballast water is discharged from the ships into storage tanks, where oil is recovered and pumped to El Segundo plants for processing. The remaining brackish ballast water is transferred to treatment tanks where the remaining impurities are removed.

This is accomplished by the addition of three chemicals and pressurized air which cause the impurities to rise to the surface and form a flock or foam. This flock is swept off the surface of the purified water and removed to a sludge bin. The purified water, or effluent, is discharged into the harbor.

"The effluent is sparking clean," Hanson noted. "Marine life may be observed within ten feet of the outfall."

Prior to its new system, the Standard Oil marine petroleum terminal used a baffle separator to clean its ballast waters. No vessel or industrial plant may discharge directly into the harbor without a permit from the Port Warden's office, a measure that helps the Port of Los Angeles maintain its high quality water.

Matching the efforts of Standard Oil Company of California is the canning industry located on Terminal Island. According to Don Crews, staff engineer for the Tuna Research Foundation, the canneries have in the past and will continue to limit their fish processing throughout the year in order to maintain a proper marine environment for the harbor.

The wet fish season (anchovy and mackerel) begins in September and the canneries have already made extensive alterations for unloading and conveying these species through water recycling and other means. Substantial reduction of organic wastes has been achieved.

Crews also noted that all of the canneries will be installing new air flotation treating equipment. "Cannery problems here on Terminal Island are requiring large expenditures without recovery of a useable product to offset these costs. We hope our efforts will not eliminate the beneficial effects of our present discharge for fish propagation.

All the canneries intend to hook up to a planned expanded sewerage system on Terminal Island, which will provide secondary treatment and discharge its effluent beyond the breakwater.

"What we now have," Crews reflected, "it a water oriented industry converting to a dry industry." While 30 million gallons of water (mostly sterilized sea water) a day was the regular use for normal cannery operations in the past, the goal is now to get down to three million gallons per day.

With the beginning of the wet fish season, routine sampling and testing of fish cannery effluent by the Los Angeles Harbor Department will be increased to once a week. In addition, daily tests of the quality of water in and around Fish Harbor will continue to be made.

"We're even busier than ever before," Frank Steiger, Harbor Department testing engineer, said in regard to the daily testing required by the Regional Water Quality Control Board during the wet fish season.

"Generally the quality of water is being upheld," observed Steiger. "We've been getting results of five parts per million of dissolved oxygen constantly throughout most of the harbor."

Eight parts per million of dissolved oxygen is considered the maximum possible normal conditions, Steiger observed, and therefore the harbor's water is in good condition.

In addition to the constant testing programs, the testing laboratory has cooperated with the University of Southern California and the Allan Hancock Foundation in studies of the harbor's currents. The relatively small current activity in the inner harbor has contributed to pollution conditions, and information in this will be helpful in combating any future problems.

As the Harbor Department continually tests the port's waters and monitors all shipping and industrial plant discharge through the Port Warden's office, it is also engaged in the surface trash removal.

Approximately 20 tons of floating debris per day is removed from harbor waters by port personnel. This alone costs about $60,000 per year.

The Los Angeles Board of Harbor Commissioners adopted a strong anti-pollution policy statement on August 27, 1969. Its objective was the improvement of the quality of harbor waters so that an environment favorable to sea life could exist inside the harbor.

Recently the industrial plants along the Dominquez Channel were commended by the Harbor Department for their efforts to clean their discharge that went from the channel into the harbor.

While testing engineer Steiger indicated that the phenomenal improvement of harbor waters during the 1969–70 period resulted in a high level of water quality, steps by the Harbor Department and its tenants have ensured that the Los Angeles Harbor waters will continue as among the best in the world.

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minded private firm like Marine Terminals Corp. could provide," said Nutter.

"Oakland Distribution Terminal has expanded its range of import-export services to a point where almost any given shipper can select an ODT service that will seem tailor-made to fit his needs."

Progress—the COOL Way

Taranaki Harbours Board
Port News, April, 1972

"Your directors desire to congratulate the shareholders on possessing works so complete in themselves, with all the latest and most improved machinery . . ."

This is an extract from the first annual report of the Taranaki Freezing Works Company Limited, presented on August 1, 1896.

Such a paragraph could well be included in the 1972 annual report of that company's successor, the Taranaki Producers' Freezing Works Company Limited.

For more than seventy years the "cool stores" as the company's premises are popularly known, have progressed with the rest of Taranaki; new buildings have been erected and modern equipment installed geared to meet the growing needs of a progressive province.

When the present company was formed in 1901 just over 500 tons of dairy produce was received for storage during that first year, in 90,000 cubic feet of space.

Last year 85,247 tons of produce was handled in two-and-a-half million cubic feet of storage space.

These figures show the impressive growth of a company which handles the butter and cheese produced in one of this country's richest dairy areas.

Visual proof is even more impressive. The company's huge $5½ million complex in Breakwater Road, New Plymouth, dominates the approach to Port Taranaki, which, because of the activities of the company, is the largest cheese-exporting port in the Southern Hemisphere.

The original firm had its building on the site of the present works and had on its directorate men whose names are now part of Taranaki's history: J. B. Connett, Newton King, William Bayly, Henry Okey, Hugh Irvine.

After five years of operations, representatives of the various dairy companies made an offer and the works were bought for $31,527. The Taranaki Producers' Freezing Works Company Limited's first board of directors comprised Messrs. J. B. Connett (chairman), R. Dingle, H. Sprett, J. W. Forman, C. Washer, J. Brown and A. Morton.

In that first year of operation, 1901–1902, 176,210 boxes of butter and 9530 crates of cheese were handled. Modern packaging and other changes have seen the end of the old crates and boxes, but some idea of the growth of the company can be visualized when it is realized that last year six and threequarter million units of produce were handled by the staff.

It hasn't been an easy 71 years. There have been good times, but there have been some lean years. There have been times of depression when, together with the rest of the country, men didn't know if there would be any money for them on pay-day; two world wars, shipping, waterfront and other industrial disputes have had their repercussions.

But each decade has seen a substantial increase in the tonnages handled, until today the Taranaki Producers' Freezing Works is one of the largest and certainly one of the most efficient of its kind in the country.

Right through the company's history there is evidence of efficient planning for the future and crisp action is an emergency.

For instance, when in 1904 the works were destroyed by fire, within five months a new store had been built at a cost of $13,814, and figures reveal there was no reduction in the amount of produce handled in that year.

Since then there have been nine major alterations and additions to the works, the last—and the biggest—being completed in 1970. This is the Scott and Gibson store, which lifted the works' capacity to two and a quarter million feet of storage space.

The heart of the cool stores is its insulation and refrigeration system. The first buildings were built of kauri, with granulated pumice in hollow walls and floors as the insulation medium, a portion of which is still in existence and quite serviceable. In later construction cork was used as insulation material, and in the latest building expanded polysterene was installed to provide insulation of storage spaces.

The original plant consisted of two steamdriven ammonia compressors. From the beginning of operations the directors had foreseen the use of electricity, but it was not until 1919 that complete electrification of the works was possible.

Today the works is equipped with some of the world's most sophisticated refrigeration equipment. In the Scott and Gibson store, for instance, the plant consists essentially of five high-speed ammonia compressors which can be used either for high-pressure chilling, or low-pressure freezing services, according to seasonal storage needs and export shipping.

The whole plant operates automatically and has built-in "fail-safe" shutdown controls and modern safety devices.

The insulation design factors permit temperature reduction in all chambers to zero degrees Fahrenheit, if necessary.

In point of fact, such a low temperature is rarely needed. Most of the cheese is kept at between 42 and 44 degrees Fahrenheit, except for special orders which require delayed maturing, and are kept at about 38 degrees Fahrenheit.

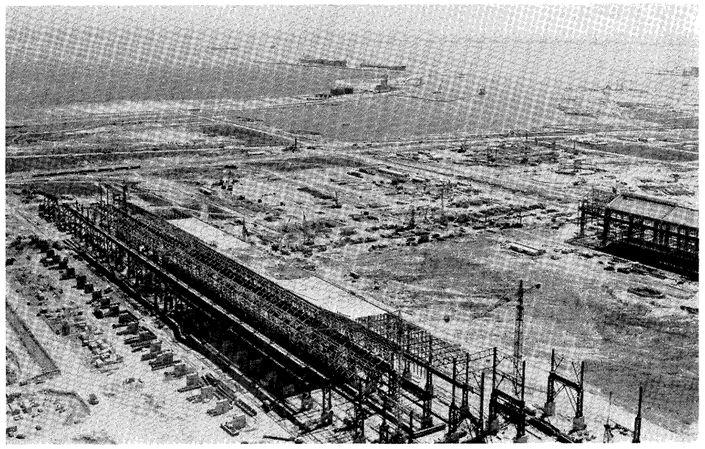
Butter is usually stored at a temperature of 15 degrees Fahrenheit. It has been found that butter and cheese can be kept in store for months without losing quality, although it is unusual for bulk produce to remain in the store for longer than a few weeks during the height of the production season.

For the first seventeen years of the company's existence, this province's dairy exports were railed to Wellington and Auckland for loading on to refrigerated ocean-going ships.

In 1917 an event occurred of great significance to the company and the province, which for some unknown reason, was allowed to pass almost unnoticed. When, in March of that year the steamship Waiwera called at Port Taranaki to load butter and

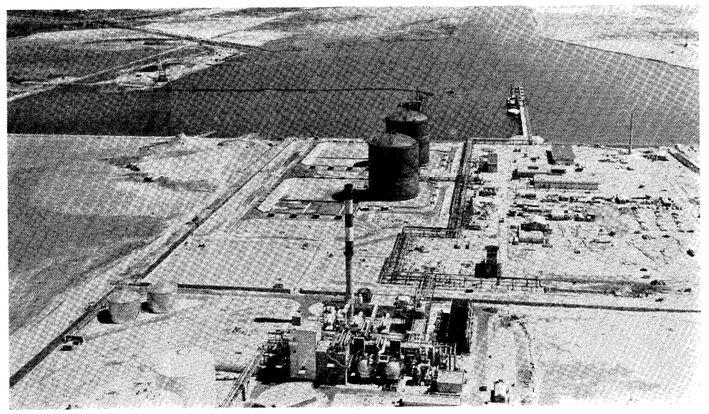
(Continued on Page 28)

Photographs of Berths and Industrial Plants at Marseilles-Fos

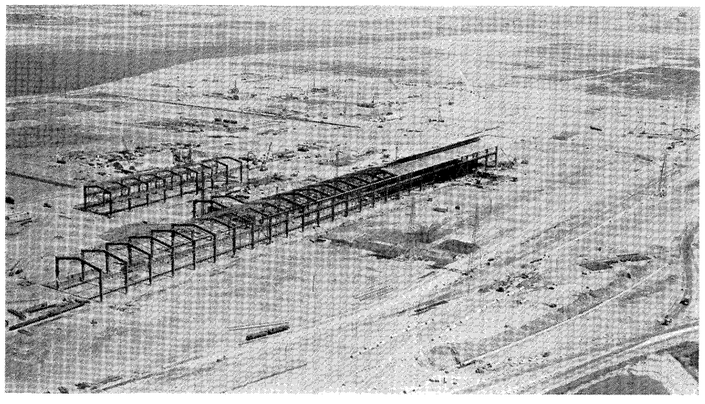


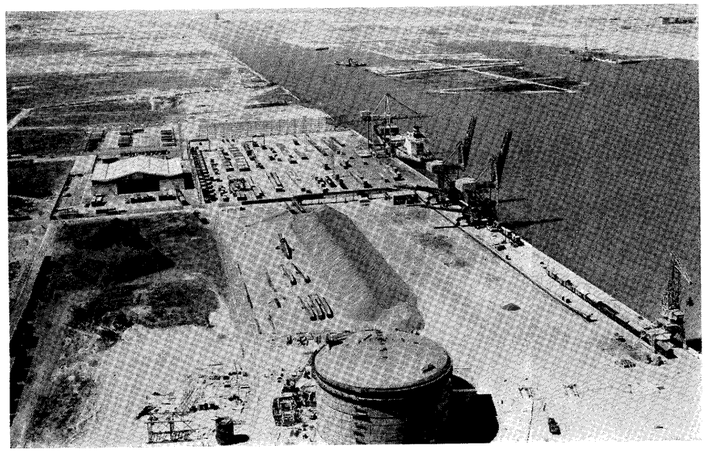
← Dock 1: SOLMER (Société Lorraine et Méridionale de Laminage continu). The control tower and oil berths are seen in the background.

→ Dock 1: Gaz de France (Center at waterfront) and Air Liquide (foreground)

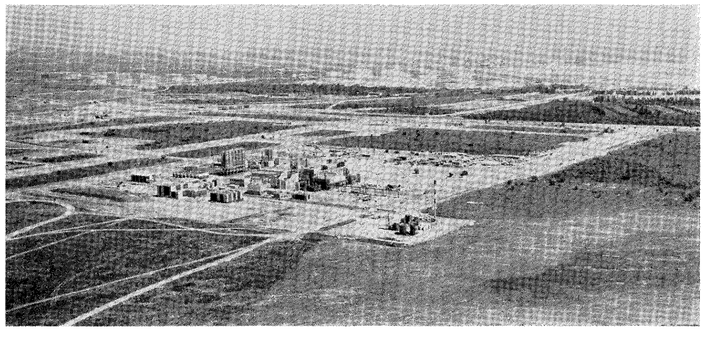


→ Dock 1: Ugine Acier



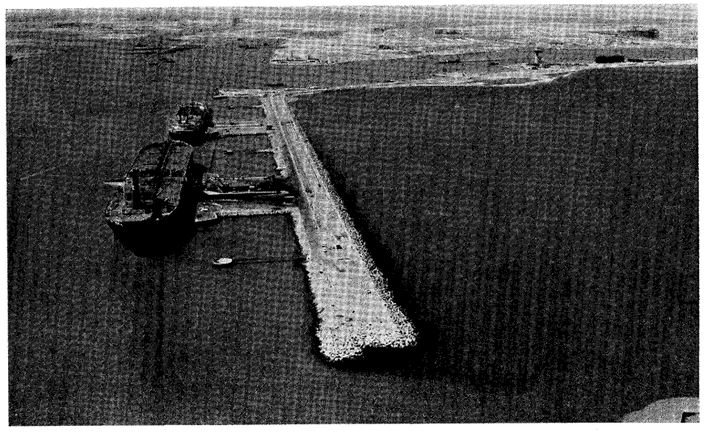


← Ore berth (foreground) and container berth (adjacent) at Dock 1



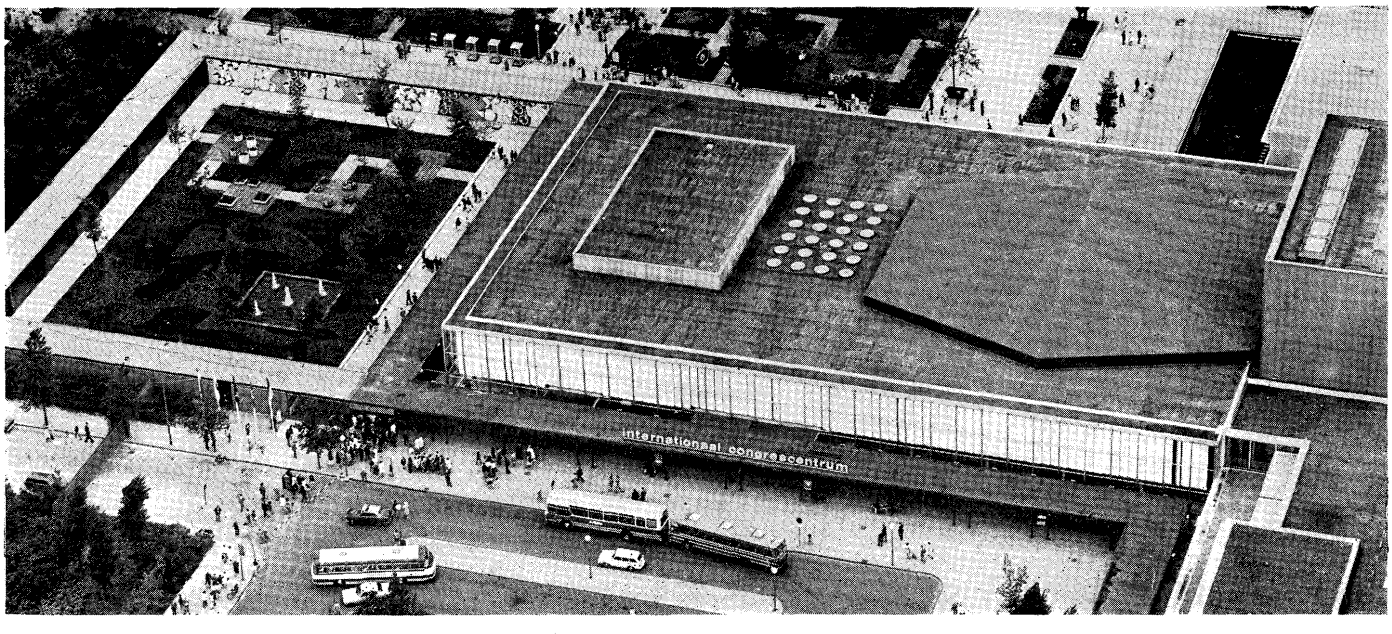
← I.C.I.

→ Oil berths



The 8th conference of the International Association of Ports and Harbors will be in Amsterdam.

Coming?



A globe-spanning network, flights straight to Amsterdam. Lots of thoughtful extras-including a booking office right at the congress centre, where you need it. For KLM's the airline with the difference. The airline that cares, start to finish, in the air and on the ground.

KLM's the airline for you.

We have a home country perfect for conventions, too: Plenty of scope for sightseeing and after-hours fun. Great congress centres in Amsterdam, Rotterdam, The Hague and Utrecht. It's a country that welcomes strangers — that has reserved a special welcome at Amsterdam's RAI for Port and Harbor's people, May 6-12 next year. Will we be flying you there?

KLM

cheese for the United Kingdom, she was the first overseas vessel to load dairy produce direct from New Plymouth.

Now refrigerated cargo ships are among the port's most frequent visitors.

The land on which the cool stores stand has important links with early New Zealand history. It was the site of a large pa where the early whalers and traders lived at peace with the Maoris.

Early in 1832 the pa was beseiged by the raiding Waikato Maoris, and for three weeks the defenders, led by Richard Barrett, John Love, and other Europeans, held off determined attacks.

During one of these, one of the defenders' field pieces exploded. This was taken as a bad omen. and the Waikatos, as was customary, announced that there would be a general assault and the pa would then be taken the following morning.

There was apathy among the Maori defenders, but not among the Europeans. In spite of the fact that the Waikatos had informed them in detail exactly what was to happen to their individuals (or maybe because of this) the Europeans fought with such vigour that the Waikatos panicked and were driven back.

For many years afterwards there were white human bones among the sand to the west of the Hongi Hongi stream.

A few yards away to the west a memorial marks the spot where the first settlers landed from the ship William Bryan in 1841.

Following the discovery of oil at the breakwater in 1865 the beach at Ngamotu literally bristled with oil derricks for many years. One of these wells was drilled where the Scott and Gibson Store now stands. During work on the foundations for this building the bore was exposed, and gas was encountered.

The well was permanently plugged and gas diverted to the cooling water overflow system. Gas seeping through the surrounding conglomerate can still sometimes be seen bubbling up through the cooling pond, which was formed by damming a small stream adjacent to the works.

The history of the Taranaki Producers' Freezing Works Company Limited is, in part, the history of Port Taranaki, for the bulk of the export trade comes to the port via the cool store.

Britain's entry into the Common Market may see changes in the trading pattern, but in the meantime an annual turnover of more than 80,000 tons of Taranaki dairy produce is proof of the value of the "cool stores" to Taranaki.

Major construction and rebuilding of the Taranaki Producers' Freezing Works over the years:

Original building, 1895: taken over by present company 1901: works destroyed by fire and rebuilt in 1904; Morrison Store built in 1915; Connett Store, 1918; additions to Morrison Store, 1929 to 1932; Nixon Store, 1937; Fluker Store, 1946; Rundle Store, 1953; Parsons Store, 1959; Scott and Gibson Store, 1970.

Present members of the directorate are Messrs. K. W. Jackson (Chairman), L. J. Barrett, J. A. W. Boddie, J. B. Coull, D. I. Corbett, C. W. Green, G. Kissick, J. B. Mooney and N. A. Sutherland. Manager and Superintending Engineer is Mr. J. B. Johnston and the Secretary is Mr. D. M. Powell.

A Deepwater Port in The Delaware Bay Area?

City of Philadelphia News Release
June 2, 1972

Mr. Chairman and distinguished members of this public meeting.

My name is Harry R. Belinger, City Representative and Director of Commerce for the City of Philadelphia. Today I am before you in my function as Director of Commerce, which carries with it responsibility for the promotion and development of the city's Business, Airport, Port and Civic Center.

The question before us is the location of a deepwater port in the North Atlantic Region. While the Port of Philadelphia is of vital importance to the economy of both the City and State, we are also aware of the fact that the channel leading up to our City has an average depth of only 40 feet. The technological developments following the seizure of the Suez Corporation by the Egyptian Government in 1956 led to construction of ever larger bulk tankers and carriers. We are cognizant of the fact that today the United States is the only large industrial country that does not possess a port capable of handling vessels of more than 150,000 tons dead weight.

We have also closely followed the constantly rising need of our nation for ever increasing sources of energy. The Delaware Region where so much of our manufacturing processors are concentrated is especially affected by these constantly rising energy requirements. Since even such a modest goal as a 4% annual increase of the gross national product would require more than doubling of the existing sources of energy and because the supply of domestic crude oil has passed its maximum yield, the importation of foreign crude oils will be the only answer to satisfy the United States' needs for the foreseeable future.

Recent studies have indicated that approximately 15 million barrels of crude oil will have to be imported on a daily basis into the United States by 1985. Approximately one-third of this amount will be needed on a daily basis to satisfy the needs of serving the North East Coast industrial areas.

At the present time the two ports on the East Coast handling bulk petroleum imports—New York and Philadelphia—handle approximately 1½ million barrels per day. To increase this quantity more than threefold will require not only a substantial tanker fleet but in the very near future a deepwater channel.

The importance of the Philadelphia port can best be visualized against its central location in an $80 billion market containing a population of about 60 million residents.

The contribution of the ten major East Coast refineries is reflected in their 1971 employment, which amounted to over 14,000 jobs, producing more than $127 million annually to the Delaware River-Perth Amboy-North Jersey areas.

The projected needs of the East Coast capacity for 1985 will require more than doubling the 1971 employment picture with a corresponding increase in wages. The employment outlined thus far indicates only the direct labor force employed by the refineries. Using an extremely conservative employment multiplier effect (a ratio which indicates how many additional jobs in an area are created by employment in the original industry) of one indirect job created for every refinery employee, the economic impact of the 1985 projected employment-wages in the refinery industry for the Delaware Valley-North Jersey area is estimated to amount to more than half a billion dollars.

Location of such a deepwater port in the Delaware Bay area would probably release market forces which would induce construction of new refineries in the proximity of such a port. We are confident, however, that such a development would benefit not only the nearby areas but would also generate additional manufacturing operations throughout the Deleware-New Jersey area. Since Philadelphia has a substantial number of qualified managerial personnel as well as the labor force needed for employment in such second and third stage manufacturing developments, we believe that not only Philadelphia but the region as a whole would ultimately benefit from establishment of these facilities.

Since Philadelphia is not only a receiving terminal for bulk shipments but also acts as a shipper of coal and grain products throughout the world, we are strongly in favor of establishing a deepwater port facility in the Delaware Bay area. It is much too early for us to be able to estimate the effects of a deepwater facility in the Delaware Bay area on our own port activity. These are the questions that will be answered by technicians in the give and take process of a free competitive society such as ours. I am confident that, because of the substantial cost differential between water transportation and other means, Philadelphia with its modern container facilities at Packer and Tioga Terminals will continue to make its contribution not only to the economy of our City but to the development of the Region and the Nation.

In my statement I have not addressed myself to the seven questions on which you have asked specific information, for the simple reason that the deepwater facility in the Delaware Bay area would be located 90 miles from our City. I can assure you, however, that whatever contribution would be required of a private or public nature that is within our means of delivering, we shall contribute.

Valuable Northland Industry—Moerewa Freezing Works

Points North, May, 1972

Whangarei, N.Z.:—Over half a century ago, the Auckland Farmers' Freezing Co-operative Company Ltd. opened its Moerewa works. In spite of a hard struggle during its early years, and in the Depression, the works developed to become the catalyst of economic development in the mid and far northern areas.

The works also provided a new lease of life for the small Bay of Islands Port of Opua. Since 1922, over half the annual export tonnage handled by the port has been in the form of AFFCo meat and by-products.

The first export consignment from Moerewa—3,134 tons—was taken from Opua in 1922 by five lighter ships to a vessel waiting in the stream.

In those days, the daily killing capacity of the AFFCo works was 200 cattle or 2000 sheep.

The first refrigerated ship to dock at Opua was the New Zealand Shipping Company's "Devon," in 1924. In that year, the "Devon" and six other vessels exported 2,831 tons.

Ten years later, the cargo handling figure at Opua had increased to 6,745 tons per year and by 1940 up to 9,449 tons. Opua was closed during the war years and AFFCo exports were railed to other ports.

In the years 1957–58, a total of 20 ships exported 13,884 tons of primary produce from the port. Of that figure, 6,387 tons was in the form of meat and byproducts.

In the early 1960s the works entered into a period of profitability, modernization and expansion unequalled in its history.

In comparison to its killing figures in the 1920s, the works could now put through 7,500 sheep and lambs and up to 1,100 cattle in a day, plus a number of pigs.

By 1967–68, the AFFCo Moerewa export figure from Opua had climbed to 15,567 tons.

Typifying the modernization carried out at the works in the last two decades to cater for the export demand was the carton freezing department built in 1970.

The department contains loading, freezing, conveying and storage systems.

It is completely automated and is one which, at the time of its construction, was said to be the first of its kind in New Zealand—and probably the world. In a day, it can handle, 3,075 sixty-pound cartons of packaged meat.

The temperature of the storage area can be dropped to minus 40 degrees Celsius.

On the beef cutting floor, where choice meat is boned, cut and packaged for the export markets, the up-to-date plant, and personnel, meet stringent hygiene requirements which put the Moerewa operation in the forefront of the world's meat processing.

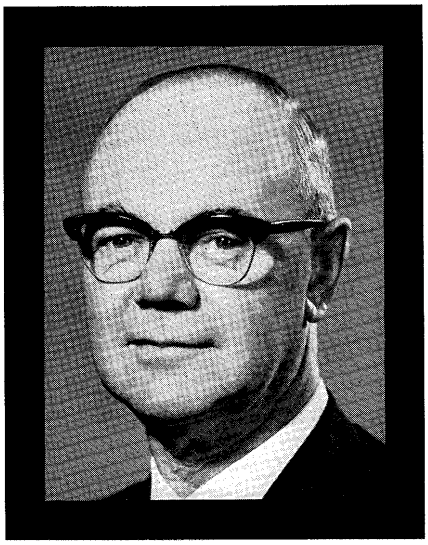
In 1971, nearly 17,000 tons of cartoned meat, carcases and by-products were exported through the Port of Opua.

In recent years the company's annual beef killing figures have in-

(Continued on Next Page Bottom)

IAPH News:

Mr. Swanson Passes Away



The late Mr. V. G. Swanson

With deep regret we learn that Mr. V. G. Swanson, C.B.E., E.D., Chairman of Melbourne Harbor Trust Commissioners, passed away early September 14 morning in Melbourne, Australia. Mr. Swanson had been President of our Association during the period March 1969–June 1971 and since then was a member of the Executive Committee.

Immediately offered were statements of condolence, three of which are printed in this page.

A. Lyle King
President

All of the members of the International Association of Ports & Harbors are greatly saddened to learn of the passing on September 14 of Vic Swanson, Chairman of the Melbourne Harbor Trust and First Past President of our Association.

On behalf of our members I wish to express our deepest sorrow. Vic was a brilliant engineer and dedicated public servant who has made a very great contribution to the port industry.

As Chairman of the Melbourne Harbor Trust he was responsible for the design and development of the modern and efficient port facilities to be found in Melbourne harbor.

We recall with pleasure the Conference held in Melbourne in 1969 when Vic was host and president.

We shall remember him as a warm human being with deep concern for others. We will all miss him very much.

Gaku Matsumoto
Former Secretary General of IAPH
President
The World Trade Center of Japan, Inc.

A sad news of death of Mr. V. G. Swanson, Chairman of Melbourne Harbour Trust Commissioners, came as a great shock to me.

Mr. Swanson served as the president of IAPH from March 1969 to June 1971 and rendered a very valuable service to the Association, contributing to its great strides made during this period and thereafter. In recognition of his outstanding work, he was elected as an honorary member of IAPH in 1971.

When the general assembly of the Association was held in Tokyo in 1967, Mr. and Mrs. Swanson were received in audience by His Majesty the Emperor and Her Majesty the Empress. I recall that at that time we had a photograph taken at the front yard of Imperial Household Agency and that Mr. and Mrs. Swanson seemed to be deeply impressed by this great honour bestowed upon them, which was perhaps one of the most memorable occasions in Mr. Swanson's long life.

Mr. Swanson is no longer with us now, but the splendid work left by him and his personality will be long remembered by those who have been fortunate to be acquainted and associated with him officially or otherwise.

Toru Akiyama
Secretary General

I first met Mr. V. G. Swanson in May, 1963 on the occasion of the 3rd IAPH Conference in New Orleans.

During the ensuing years, I developed a very close acquaintance with Mr. Swanson. He impressed me as being an extreme scholarly, deep-thinking man, and at the same time very enthusiastic, businesslike and far-seeing.

In 1969, Mr. V. G. Swanson, as Chairman of the Melbourne Harbor Trust Commissioners hosted the 6th Conference of the Association in Melbourne. Under his able chairmanship the Conference was an outstanding success and Mr. Swanson was elected as the 8th President of the IAPH, succeeding Dr. C. Haraguchi.

It is with the deepest sorrow now that I realize that this was to be the last Conference at which he was to appear personally, although his taped Presidential address was presented at the following Conference in Montreal.

My happiest memories of Mr. Swanson are of when we were together travelling. In February, 1970, after the Executive Committee meeting held in Singapore, Mr. and Mrs. Swanson and I visited Dato Razali in Penang, and Col. Suntrangkoon in Bangkok, where we were joined by Mr. King, the present President.

It is one of my happiest recollections of Mr. Swanson to have been with him on this trip which he so obviously enjoyed, trying difficulties of a hot and humid tropical climate.

The sad news of Mr. Swanson's unexpected death, when he appeared to be recovering from a long illness and was expected to attend the Conference in Amsterdam, has come to me as a great shock.

Mr. Swanson has been a close friend to me and has always been a source of sound advice and encouragement.

His death is a loss to the Association and also for me the loss of a very close personal friend.

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creased by 90 per cent and the lamb/mutton figures by 30 per cent.

Its annual killing figures for its 50th Anniversary year — 1971 — reached an all-time high of: 128,000 cattle, 700,000 sheep and lambs, 90,000 bobby calves, and 34,000 pigs.

AFFCo Moerewa now employs a regular staff of 750, with a peak season hiring last year of 1,100. Its payroll annually injects more than $3.25-million into the local economy, making it one of Northland's largest and most important primary industries.

Orbiter Probe

IAPH News:

New Members

Regular Members

1. Richmond Port Commission
   City Hall, Civic Center
   Richmond, Calif. 94804 U.S.A.
   (Capt. Thomas R. Eddy, Port Director)
2. The New Zealand Ports Authority
   P.O. Box 10059
   The Terrace, Wellington
   New Zealand
   (Mr. W.A. Cullen, Chief Executive Officer)
3. Kagoshima Prefecture
   Yamashita-cho, Kagoshima City
   892, Japan
   (Mr. Saburo Kanemaru, Governor)

Class A Associate Members

1. Department of Shipping and Transport, Australia
   P.O. Box 367, Canberra City
   A.C.T. 2601, Australia
   (Mr. M.M. Summers, Secretary)
2. Royal Adriaan Volker Group
   Rotterdam, Aelbrechtskade 100
   The Netherlands
   (Ir. H.C. Blauwkuip, Managing Director)

All were approved by the Secretary General on September 1, 1972.

Travelers

Mr. P.K. Kinyanjui, Chairman of the East African Harbours Corporation, Dar es Salaam, Tanzania, accompanied by Mr. J.C. Oliga, Financial Adviser & Chief Accountant, and Mr. P.C. Bakilana, Corporation Secretary & Legal Officer, visited the IAPH Head Office on Wednesday, August 9 and had conversation with Deputy Secretary Generals Dr. H. Sato and Mr. K. Yokoyama. The group were on their way home from an important business trip to the U.S.

Seminar on T.C.M.

Rouen, 9 June, 1972:—The Institut du Droit International des Transports (Palais des Consuls, 3, rue Jacques-le-Lieur, 76-Rouen, France) is organizing a seminar in Rouen on October 13 and 14, 1972 about "THE LEGAL SYSTEM OF COMBINED TRANSPORT" (International Regulation) with the collaboration of Mr. Putzeys, Barrister at the Brussels Court of Appeal, Professor at the C.U. of Louvain, Mr. Peyrefitte, Agrégé and Lecturer at the Faculty of Law and Economics in Rouen and the Professors of the Rouen Faculty of Law.

The announcement was made by Mr. Jean Vaudour, President of the Institute. He goes on to say, "It seems that the Convention on International Combined Transport of Goods (T.C.M. Convention) which should settle the difficulties arising from Combined Transport, isn't to be adopted immediately. Now, the difficulties still remain. They are numerous; that's why the I.D.I.T. has taken up this question".

The Dredging Day

The Hague, The Netherlands, August 1:—The International Association of Dredging Companies will organize a one-day session on the present and the future developments of dredging on the third day (The Dredging Day, TERRA ET AQUA) of the Europort '72 Congress. This congress is, as usual, held in connection with the Europort Exhibition on shipbuilding, marine engineering and port equipment which will take place in the RAI Building at Amsterdam on 14–18 November of this year.

With Mr. E. H. James in the Chair papers will be read by various prominent speakers who will highlight the successive stages of the execution of dredging operations and the way in which the participating public and private agencies can cooperate to achieve optimum results.

Programme

10.00 hrs. Opening Address: Mr. E. H. James, President of IADC and Chairman of the day.
10.15 hrs. Planning of Projects: Mr. J. F. C. Swansbourne, FICE, Partner of Posford, Pavry & Partners, Consulting Engineers of London.
10.35: Soil Investigation: Mr. J. H. Sargent, C.Eng., MICE, FGS, Managing Director of Dredging Investigations Ltd., Bromborough, U.K.

11.00: coffee break
11.15: Financing of Projects: Mr. B. Nagorski, Port Consultant of New York.
11.40: discussions
12.30: luncheon recess
14.00: Modern Dredging Techniques: Ir. J. van Dixhoorn, Dutch Rijkswaterstaat.
14.25: Maintenance Dredging in Tidal Rivers: Oberbaurat G. Hovers of the Wasserund Schiffahrtsverwaltung, Bremerhaven, German Federal Republic.
14.50: tea break
15.05: Future Developments: Prof. Dr. E. W. Bijker of the Delft Technical University.
15.30: discussions
16.00: filmshow: Milford Haven, a Port created by Dredging.
16.30: Closing Address: The Chairman
16.45: cocktails

For further details, refer to:
IADC, 21 Duinweg, The Hague 2011, The Netherlands. Telex 31102. Phone: 070-54 56 02. Cables: Dredging, The Hague.

Tariff revised

Ottawa, July 27, 1972:—The St. Lawrence Seaway Authority and its U.S. counterpart, the Saint Lawrence Seaway Development Corporation, jointly announced to-day a revision of the Tariff of Tolls which will exempt the tare weight of loaded cargo containers of 640 cubic feet or more, from Seaway tolls.

Under the previous tariff, the weight of the container was included with the weight of the cargo in the container, for the assessment of tolls. General cargo in containers is assessed at $0.90 a ton and bulk cargo in containers is assessed at $0.40 a ton. Empty containers of 640 cu. ft. or larger are presently transported toll-free through the system.

The tariff revision, effective July 27, 1972, is intended to encourage shippers to make greater use of the Seaway route for container shipping.

The step was taken after studies showed that containers are becoming a very efficient way of transporting general cargo and some small bulk cargoes.

Containers, ranging in size from 640 to 2560 cubic feet, have an average empty weight of 2.5 short tons. During 1971, 17,585 loaded containers were shipped through the Seaway compared to 11,663 in 1970. (The St. Lawrence Seaway Authority)

Traffic analysis

Ottawa:—At the end of June, the number of commercial vessel transits was ahead of 1971 by almost 1%—up from 1669 to 1683—on the Montreal-Lake Ontario section, and by nearly 5%—from 1892 to 1981—on the Welland section.

The increase in vessel transits, however, is not reflected in the cargo figures which show a decline in total tonnage over last year of 7%—from 16.4 to 15.3 million tons—on the Montreal-Lake Ontario section. A drop of 4%—from 19.6 to 18.8 million tons—is shown on the Welland section.

Labour - management disputes which led to the shutdown of major ports in the lower St. Lawrence region had adverse affects on wheat movements in both sections. Iron ore shipments are also down compared to last year. However, advances in petroleum and coal traffic have partly offset these losses. Total bulk cargo tonnage is down by about 5% on the Montreal-Lake Ontario section and by 1% on the Welland section.

In the general cargo category, a significant decline in shipments of manufactured iron and steel has resulted in a 16% drop in total general cargo tonnage on the Montreal-Lake Ontario section and 21% on the Welland section. The drop in manufactured iron and steel is largely attributed to last year's early season inventory build up by Great Lakes steel users in anticipation of a strike by the American steel industry. An additional factor has been the new voluntary quota agreement reached between the United States and foreign steel exporters which is expected to reduce significantly the amounts of overseas iron and steel imports in 1972.

Miscellaneous general cargo is up 3% on the Montreal-Lake Ontario section, partly due to a diversion of ocean vessels to Toronto and Hamilton from the lower St. Lawrence ports. The containerized component of general cargo continues to demonstrate a remarkable rate of growth. This year, container traffic is 33% ahead of last year on the Montreal-Lake Ontario section and 11% on the Welland section. (The St. Lawrence Seaway Authority Monthly Traffic Review, June)

Transpo '72

Ottawa:—Many of the estimated 10,000 visitors who toured the Seaway's exhibit at Transpo '72 in Washington were getting their first chance to look closely at the system, its scope and its economic impact.

Most of them left with the knowledge that it is a modern, viable, necessary and successful transportation link to the industrial heartland of North America, which has set a cargo tonnage record for the past two seasons.

Seaway officials on hand reported that most trade people visiting the display were intrigued by the television and computer system of traffic control on the Welland section.

Most of the questions asked dealt with the use of Seaway ports vs. ocean ports, the viability of vessel monitoring and tracking systems, the vessel capacity of the system and the Seaway's financial structure.

The Seaway display featured slow-scan television viewing of ships in the Welland section, an on-line databank which showed up-to-date information on vessel location and the status of ports as well as a map of the Seaway with colored slide panels of interesting points.

Most visitors had no idea that television and computer operations were available and in operation on the Seaway. They seemed impressed with it and even more interested that it will eventually be extended throughout the St. Lawrence-Great Lakes area.

They were also impressed with the fact that it would take twenty 100-car trains a day, 365 days a year, to move the same amount of freight as the Seaway is now handling in its nine-month season.

The Welland system works with a plot board for a visual overview of the ships in the locks and a network of three television cameras at each of the eight locks. These are operated remotely by the traffic control centre so controllers have a live

broadcast of individual ship movements and lock operations.

The computer is used to keep an automatic 24-hour watch of all ships in the Seaway system so lock usage can be optimized and vessel delays kept to a minimum.

Display organizers feel that Transpo '72 gave the Seaway the opportunity to bring its message to many people who had only a general idea of its importance. The display demonstrated that the St. Lawrence Seaway is a vital component of the continent's vast transportation network. (The St. Lawrence Seaway Authority Monthly Traffic Review, May)

Port of Saint John

Ottawa: — Development — and business—is booming around the harbour basin of Saint John, N.B. and the adjacent shores of the Bay of Fundy. The face of the harbour front is changing from month to month and the westside now includes a $4 million containerport, an expanding auto handling facility, and areas for handling agricultural products, forest products, bulk shipments such as asbestos and general cargo. Filling and construction of new wharves is proceeding to further expand facilities.

Potential of the area will be increased by development of the new deep-water port of Lorneville with its adjacent industrial acreage just six miles west on the Bay shore.

Top right, can be seen the 40-ton gantry crane for handling containers; centre right, some of the thousands of imported cars now being brought in through the Port of Saint John; bottom right, James Maskell of the New Brunswick Development Corporation, points out berths on a model of the Lorneville site.

Eastward in Courtenay Bay are the drydock, fueling berths and petroleum products piers backed by a growing industrial park.

Further east on the Bay, are the Irving Oil storage and refinery facilities. (Canada Japan Trade Council News Letter, June–July, 1972)

Japan's M.S. Tohbei Maru

Baltimore, Md., August 24:—The port of Baltimore will help inaugurate a long-awaited Japanese container service to the U.S. East Coast.

Beginning next month with the maiden voyage arrival (scheduled for Sept. 15, 1972) of the M.S. TOHBEI MARU at Dundalk Marine Terminal, a Japanese container space charter group consisting of five lines and seven ships will have a regular service to Baltimore and five other North Atlantic ports. The announcement was made today by the Maryland Port Administration, an agency of the Maryland Department of Transportation.

The new container service will be the first ever to the East Coast by a Japanese flag carrier. Japanese container lines have operated out of West Coast ports for several years.

The TOHBEI MARU is the first of the fleet of seven new container ships built especially for the Japan-East Coast service. It has a capacity of 1,620 twenty-foot containers and represents Y-S Lines, which along with J-L Line, MOL Line, NYK Line and "K" Line, comprises the container space charter group.

Eventually, the seven ships are expected to provide weekly sailings out of Baltimore and other East Coast ports. Each vessel will have a turn-around voyage set at 49 days.

Other vessels to ultimately be involved in the service will be J-L Line's JAPAN AMBROSE; MOL Line's NEW YORK MARU and NEW JERSEY MARU; NYK Line's KUROBE MARU and KISO MARU; and "K" Line's VERRAZANO BRIDGE. Each ship will carry containerized cargo belonging to all five members of the space charter agreement.

Dundalk Marine Terminal, the port of Baltimore's container center, will soon be able to offer expanded facilities to better accommodate its container customers.

The 550-acre terminal, which already has three container cranes in operation, currently has four more cranes under construction at the new Berths 11 and 12, which are scheduled to be complete before the end of this year. Additionally, dredging operations are now being undertaken to make Dundalk's new berths, approach channel and turning basin accessible to the largest container ships afloat. (News from Maryland Port Administration)

New trade promoter

Baltimore, Md., August 3:—The Maryland Port Administration today announced the appointment of Joseph J. Giancola as its Director of Trade Development.

Mr. Giancola, 35, has been serving as regional manager of the MPA's New York Trade Development office. His promotion to head of the department becomes effective September 1, 1972, Joseph L. Stanton, Maryland Port Administrator, said. The MPA is an agency of the Maryland Department of Transportation.

Mr. Giancola's primary responsibility in his new position will be to direct the overall sales promotion of the port of Baltimore. This will involve, among other duties, the supervision of MPA's domestic and overseas solicitation of freight moving in international trade to and from manufacturers, warehousemen, distributors and other points.

Additionally, he will direct a worldwide network of MPA trade development offices. The MPA currently maintains trade development offices and representatives in Brussels, Belgium; London, England; Tokyo, Japan; and stateside, in addition to the New York location, at MPA headquarters in Baltimore; Pittsburgh, Pa.; and Chicago, Ill.

Educated in New York City, Mr. Giancola specialized in transportation and traffic management at the Academy of Advanced Traffic. From 1957–62, he worked as a sales representative in the foreign traffic department of Western Maryland Railway in New York.

In 1963, he joined the MPA as assistant regional manager of the agency's New York office. He was promoted to regional manager in 1965.

A New York native, he is an active member in several transportation organizations, including the Traffic Club of New York, the National Express Traffic League and the Whitehall Club.

The appointment of Mr. Giancola as trade development head fills a vacancy created several months ago when Charles I. Hughes, who formerly held the position, resigned.

Mr. Giancola presently resides with his wife and three children in

Spring Valley, N.Y., but is moving to Baltimore to assume his new duties. (News from Maryland Port Administration)

Welland bypass

Buffalo, N.Y.:—Next year will bring a big physical boost to ships traveling the Great Lakes and St. Lawrence Seaway. It is the new 8.3-mile bypass channel scheduled to open as part of the Welland Canal between Lake Ontario and Lake Erie. The present narrow and winding channel which runs through the city of Welland will be replaced by a straight, wide, unobstructed passage that will be eight-tenths of a mile shorter. Two tunnels will run beneath it, one accommodating three highway lanes and the other, taking two highway lanes and three rail lines. There will be no vertical-lift or swing bridges to hamper vessel traffic.

Bottom width of the present channel is 192 feet and its depth is 27 feet. The new bypass will have a bottom width of 350 feet and a depth of 30 feet. Already completed is a four tube siphon culvert which carries the Welland River underneath the bypass.

The Welland Canal bypass project was designed to meet the requirements of a Seaway equipped with bigger locks and able to handle more traffic in comfortable fashion. If it becomes necessary in the future to build a new and larger canal, the bypass can be integrated into that vast undertaking. (Port of Buffalo Progress Bulletin, April/May, 1972)

Port Everglades News

• Port Everglades will participate for the first time in the International Trade Fair at Bogota, Colombia August 5–20.

The seaport will have a booth in the Florida Pavillion, sponsored by the State Department of Commerce. The Bogota Fair will have more than 3,000 exhibitors from 40 countries and is expected to attract two million visitors.

• SS Nepco Gallant, 116,000 deadweight ton ship which called at Port Everglades is the largest tanker to visit the South Florida port.

The 856-foot vessel, here for an engine survey, transports crude oil from the Mid-East to a refinery in Freeport, Grand Bahama Island.

• A third bulk carrier from Norway, SS Bavang, was scheduled to discharge cement at Port Everglades, utilizing portable equipment in the unloading operation. Bulk carriers have been placed in service to offset the cement shortage in South Florida. Meanwhile, the first shipment of cement clinker was expected August 2 with the arrival of the SS Costis. (Port Everglades News)

New stevedoring office

Long Beach, Calif., August 23:—The Board of Directors of Cooper Stevedoring Company, Inc., a Gulf Coast stevedoring firm, recently announced that the corporation has expanded its operations to the West Coast, with offices in Port of Long Beach.

Cooper Stevedoring Company has operations in Mobile, New Orleans and St. Louis. The California division is part of the new expansion program initiated by the corporation. The Cooper family has been actively involved in stevedoring operations since 1911.

Retla Steamship Company, a major carrier of wood and steel products through Berths 204–205 on Pier F, Port of Long Beach, is now having its stevedoring provided by Cooper, which also handles their operations in New Orleans. (Port of Long Beach News)

New lease on Pier E

Long Beach, Calif.:—The Long Beach Board of Harbor Commissioners has approved a new lease with Hughes Aircraft Division under which the famed Hercules flying boat may remain in its present hangar on Pier E a minimum of two more years, and perhaps as long as four years.

Under terms of the agreement, Hughes will increase his lease payments from $36,054.84 annually to $100,000.00 per year for the 4.35 acres of land and 2.93 acres of water area used to store what is still regarded as the world's largest aircraft.

Hughes' present lease with the Port of Long Beach has until Sept. 4, 1976 to run, subject to annual renewal. The new agreement calls for the same expiration date but is cancelable at any time after March 4, 1974, upon six months notice by either party.

General Service Administration officials recently announced plans to auction off the eight engine Hercules, which is under lease to Hughes, this January. The Spruce Goose seaplane has been locked away in the hangar since shortly after Hughes' unscheduled test flight in Long Beach Harbor 25 years ago this November 2.

Should Hughes purchase the Hercules from the government, he is now assured of its being allowed to remain in the Port for another two years at least.

The Harbor Commission has long-range plans to construct a deep water berth on the site some time in the future. The 60 foot deep main Long Beach channel links the location with the open sea 3½ miles distant, making Long Beach the deepest port in the United States.

"Intermodal Interchange"

Long Beach, Calif.:—Port of Long Beach officials have unveiled plans to construct a container and trailer interchange rail facility to be used to transfer both import and export freight to and from railway flat cars within the Long Beach Harbor District.

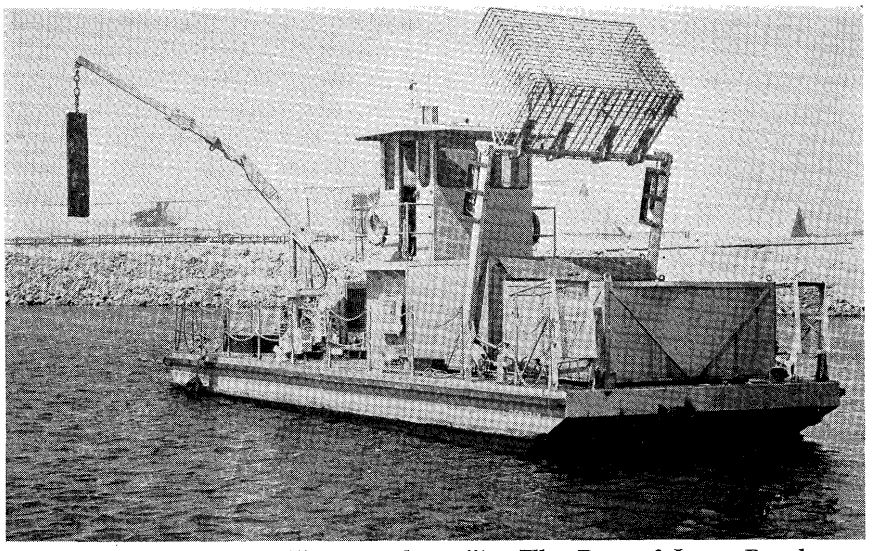
This unique "intermodal interchange" will be designed for Container on Flat Car and Trailer on Flat Car operations and a suitable site has already been selected, according to Port general manager Thomas J. Thorley.

Operating agreement proposals are being invited and inquiries should be made by September 1, 1972. It is estimated that minimum investment by successful bidders will approximate $500,000.

Interested parties should contact Thorley at Port of Long Beach, P.O. Box 570, Long Beach, Cal. 90801. (Port of Long Beach News)

Harbor cleanup craft

Long Beach, Calif.:—What is believed to be the world's first self-contained, automated harbor cleanup craft was recently put into service by Port of Long Beach, California, following two years of extensive study study to design a practical



The "Big Dipper" ("ecology barge")—The Port of Long Beach

prototype.

Christened "Big Dipper," the $100,000 steel-hulled barge type vessel is equipped with a hydraulic basket in the bow with which floating debris is scooped up from harbor waters and deposited in two large bins located on deck. These in turn are offloaded onto trucks for disposal ashore.

A hydraulic crane is also provided for hoisting heavy objects—such as floating logs—out of the water. George Seufert, Director of Port Maintenance, estimates that the "ecology barge" will quickly and efficiently remove the 130 cubic yards of debris that accumulates in an average month within the confines of the four-square mile Long Beach Harbor District.

"Big Dipper" was designed by Naval architect John Marriner on specifications provided by the Harbor Engineering Division, following a worldwide survey made by Battelle Memorial Institute. Battelle found there was no such craft available and recommended that one be commissioned for construction by the Long Beach Harbor Department.

Provision has been built-in for installing barriers to contain small oil spills. The craft, which carries a crew of two, will also double as repair boat for wharf and fender systems.

California Shipbuilding Corp. of Long Beach was low bidder for the 40 foot craft, which was completed in less than four months.

The Port of Long Beach was recently honored for its continuing 20-year-old program to make its already clean harbor waters even cleaner. A $2-million sanitary sewage system will be finished later this year. Humble Oil is now nearing completion of its harbor-wide automated ship bunkering system, eliminating the need to take on fuel oil from barges and designed to greatly reduce the possibility of oil spills. And all oil well waste waters within the Long Beach Harbor District are now purified before reinjection into the field, rather than discharged into the ocean.

Detailed information regarding the design and construction of the "Big Dipper" is available from the Maintenance Division, Port of Long Beach, P.O. Box 570, Long Beach, Calif. 90801. (Port of Long Beach News)

Small craft facilities

Los Angeles, Calif.:—The Los Angeles Board of Harbor Commissioners today has urged the County Supervisors "to assist in reaching a solution to the increasing serious situation" of providing small craft facilities in the area.

In a letter to the Board of Supervisors, John J. Royal, acting president of the Harbor Commission, referred to the problems being faced by the port in building marinas, and suggested that the County help by constructing moorages along the 47-mile coastline under its jurisdiction.

Royal said that the Fish Harbor Marina has been delayed nearly two years because of legal questions and environmental problems, and that the marinas planned in the port's West Channel and at the Lower Reservation of Fort Mac Arthur have been preempted by the military who have now announced cotinued use of these areas. He pointed out, also, that the proposed North Cabrillo Beach Marina now appears economically unsound because of rising construction costs and additional expenses in building due to constraints imposed by the Water Quality Control Board.

Royal also said he and his commissioners are aware of some of the problems encountered by the County Supervisors in considering certain marina development, but that perhaps the problems were less difficult than those at the port, and could be solved.

Citing research by the Harbor Department and other consultants, Royal projected a deficiency of 28,000 boat slips by 1980, unless additional marinas are built in the near future.

"Certainly, some moorages may be added somewhere along our coastline during this interim period," he told the supervisors. "But we are honestly concerned that, without active participation and sponsorship by the County and coastline communities, nothing of any real magnitude will result to meet this demand."

Royal asked the County Supervisors to give "earnest consideration" to the possibility of providing additional boat slips since, he said, "it seems quite apparent that relief can only come through the construction of facilities outside the harbor itself." (Port of Los Angeles)

Preventing pollution

Los Angeles, Calif., August 9:—The time has come for people directly involved in pollution problems to take the lead in anti-pollution programs, concludes Donald A. Walsh in a paper to be presented next July in Ottawa at the 23rd Congress of the Permanent International Association of Navigation Congresses.

Walsh, director of planning and research for the Port of Los Angeles, writes that "Perhaps the greatest

tragedy of the entire pollution problem and its development to date has been that the leadership for its resolution has fallen largely into the hands of the academic and legal professions."

Noting that there has been some evidence that more persons with first-hand knowledge of the economic, engineering, social and political considerations are assuming leadership in pollution prevention, Walsh indicates that this trend should be accelerated before "vast sums of money in the name of anti-pollution campaigns are spent on impractical and uneconomical academic ideas."

Title of the paper is "Measures for Preventing Pollution in Harbors and on Coasts." He will personally appear before the Congress.

Walsh has developed considerable expertise on pollution prevention and remedial equipment as director of planning and research. Due to its international reputation in improving the quality of its waters, the Port of Los Angeles was asked to prepare a paper on an anti-pollution subject for the meeting.

Walsh's paper touches on sources of coastal and harbor pollution, national and international legislation, conventions and agreements, and pollution detection. He also writes on possible preventative measures, mechanical and chemical remedies, and specific examples of what other U.S. and international ports are doing in combatting pollution. He concludes with goals and recommendations.

The paper represents perhaps the most complete condensation of material on this subject compiled by Walsh, who has been published in almost every major engineering magazine in the country. It should be an excellent reference for students and laymen desiring a quick knowledge of marine pollution problems.

Walsh graduated from the Illinois Institute of Technology with a bachelor of science degree in civil engineering, and has done graduate work at U.C.L.A. and La Salle Extension University.

He has worked for several engineering firms in the U.S. and has served on overseas projects, including an assignment as project manager on a nationwide transportation study of Bolivia which involved all modes of transport.

Walsh and his family live at 4102 Stalwart Drive, Palos Verdes Peninsula. (Port of Los Angeles)

New Board President

Los Angeles, Calif., July 26:—Businessman John B. Kilroy was unanimously selected by his colleagues as president of the Board of Harbor Commissioners of the City of Los Angeles at today's (July 26) regular meeting.

As head of Kilroy Industries, the new Harbor Commission president is engaged in financing construction and real estate, as well as being active as a lecturer in real estate investment and economics.

Kilroy replaces John J. Royal as president. Royal, a labor union executive, was recently reappointed to a five-year term on the Commission.

Replacing Kilroy as vice president of the Harbor Commission is John Y. Chu, an attorney named to the board last December.

Kilroy was born in Ruby, Alaska, in 1922 and educated in California at South Gate High School and Santa Barbara State College.

He was an assistant chief inspector for Douglas Aircraft Company until World War II when he became a pilot in the Air Force.

President of Kilroy Industries since 1950, he is a retired trustee of Claremont Men's College and was president of the Los Angeles 1976 Olympic Commission. Kilroy also belongs to several yacht and business and real estate associations.

Chu has been in private law practice since 1966 and belongs to the American, California and Los Angeles County bar associations, as well as several civic, political and fraternal clubs. (Port of Los Angeles)

Passenger ship terminal

New York, Aug. 10:—A three-level roadway system extending 1,700 feet along the Hudson River, adjacent to the West Side Highway, will permit rapid and easy loading and unloading of passengers and baggage at all three piers of the Passenger Ship Terminal under construction in midtown Manhattan by The Port Authority of New York and New Jersey. (See "Ports and Harbors" January 1972, page 32.)

At their monthly Board meeting today, the Commissioners of the bi-state agency awarded a contract for the concrete viaduct structure linking Piers 88, 90 and 92 with local streets, according to an announcement by Chairman James C. Kellogg, III.

The street level of the 60-foot-wide viaduct will have two traffic lanes serving an open mall for public use. It will provide an area for a taxi line and truck entrances at each pier for pickups and deliveries. The middle level will have three traffic lanes and a 20-foot-wide sidewalk for loading and unloading passenger baggage. The upper level, with three traffic lanes, will be used to reach the rooftop parking areas. Curved ramps connecting the middle and upper roadways will be at the north and south ends of the terminal.

The entrance to the elevated roadway system will be on 12th Avenue, between 54th and 55th Streets, serving traffic moving in a southbound direction. The exit ramp will feed traffic into 12th Avenue at 46th Street.

The $3,882,000 contract was awarded to the Horn Construction Co., Inc. of New York City, the low bidder. Field work is expected to begin in December following completion of pile driving in the Hudson River adjacent to the existing bulkhead line under a contract awarded in June. The viaduct superstructure will be completed by the end of 1973.

The new Passenger Ship Terminal is under development by the Port Authority at the request of the City of New York. It involves reconstruction of the barnlike and obsolete Piers 88, 90 and 92 on the Hudson River to provide six ship berths with the most modern passenger facilities. In addition, Pier 40 at Houston Street will be used as a companion three-berth facility, thus providing a total of nine steamship berths to accommodate transatlantic and cruise liners.

When the terminal is completed in the spring of 1974, it is estimated that 750,000 oceangoing travelers will use the facility during the first year of operation.

The new terminal will cost an estimated $35.9 million. The Port Authority will construct and operate the terminal under a 20-year lease with the City. The bi-state agency will collect user charges from the steamship lines to cover the rental payments to the City and operating and maintenance costs.

Designed to serve all passenger vessels calling at the New York-New Jersey Port, the new Passenger Ship Terminal will have air-conditioned lounges and efficient Customs facilities. These new facilities will give the Port the comfortable and attractive passenger ship terminal it has needed for so long. (News from The Port Authority of New York and New Jersey)

Elizabeth seaport

New York, Aug. 10:—The award of two construction contracts totaling $514,020 for the continuing development of container facilities at the Elizabeth-Port Authority Marine Terminal was announced today by Chairman James C. Kellogg, III, following the monthly meeting of the Commissioners of The Port Authority of New York and New Jersey.

The power distribution and lighting system in a future warehouse area covering about 1.5 million square feet of land in the vicinity of McLester and Tripoli Streets will be installed under a $294,600 contract. The work, to begin in September and scheduled for completion in January, includes installing floodlight poles and lighting fixtures, as well as a telephone communications system. In addition, 26 KV substation, transformer and outdoor switchboard which had been purchased under a previous contract will be installed. The low bidder on the job is E.J. Hammesfahr Electric Co., Inc. of Metuchen, New Jersey.

The electrical power conductor system to serve the giant 40-ton container handling cranes at Berth 86 on Newark Bay will be installed under a $219,420 contract awarded to Santaniello, Inc. of Newark, New Jersey, the low bidder. The work, to begin immediately and be completed in January 1973, includes splicing this system into the crane rail conductor system serving adjacent Berth 84.

Already the world's largest and most modern containership facility, the Elizabeth-Port Authority Marine Terminal is handling a steadily increasing volume of goods shipped in containers to worldwide markets. Upon completion in 1973, the $205 million Elizabeth seaport will have over three miles of containership berthing area supported by over 1,000 acres of container marshalling and distribution space and is expected to handle 12 million tons of containerized cargo a year. (News from The Port Authority of New York and New Jersey)

N.I.T. annexed

The City of Norfolk and the Norfolk Port and Industrial Authority transferred ownership of Norfolk International Terminals to the Virginia Port Authority July 1, 1972.

Under the unification plan, Maritime Terminals Inc., a non-profit, non-stock terminal operating corporation, will manage NIT. The VPA will enter into a lease-operating agreement with the new terminal corporation.

Unification of Hampton Roads marine terminals under the administrative umbrella of the VPA has become an accomplished fact. The State now owns all five of the major general cargo terminals in the three port cities of Newport News, Portsmouth, and Norfolk. A single development and promotion program for the unified port complex will be the goal of the VPA.

The NIT unification contract was ratified by the Norfolk city council Feb. 10, 1972, and by the VPA board Feb. 11, 1972.

Virginia General Assembly Appropriated to the VPA $12 million to be used in effecting unification with Norfolk, including funds for acquisition and future development of the terminal.

As part of the agreement, VPA will absorb the sales staff and security force of the NPIA, as well as assume full responsibility for advertising, promotion, engineering, traffic quotations, and planning services. (Virginia Ports Newsletter, August)

Association president

Portland, Oregon:—Ray Allen,

Mr. Thomas P. Guerin

General Manager of Portland Freight Traffic Association today announced that its Board of Directors had recently elected Thomas P. Guerin as its President for the fiscal year beginning July 1972.

Guerin, a well known and respected figure in maritime and civic circles, retired as General Manager of the Commission of Public Docks during November of 1970, now serves as an Advisor to the Port of Portland Commission.

A Director of PFTA for over 15 years, Guerin was a leader in the complete restructing of PFTA during 1959 which lead to its being one of the most active and powerful voices in transportation matters on the West Coast today. Guerin served as President twice before during his 15 years tenure on the Board.

Other officers elected were:

First Vice President; Fred C. Gast, General Manager, United Grocers, Inc.

Second Vice President: William H. Fisher, Vice President and General Manager, Cargill, Inc.

Treasurer: John I. Sell, Vice President, First National Bank of Oregon. (Portland Freight Traffic Assn.)

Seattle maritime press

Seattle:—At their June 28 business meeting, members of the Puget Sound Maritime Press Association unanimously elected Stephen Tiebout as 1972–73 president, succeeding Glen Carter, maritime editor of the Seattle Times. A newcomer to

Seattle, Tiebout is northwest manager of Sea and Pacific Motor Boat magazine.

Patricia M. Baillargeon was elected vice president of the group, replacing George Bukota, student at Washington State University and former Coast Guard journalist. Ms. Baillargeon is assistant director of the Port of Seattle's World Trade Center Department and assistant executive director of the Washington State International Trade Fair.

Susan MacDonald, associate editor, Port of Seattle was re-elected secretary-treasurer.

Founded in 1951, the Maritime Press Association's membership includes writers, photographers and publicists bound by a common interest in furthering the maritime industry of Pudget Sound. Each year the association nominates and selects the Maritime Man of the Year, announce at the Maritime Day Luncheon in May. This year's winner was Capt. Merle D. Adlum, Port Commissioner and president of the Inland boatmen's Union of the Pacific. (Puget Sound Maritime Press Association)

Trucks imported by Ford

Tampa, Florida:—The first shipment of Ford Motor Company's Courier pickup trucks arrived in the Port of Tampa July 24–25 for distribution in the Southeastern United States.

The shipment marks the beginning of a new industry to the rapidly expanding Port of Tampa where tonnage has been setting records since the first of the year.

A total of 1058 truck chassis were unloaded from the Japanese vessel Chiba under charter to Viking Car Carriers, of Oslo, Norway. They were received at the new terminal of Computer Automated Transportation, Inc., of Florida, (CAT), selected by Ford as port cotractor. Arriving separately on another ship were the beds for the trucks packed eight in a "box."

The chassis were driven from the Chiba by Tampa longshoremen and received at CAT's terminal. CAT will wash the trucks, put on the beds and distribute them to dealers. For the present motor transport trucks will be used for overland distribution. Rail distribution is planned for the future.

Luckenbach Steamship Company, general agents in the U.S. for Viking Lines, stevedored the operation.

The trucks are manufactured by Toyo Kogyo Ltd., of Hiroshima, Japan. Nearly 4,000 of them will arrive in Tampa during the next 90 days. Importation will level out at about 600 vehicles a month.

Officials of CAT have indicated that negotiations are under way for the importation of additional foreign-manufactured motor vehicles. They will be distributed in the United States and Caribbean area.

Tampa Port Authority has leased 20 acres to CAT for its operation and the firm has taken an option of 30 additional acres. The Port Authority has cooperated in the venture by providing paving and a building in the area. Unloading was at the Port Authority's Kreher Terminal public docks. (News from The Tampa Port Authority)

Tampa Port and Tenants Are Booming with Expansion

News from The Tampa Port Authority

Tampa, Florida, August 11:—A multi-million dollar facilities development program at the port of Tampa, which will involve both public and private investment, was disclosed at the August meeting of the Tampa Port Authority.

The new development includes new general cargo facilities and vessel construction to meet the demands of continually increasing business at the port.

The Tampa Port Authority announced plans for a six million dollar bond issue, which may be expanded, in order to construct at least four, and possibly five, new general cargo berths at the Holland Terminal area on the new East Bay Channel and Turning Basin.

Private port interests announced plans for extensive development on land leased from the Authority adjacent to the new berths. The plans include:

— A modern dockside $1.5 million cold storage warehouse to be constructed by Uiterwyck Cold Storage Company. Jan C. Uiterwyck, president of Jan C. Uiterwyck Company, ship operators and agents, announced formation of the new company and said the facility will be the largest at dockside in the U.S.

The Port Authority granted a lease on 10 acres of land with options for additional acreage.

— William A. Freeman, Jr., president of Garrison Terminals, a privately-owned general cargo facility in the port, requested the Port Authority to lease his firm 10 acres in the same area. Freeman annouced plans to construct new backup facilities. The Port Authority will hold a public hearing shortly on the proposal.

— The Tampa Ship Repair and Drydock Division of American Shipbuilding Company, of Cleveland, Ohio, leased three shipways from the Port Authority for the construction of a five million dollar phosphate barge and reported the company has an option on a contract to construct one other barge.

— Michael Baker, Jr., Inc., Consulting Engineers of Rochester, Pa., announced plans to construct a maritime office building complex in the Holland Terminal area. Spokesman for the company, Charles Banks, of Tampa, said he had several tenants committed.

The general cargo berths will be public berths with the terminal tenants leasing land adjacent and receiving preferential berthing rights. The local firm of Pierce, Wulbern and Murphey was retained as fiscal agents and well-known bond attorney, Frank Watson of Jacksonville was retained as bond counsel. Validation of the issue is expected shortly and the authority will borrow on bond anticipation notes.

It is expected the work will be

completed within a year.

Uiterwyck in making the announcement said he anticipated eventually to handle 100,000 tons of imported meats and 100,000 tons of Florida citrus for exportation to Japan and Europe. Plans call for an initial warehouse of 80,000 square feet in a one story building. At the present time Tampa is second only to New York in tonnage of imported meat from Australia. Last year more than 80,000 tons came through the port.

The warehouse will be set up with modern sorting and inspection facilities to efficiently handle the meat.

Freeman said he would construct a 100,000 square foot warehouse and needs preferential rights on two additional berths. At its present location Garrison Terminal is the largest handler of general cargo in the port.

Indications are that other private general cargo terminal operators will also announce plans to move to the new Holland Terminal location in the near future. Movement of the general cargo terminals from the present congested location in downtown Tampa has long been a goal of the Port Authority.

American Shipbuilding recently bought out Tampa Ship Repair and Drydock Company, which had been in business in Tampa for more than 20 years on land leased from the Port Authority. The company has announced plans for expansion of repair facilities. The announcement of the construction of the barge was the first specific statement on construction. The company has also indicated it wishes to lease more than 100 acres from the Port Authority for expanded operations.

Progress was also reported on the project to deepen the main harbor ship channels from their present 34 feet to 44 feet. House and Senate conferees included $300,000 in the public works appropriations bill for preliminary engineering on the project.

Other expansion at the port includes a $5 million terminal under construction by CF Chemicals for the handling of phosphatic fertilizers and the inauguration of the importation of motor vehicles manufactured for the Ford Motor Company in Japan.

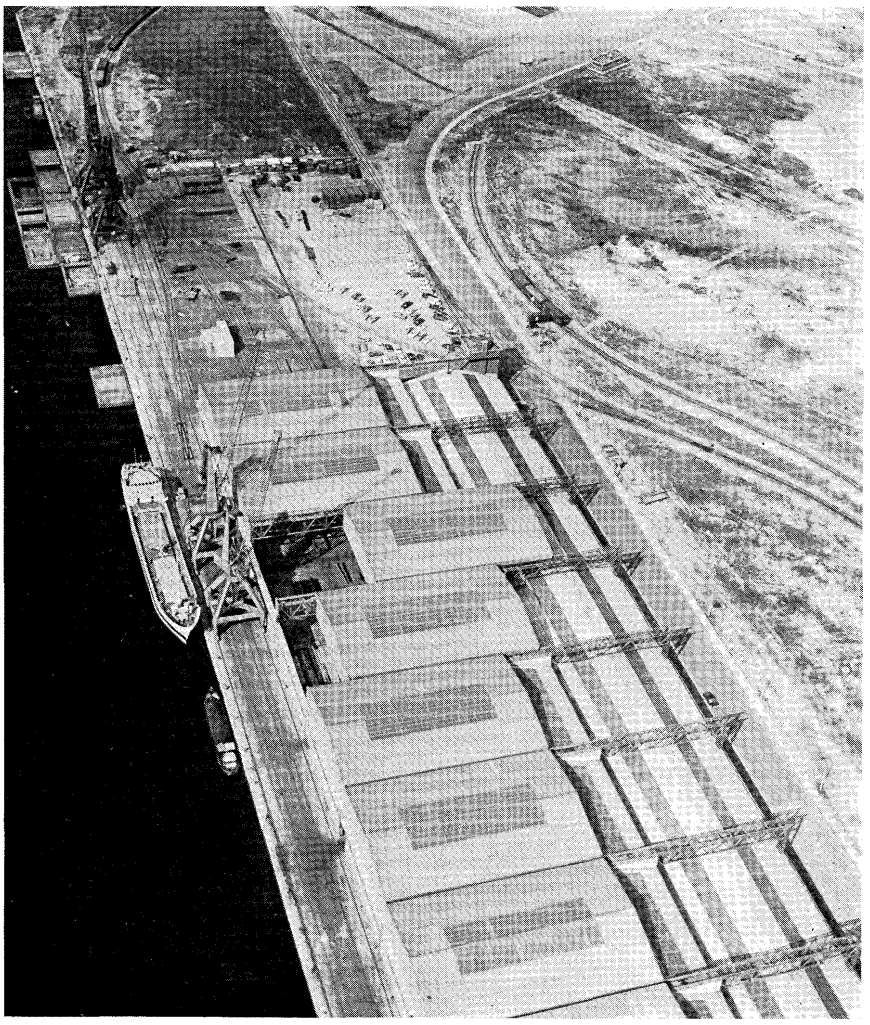
SAN FRANCISCO, July 18, 1972:—Key Federal interest in navigation was represented by a recent World Trade Club group in San Francisco which included two newly-posted Corps of Engineers officers. Brig. Gen. George Fink, former Sacramento District Engineer, was welcomed back to the region in his top-level assignment; Col. James Lammie, also recently-arrived, was greeted as new San Francisco District Engineer by Robert Langner, executive director of the California Marine Affairs and Navigation Conference. On behalf of the commercial ports of the state and its many recreational harbors and marinas, Langner extended warm welcome to the two Army Engineers whose responsibilities encompass the Golden State's total access needs for both recreational boating as well as world trade. (C.M.A.N.C.)

Trade under EEC

Antwerp: — In the course of an informatory meeting which took place on 30th of May last, in Antwerp, Mr. H. Verhulst who presides over the Studycentre for the Expansion of Antwerp, gave an exposé of what has been achieved by this centre during last year. He further annouced that the centre are giving the finishing touch to a forecast of the evolution of traffic in the port of Antwerp. Furthermore, a start was recently given to a study on the adaptation of the docks to the most recent techniques in the matter of transports.

Subsequently, the guest-speaker, Mr. R. Venneman, assistant general manager of the Belgian Foreign Trade Office dealt with the influence of the extension of the EEC on the mutual commercial intercourse between the members. Mr. Venneman gave it as his inmost conviction that the exchange of goods will substantially expand when Great Britain becomes a member of the EEC. A first major impulse will be provided by the gradual breaking-up of customs tariffs and the setting-up of a common outer tariff, the target date of which is: 1st July 1977. In addition, it is intended for three VAT-rates in Great Britain being brought down to 10% as from 1st April 1973 for all commodities; food-stuffs will be even exempted entirely from VAT.

It appears from a study made by the Economics Research Centre of the Louvain University that mainly sectors that are susceptible to cyclical influences, such as the industry of drinks, weaving mills, glass industry, steel semis and the motorcar industry will have better outlets in Great Britain. On the other part, British mechanical engineering and the metal-working industry, also the chemical industry, will have improved chances on the continent. (Antwerp Port News, June)



← Antwerp:—Antwerp is a leading port for iron and steel and shipments. (In 1971 steel traffic per seagoing vessel amounted to 8.8 million tons).
Photograph shows special iron and steel terminal of Hessenatie at Churchilldock, Antwerp. The sliding roofs (10 sections weighing each 120 tons) enable pre-stowage protected from rain and yet direct handling with six 10 ton cranes. This steel terminal handled 1.842.000 tons of iron and steel in 1971.
The company announced a new investment of 285 million Belgian francs (over $6.6 million) for further expansion including:

a) new storage facilities (820 ft long and 100 ft wide equipped with two 10 ton overhead travelling bridges and four 10 ton cranes;
b) complete new terminal for heavy weight iron and steel products on a 2½ acre site alongside canaldock and equipped with four overhead travelling bridges with lifting capacity of 30 tons and four 20 ton cranes.

Pollution tamed

Antwerp:—On 31st March last, the Norwegian ms "Norbert", measuring 20,716 tons gross, bumped against the quay-wall while coming into Boudewijn-lock. This accident caused her to spring a leak, through which fueloil flew freely out of her. Extensive pollution was menacing. The authorities reacted quickly and with great efficiency, thanks to which a great disaster was turned round. The lock-master right away gave notice to the towage services and saw to it that both lock-gates became closed, so as to prevent the mass of oil from spreading all around. The quantity of oil was estimated at some 200 tons and this quantity the tugs succeeded in gathering together with the aid of water-guns. These tactics made it possible for the lock-gates being opened and thus enable two coasters, also inside the lock, to leave the port. All this was achieved without any oil having found its way into the river.

MS "Norbert" was subsequently shifted and small tugs assisted in placing the well-known rubber anti-oil hoses around the layer of oil. The accident took place by 9 am, the protecting hoses were in position by 3.30 pm; at 10 pm the oil-stop was coupled to a floating crane, when a start was made to remove the oil. MS "Norbert" eventually left at 10.40 pm via the dock-gate and subsequently berthed at the plants of Antwerp Tank Cleaning for her tanks to be cleaned and degassed.

By way of precaution, a unit of the Belgian Sea Force was stationed near the lock, in the river, to keep an eye on any oil that might have found its way into the Scheldt, but fortunately they did not have to come to the rescue. (Antwerp Port News, May)

Container lines

Antwerp: — Container services continue to expand and new liner services, to operate with full-container and semi-container ships, were announced in the course of the last few weeks.

A new container line, trading between Europe and USA, was set up under the style of Cargo Lines Ltd, to commence an outsider service with two vessels taken on charter, viz. "Ida Blumenthal" and "Johann Blumenthal", each of which accomodating 150 containers. Two sailings per month are scheduled from. Hamburg, Bremen and Antwerp, to New York, as from April last. The handling of the vessels will be done at the Hessenatie-Neptunus terminal. Antwerp Agents: S.A. Continental Lines.

In addition hereto, New England Express Line resume their sailings from and to Boston. Theirs is a service offering one sailing every 10 days from Antwerp/Rotterdam/Bremen/Hamburg and Felixtowe. Agents in Antwerp are: Messrs. Vinke & Co.

Port of Copenhagen: Roll-on/Roll-off Terminals (See front cover also.)

Cast Containers Ltd, having a container service between Antwerp and Montreal, worked their fleet up to 7 ships, by taking two more units on charter, namely: cargovessel "Gyda" (25,000 tons dw) and "Rudolf Olsen" (38,000 tons dw), which are in a position to accommodate 263 and 430 20-feet containers, respectively. This must enable Cast Container Ltd. to now offer a sailing every 7 days. (Antwerp Port News, May)

Hamburg general manager

Antwerp:—While on their way back to Hamburg, from a study trip to USA, a delegation of 40 members, led by Mr. Munke Meyer, general manager of the port of Hamburg, paid a visit to Antwerp. They were given a welcome in the City Hall by Mr. Suykens, assistant-general manager of the port, and subsequently had a look around in the port of Antwerp and specialized terminals.

Declared Mr. Munke Meyer in connection therewith, that the group had actually become impressed by the potentialities of the ports in the USA, though feeling that ports in Western Europe had made much wider progress in the matter of modernization and equipment. He also stressed that the productivity of labour in the ports of the Dunkirk/Hamburg range was on a much higher level. (Antwerp Port News, May)

U.K.'s fastest-growing port

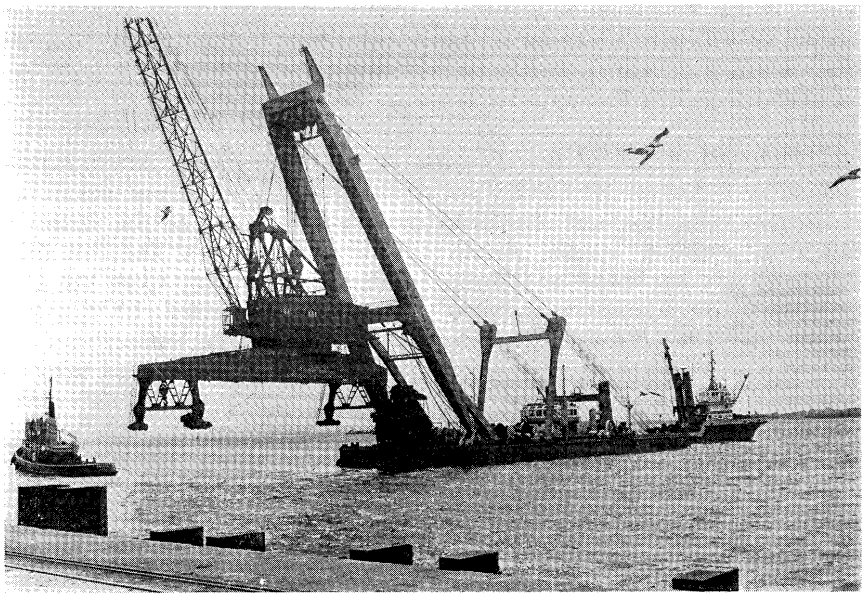
Felixstowe, 18 August:—The extensive modernisation and development programme currently in progress at The Port of Felixstowe is not the only thing that is changing in Britain's fastest-growing port. Latterly, with the appointment of Motivation Techniques as advertising and public relations consultants, The Felixstowe Dock & Railway Company's image is also coming in for some modernisation treatment. With an eye on Common Market developments the port management is acutely aware that it must sell its services and facilities progressively—and be seen to do so. The first task for Motivation Techniques was to create a new corporate image for the Port in the design of a completely new company logo. Their brief was to create a progressive and modern image but one which reflected the traditional qualities on which the port's foundations have been built. The result is a new logo (see above) using the traditional coat-of-arms of the Dock Company embraced by a stylised 'F' symbolic of a container-crane and accompanied by the name of the port—a fitting symbol for Britain's fastest growing port. (Motivation Techniques)

THE FELIXSTOWE DOCK & RAILWAY COMPANY

Port of Felixstowe

Crane re-positioned

Felixstowe, 22 August: — The Stothert & Pitt 32-ton crane which was damaged at Felixstowe early in the year when, in a storm, a containership partly demolished the Roll-on/Roll-off quay, is lifted back into position on the new quay which is now nearing completion. The crane weighing 360 tons in turn required an 800 ton Taklift floating crane—specially imported from Hol-



land—to lift it into position.

The reconstruction of the Ro-Ro terminal under the supervision of the Felixstowe Dock & Railway Company was put in hand almost immediately after the accident. The giant Taklift crane was ordered on the same night as the accident and one month afterwards the port had put down temporary moorings to enable ASN vessels to continue operating their services with the minimum of disruption. The only restriction was that the loading operation was restricted to Roll-on/Roll-off only and not Roll-on/Roll-off and Lift-on/Lift-off as usual. Now, with the repositioning of the Stothert & Pitt crane onto the new permanent quay, full operations can re-commence. (Motivation Techniques)

New Board Secretary

London, 7 August (B.T.D.B.):—The British Transport Docks Board have appointed Mr. J. Keith Stuart as Secretary to the Board with effect from 1 October 1972. He succeeds Mr. Kenneth Bantock, who was recently appointed as the Board's Port Director, Humber.

For the past six years Mr. Stuart has been employed by the South Western Electricity Board and was the Board's Assistant Secretary, based in Bristol, from 1966 until he was appointed as the manager of its Mid-Cornwall District in October, 1970.

Previously, Mr. Stuart spent several years with the National Coal Board, which he joined as a graduate trainee on leaving Cambridge in 1961. He is a native of Southport, Lancs.

Cranes for Swansea

London, 3 August (B.T.D.B.):—A contract valued at over £200,000 has been awarded by the British Transport Docks Board to Clarke Chapman-John Thompson Limited of Dumfriesshire, for the provision of two 25-ton quayside cranes for Swansea Docks.

The cranes are to be installed at Swansea's recently modernised 'D' Shed Wharf at King's Dock and will be used for handling heavy steel products. Delivery of the first crane is scheduled to begin in July, 1973 and both cranes are due to become operational in October.

Current trends in the Steel Industry indicate an increasing demand for heavier semi-finished and finished steel products with the subsequent need for improve lifting facilities at Swansea where much of this trade will be handled.

The closure of Port Talbot Docks at the end of 1971 has already resulted in a big expansion in Swansea's steel and tinplate trade. In the first half of 1972 there was an increase in steel traffics of 211,442 tonnes compared with the same period in the previous year.

Cardiff Docks Manager

London, 1 August (B.T.D.B.):—Mr. R.G. Wareham, who has been Commercial Manager for the British Transport Docks Board's South Wales ports group for the past four years, has been appointed by the Docks Board as the new Docks Manager for the port of Cardiff with effect from today (Tuesday, 1 August). He succeeds Mr. J.B. Williams, who was recently appointed Docks Manager, Hull.

Mr. Wareham has worked in the South Wales ports throughout his career, having jointed the Great Western Railway Company in 1946. After three years' management training he served in various posts until he was appointed Assistant Docks Manager at Port Talbot in 1961. In 1964 he moved to Newport, again as Assistant Docks Manager, and in February 1968 was appointed Commercial Manager, South Wales Ports.

Mr. Wareham is married with one son and lives at Llandaff.

More trade for Silloth

London, 10 July (B.T.D.B.):—The Cumberland port of Silloth has won a new trade in the coastwise imports of molasses. The first shipment arrived today, when the m.v. "Activity" discharged 1,250 tonnes of molasses at the port.

Silloth has been awarded this new business by Carr's Flour Mills Limited, who have leased a dockside site from the British Transport Docks Board and erected a 1,500 tonne capacity storage tank. The molasses, which came from United Molasses' storage depot in Liverpool, will be used in the manufacture of animal feeding stuff.

Mr. R.L. Naylor, managing director of Carr's Flour Mills, said, "It is hoped that this will be the start of a growing trade for Silloth, and that the depot will become a distribution centre for molasses in the area".

During 1971 total trade passing through Silloth amounted to 97,451 tonnes.

Exports from Immingham

London, 10 July (B.T.D.B.):—Export cargoes of refined sugar are being loaded at Immingham for the first time since the war, states the British Transport Docks Board.

Over 13,000 tonnes of sugar will be handled by the port this week. The first consignment of 3,700 tonnes is being loaded on to the 'Karyatis' for shipment to Algeria, and a further cargo of 9,500 tonnes is being loaded on to the 'Emmanuel Marcou' destined for Port Sudan.

Further cargoes amounting to 15/20,000 tonnes are expected to be handled by the port in the next few weeks.

Immingham has handled 24,309 tonnes of foodstuffs in the first six months of 1972, compared with 16,304 tonnes handled in the corresponding period last year.

U.K., Rouen's trade partner

Rouen:—Eighty two countries, in all over the world, were linked by sea with the port of Rouen during 1971. The trade to and from Great Britain reached 887,200 tons, so that this nation was the third by classification of tonnage, the second being the U.S.S.R. (1,389,700 t.) and the first, Poland (1,938,500 t.). The place of these two Eastern nations is mostly explained by a considerable coal trade towards our port.

The maritime trade between Rouen and Great Britain consists of:

—Imports: 279,400 t. of which: 81,500 t. coal, 29,000 t. refined oil products, 102,300 t. minerals (china-clay, clay..), 21,800 t. chemicals, 10,400 t. cardboard, 9,600 t. metals, 3,700 t. machinery, 1,800 t. transport equipment, 3,800 t. alcohols (whisky ....), etc.....

—Exports: 607,800 t. of which 28,100 t. coal, 347,000 t. refined oil

products, 34,600 t. gypsum, 17,200 t. fertilizers, chemicals...., 7,100 t. wood, 159,600 t. grain, etc.

A great part of the trade is carried out by tankers and tramp coasters (coal, china clay, clay.... from Great Britain, coal, grain, gypsum, wood from Rouen....), but a network of six regular lines is also available from our port towards the principal British regions. This network consists of five conventional services and one roll-on roll-off line, operating together 20 calls a month.

British manufacturers and merchants, interested in the "Continental" market, can find on the River Seine banks (240 kms. length....) all the necessary space to set up middle-sized production units or warehousing and distribution centers.

The vehicle center of Moulineaux, where the Bore-Ugland ferries are operated, is a good example of the possibilities that the port of Rouen is able to offer to the trade and industry when the E.E.C. is extended to the British Isles and Scandinavia. (Rouen Port International Issue, 22 June)

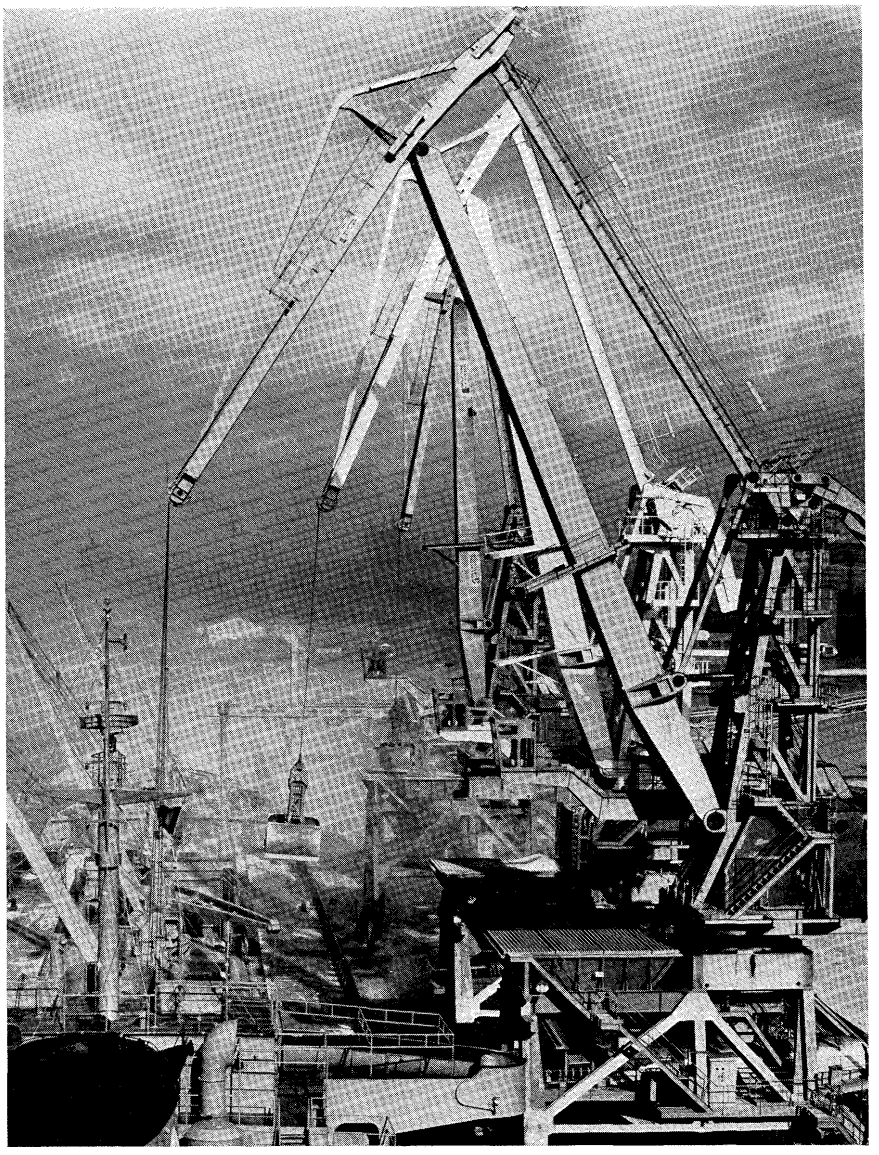
Rouen, rapid grain port

Rouen:—Because of its particularly favourable location, right in the heart of the main production areas, Rouen is by far the leading French grain port: 1,254,500 tons of wheat, barley and maize were shipped in 1971; however, during the record harvest year of 1969 the port reached as much as 1,722,500 tons.

Increasingly efficient equipment is being installed in favour of this trade, essential not only for our port but also for French agriculture. These improvements represent on the whole a greater rapidity in the loading of vessels: thus, of particular note, a freighter arriving in the port at noon on a friday was ready to set sail during the afternoon of the following day; in the interim a cargo of 12,970 tons barley was loaded to its holds.

This particularly rapid loading operation was realized by the Magasin de Rouen Maritime silo at Grand-Couronne. The vessel was the Anna Katrin Fritzen of German flag owned by the shipping company Johs. Fritzen & Sohn (Emden). From 1.00 p.m. on friday 24th March to 12.00 hrs Saturday 25th March a total 10,675 ton barley had already been loaded to the ship within 10 working hours; in other words within two normal shifts of four hours and two hours overtime (without half-night shifts). Thus the average rate of work over these ten hours represents approximately 1070 tons per hour. Loading completed during the saturday afternoon at a rate exceeding 700 tons/hour and finished at 4.15 p.m. The average rate of work throughout the entire loading of the ship, which took 13-1/4 hours, being 980 tons/hour.

After this especially successful loading operation the Anna Katrin Fritzen was able to sail to Constantza with a draught of 8.38 metres (27 ft. 6 in) which is at present the maximum permissible draught to proceed downriver during daylight on a direct tide. The dual-tide downriver passage technique has already enabled the draught of 9.60 metres to be attained on leaving Rouen. (Rouen Port International Issue, 22 June)



Port of Dunkirk:—Discharge of a phosphate cargo by 3 "Kangaroo" cranes of 15 tons each.

Growing container cargo

Bremen:—If matters proceed as they are, Bremerhaven can expect the container handling in the current year to reach 2.5 million tons. It was already 1.032 millions in the first five months. The container-share in general-cargo handling rose from 12 to 17%, from 1970 to 1971: the number of handled containers rose

by 31,500 to 156,962 (or 25%); with the cargo even jumping some 500,000 tons, to 1.934 million tons i.e. by 33%. Within the container-handling field itself a steeper increase was to be seen in the over 20-foot units (by 32,220, to 140,377) and in the specialised-containers (by 1,191, to 5,350), whilst there was a decline in the upward trend of the up to 20-foot units (by 1,275, to 7,584) and the trailers (by 622, to 4,273). 1972 is expected to show further improvements.

In the general-cargo position for all the German ports the Bremen/Bremerhaven port-group, alone having had 40% for some months, leads the field by a short head from Hamburg. Meanwhile the container-handling has practically completely concentrated itself in the Bremerhaven port-group on the Weser estuary. 9 full-container lines and 30 semi-container lines now run there regularly. In the "Bremerhaven Container-Crossroads" at the present time there are 9 container-bridges; 3 berths on the open-river quay (1,000 metres long) and 4 berths within the "Nordhafen" area (946 m)—all available together with a marshalling and operations area of 741,200 sq. m. The new terminal has already proved itself in various ways; whether it be in the storing of enormous quantities of containers —as occurred during the months-long strike of the American dockers —(despite the vast storage areas it was necessary to stock three high); whether it be in the speedy outflow —as experienced with the massshipments to the USA in December; or whether it be in peak-demand periods—such as occurred in early July of '72, when—within a period of 48 hours—10 container and ro-ro ships with 2,576 containers and 870 private cars were handled frictionlessly and fluidly. (Bremen International, 8–1972)

Passenger trade is up

Bremen: — The Bremen/Bremerhaven port group reports that after a heavy falling-off in the transocean passenger trade over the last decade an increase has again been recorded. It is true that the transocean passenger trade — now mainly sea cruises—is stagnating, with a mini-increase from 28,399 passengers in 1970 to 28,453 in 1971; but the ferry trade to England has jumped from 85,059 passengers in 1970 to 109,691 in 1971—or by 29 percent! In the transocean passenger trade the Russian passenger ship "Alexander Puschkin" was the most frequent guest at the Columbus Quay in 1971; with 12 arrivals at Bremerhaven, on the Leningrad—Montreal route. (Bremen International, 8, 1972)

New port model

Bremen: — Statesmen, politicians, diplomats, scientists, experts, journalists, students, school-children: since 1949 thousands have visited the model-room in the Bremen "Überseehafen". A unique place of interest for gazing at and admiring the arrival and departure of giant ocean vessels bearing the flags of the 40 seafaring nations: transporters, passenger liners, ro-ro LASH ships. Not to forget the tugs, floating cranes, the quays with their ramps and long rows of cranes, the container-bridges, the sheds, the grain-elevator, the ship-yards, the inland-watercraft, the port railway system with its hundred kilometres of trackage, the van-carriers, the forklift-trucks, the lorries, the cars—disappearing into the vitals of a car-ferry, the fenced-in freeport, the commodities from all parts of the world. A picture which otherwise is only to be seen from an aeroplane. Indeed, even more: cross-sections of a ship and port, illuminated maps, an original ships' cabin and an original Bremen wine-room. For the model-room of the Bremen/Bremerhaven port-group which has earned world-wide praise was renewed in July 1972 and has been moved into the very top floor of the port sky-scraper building, from where one can also observe and pass judgement on a part of the goings-on, a section of the reality. (Bremen International, 8-1972)

LASH boom?

Bremen:—The, up to now, little noticed—as far as the general public is concerned—LASH start resembles in many ways the transocean start of the container, only 6 years ago, when the experts were observing; with a very sceptic eye. In the German Bremen/Bremerhaven overseas port-group (which—as has so often been the case with innovations —was the first to take up with the LASH trade) this new form of transportation commenced in September 1970. In the first full LASH year (1971) Bremerhaven received from the parentships 428 barges containing 132,000 tons of cargo; mainly forestry products (sawn timber, paper, woodpulp), as well as rice, chemical products and minerals. In the other direction the LASH-ships took on 407 barges with 82,300 tons of cargo; industrial products of all description—mainly iron and steel.

Following on the Central Gulf Contramar Line, of America, which has been sending LASH-ships to Bremerhaven since 1970—and the (German - Dutch) Combi - Line, which has been serving Bremerhaven since March 1972—the Lykes Lines,

(Continued on Next Page Bottom)

Third Berth Put into Operation at the "Container Crossroads Bremerhaven"

via Bremen Bremerhaven

Bremen, 30th June:—In the last few days there has been intense activity at the "Container Crossroads Bremerhaven". Once again the terminal on the estuary of the river Weser was able to show its efficiency by handling not less than 10 container and roll-on/roll-off vessels within only 48 hours.

It was possible to handle this

amount of traffic because the third berth at the Stromkaje (River Quay) of the "Container Crossroads Bremerhaven" was put into operation at this time. Thus the complete terminal, with a storage and marshalling area of 741,200 square metres, nine container cranes, three berths (1,000 metres) at the Stromkaje and four berths (946 metres) in the Nordhafen area, is fully operational for container and roll-on/roll-off services.

Apart from the Australia Europe Container Service (AECS), the Japanese / English / German trio-group, and the Hapag-Lloyd AG, all lines calling at the Ports of Bremen were present during this period. The vessels concerned were the "Taiping", "Visurgis", and the "Scantrain" of the Seatrain Lines, Inc., the "Atlantic Span" of the Atlantic Container Line, Ltd., the "American Legend" of the United States Lines, the "Flying Scot" and the "SL 181" of the Sea-Land Service, Inc., the "Baltica" of the Dart Container Line and the car carrier "Jacara" of the Wallenius Rederierna line. Moreover, MS "Lightning" started the regular all-container service operated from Bremerhaven by the American Export Isbrandtsen Lines, which have been operating between Bremen-City and the U.S. East Coast since December 1966.

It was possible to achieve record performances when clearing these ten specialized vessels, for not less than 2,576 containers and 870 cars were loaded or discharged within only 48 hours.

All the construction work at the "Container Crossroads Bremerhaven" will be completed for the time being in the autumn of this year.

Ready for ro/ro ships

Fremantle:—Work is now completed on the reconstruction of two berths, Nos. 6 and 7 North Quay, to cater for roll on/roll off and unit-load ships in the Port of Fremantle Inner Harbour.

Eleven hundred feet of quay has been replaced with a reinforced concrete structure capable of withstanding axle loadings of up to 50 tons. A modern unobstructed span cargo handling shed measuring 280 feet by 150 feet has been erected. Consistent with the demands of modern shipping, large areas of open space for the stacking and marshalling of containers and other items of general cargo such as steel products and motor vehicles have been provided. Special care has been paid to the lighting of both the cargo shed and the surrounding tarmac areas.

Work has commenced on the reconstruction of the adjoining No. 8 Berth. A cargo shed similar to that

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of America, has now taken up the LASH-trade across the Atlantic, with the, up to now, only German LASH-port. The Hapag-Lloyd AG., of Germany, which—jointly with the Holland-America Line — runs the Combi-Line (its first LASH-ship was the "Bilderdyk"), is placing into service Germany's first LASH-ship, the "München", in the Autumn of 1972. She is a 261.40-metre long, 43,000-ton parent ship which is able to accommodate 83 lighters (barges); can run at 18 knots and costs DM 50 millions. The port of registry of the "München": Bremerhaven. There are 20 LASH-ships under construction around the globe at the present time. The belief of Bremen is that the LASH-system of transportation will prevail. (Bremen International, 8-1972)

provided at Nos. 6 and 7 Berths will be constructed at No. 8 Berth. (Port of Fremantle Quarterly, April, 1972)

New first aid unit

Melbourne:—A new first aid unit fitted with every conceivable requirement, necessary for rendering medical aid to port workers and the public, has been added to the First Aid Section of the Port Emergency Service.

Built at a cost of more than $7,000 the first aid unit is one of five vehicles which maintains a 24 hour service throughout the entire port area.

Three of the units operate from Port Emergency Service Headquarters located at Piggott Street, with a fourth based at the Williamstown Workshops, while the fifth unit is stationed at 16 South Wharf.

In keeping with their policy of improving facilities wherever possible, the Commissioners of the Trust when they decided to phase out the old unit, selected a unit that would be of the very latest type.

Consequently the new first aid unit has been fitted with the following:

- An interior unit for storage of first aid equipment.
- Hot water heater, using the radiator of the vehicle as a heating source.
- Folding sink.
- Plastic fresh water tank with a 12 gallon capacity.
- Paraguard stretcher.

The unit is mounted on an International chassis. The outer skin of the vehicle is made of 20 gauge sheet steel.

The decision to equip the vehicle with a full sized stretcher rather than seat/stretcher type was made because of the increasing number of accident cases occurring in the port, which required the use of a full sized stretcher.

The Port Emergency Service has the responsibility of keeping accidents and disasters down to the barest minimum, and their approach to this problem, which is uppermost in the minds of port authorities throughout the world, is one of PREPAREDNESS.

Formed during the second war as a safeguard against saboteurs, it operated with so much success, that the Commissioners of the Trust decided to continue the service in peace time.

The P.E.S. today is equipped with the latest appliances and is staffed by a highly trained team of officers and men, who maintain a constant vigil over the 10½ square miles of land and water under the jurisdiction of the Melbourne Harbor Trust Commissioners. (Melbourne Harbor Trust Port Gazette, June, 1972)

Bulk liquids berth

Sydney, 25th May:—The Maritime Services Board, at its meeting held in Newcastle today, decided to proceed with the building of a bulk liquids berth in the Rotten Row area of Kooragang Island.

The decision was announced in Newcastle today by the President of the Maritime Services Board, Mr. W. H. Brotherson, who said that the Board reached its decision following discussions with the oil companies and other interests extending over a lengthy period.

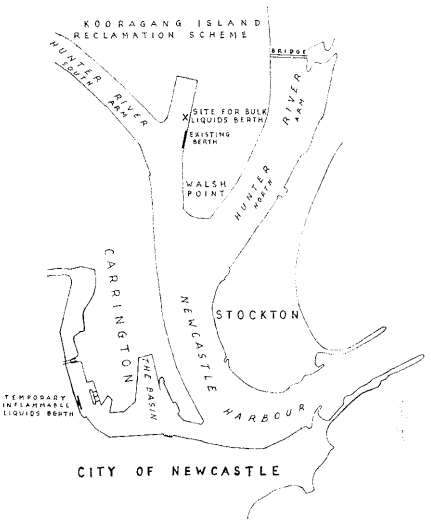
He said that the present temporary inflammable liquids berth is inappropriately placed in Throsby Basin as any spillage of petroleum products being discharged from a ship in that area can cause a pollution problem.

Mr. Brotherson said that, apart from the hazard involved in handling cargo of this nature near the main city area as at present, means are not readily available to isolate any spillage so that it can be retained and cleared easily.

He said, however, that the site chosen at Kooragang Island, being in re-entrant waterway, will allow of a boom being placed across the re-entrant so that, should any spillage occur, it can be readily contained and dispersed. This fact, together with the isolated nature of the area, has influenced the Board in its decision.

Mr. Brotherson said that the bulk liquids berth, which will be a common user facility, has been designed by the Board's engineering staff and the Public Works Department has been commissioned to construct the berth on the Board's behalf.

The estimated cost for the completed berth, will approximate $1,000,000 and it is anticipated that the berth will be completed within



a period of 64 weeks.

Mr. Brotherson indicated that dredging into the site has already been completed in anticipation of the work commencing, and the oil industry is now in the process of surveying the site so that the necessary pipeline connections can be made to the new berth. He said this is an aspect for which the oil companies are responsible. (The Maritime Services Board of N.S.W.)

Dredging at Newcastle

Sydney, 25th May:—The Maritime Services Board has commissioned the dredge "W.D. Resolution" built recently at the State Dockyard, to complete the dredging of the main channels in the Port of Newcastle to the designed depths of 36 ft.

In announcing this in Newcastle to-day, Mr. W. H. Brotherson, President of the Maritime Services Board, said that widening and removal of siltation from the Steelworks Channel had been undertaken last year by the Westminster Dredging Company's dredge "Seven Seas" which had removed in excess of 1.0 million cubic yards of material at a cost of $1.25 million.

He said, however, that major flooding which occurred earlier this year resulted in further siltation of the Port to the extent that it had become necessary to dredge an additional 250,000 cubic yards of silt to restore the channels and the Board had decided to extend the Company's contract to cover the extra work.

The cost of this additional dredg-

ing is estimated at $300,000.

In making the announcement, Mr. Brotherson said that it was a point of great interest that the "W.D. Resolution", which was recently named at Newcastle by Lady Askin, is now to be placed in service in its first job in the port.

He said that it is one of the world's largest trailer suction dredges and the work involved in the dredging at Newcastle will be completed by it in a matter of three weeks.

The dredge will commence to operate on Monday next, 29th May, 1972. (The Maritime Services Board of N.S.W.)

Single buoy mooring

Sydney, 25th May:—The President of the Maritime Services Board, Mr. W. H. Brotherson, announced in Newcastle that the Board had decided at its meeting held in that City to-day to amend the Botany Bay Oil Tanker Regulations to prohibit any vessel moving closer than 800 ft. to the new single buoy mooring which has been installed by the Board near the northern foreshores of Botany Bay close to Bumborah Point.

Mr. Brotherson said that the Regulations now prohibit any vessel moving closer than 300 ft. to the Kurnell wharf or to any vessel moored at the Submarine Terminal at Botany Bay, but, unlike the fixed mooring at that terminal, the single buoy mooring provides for ships to swing around the buoy according to the weather conditions and there are also floating pipelines which remain on the water whilst no ships are at the berth. The 800 ft. stand off distance has therefore been introduced as a safety measure.

He said that Regulations already exist to prohibit ships anchoring within 1400 ft. of the buoy. This relates to the need to prevent anchors fouling the underwater pipelines as well as to facilitate the swinging of ships.

A number of small tankers have already used the mooring for testing purposes but it will be officially commissioned when the 62,000 ton tanker "Amanda Miller" uses the facility to discharge an oil cargo to the nearby Total refinery.

It is anticipated that the "Amanda Miller" will arrive in Botany Bay on 7th June, 1972.

Mr. Brotherson said the single buoy mooring has been designed to handle ships of 120,000 tons deadweight but initially ships of 80,000 tons deadweight will be catered for.

He said that the largest oil tanker to enter Sydney to date has been the "Eiyo Maru" of 71,750 tons deadweight.

Mr. Brotherson said that the advantage of a single buoy mooring lies in the fact that a vessel tied to it is able to swing in a complete circle, depending on the wind and weather, while continuing to pump. He said the inner manifold of the buoy rotates with the ship and allows the floating hose pipe to follow the direction of the ship without becoming tangled.

The buoy and the associated anchorage system at Botany Bay were installed for the Board by its contractor, I.H.C. Holland (Aust.) Pty. Ltd., at a cost of $1,000,000. The cost of installing the pipelines leading from the single buoy mooring to the shore was accepted by the Total Refinery.

Mr. Brotherson said that, although single buoy moorings are used in a number of places overseas, this is the first to have been installed in any port in Australia. (The Maritime Services Board of N.S.W.)

Oil slick from QE

Hong Kong, 28 April:—For the past two days Marine Department launches have been involved in breaking up a large oil slick which has seeped from the former passenger liner, Queen Elizabeth. The ship, renamed Seawise University, caught fire and later capsized in Hong Kong harbour early this year. More than 2,000 gallons of emulsifiers have been used to break up the slicks in various parts of the harbour and the launches were again standing by today. However, there is no sign of a significant oil leakage from the hulk, which is said to be carrying some 3,000 tons of fuel oil in its storage tanks. Meanwhile the owners are continuing investigations into possible ways to draw the oil from the tanks. (The Week in Hong Kong)

QE fire traced to arson

Hong Kong, 18 July — The blazing inferno that completely gutted and finally capsized the Seawise University, the former luxury liner Queen Elizabeth, was caused by a series of fires deliberately started by "a person or persons unknown".

This was the main conclusion reached by an official Court of Inquiry into the cause of the disastrous fire which ended the illustrious career of the once proud Queen of the Atlantic.

More than 1,000 workmen were engaged in refitting the vessel for its new role as an ocean-going university when the fires broke out.

The charred remains of what was once the world's largest liner now lies almost completely submerged off Tsing Yi Island on the outskirts of Hong Kong harbour. (The Week in Hong Kong)

Beef for American market

Whangarei, N.Z.: — Hellaby Northland, New Zealand's most modern beef processing plant, is now producing for the American market.

The first two container loads of manufacturing beef—a total of 30 tons of meat—left the plant last month, bound for the West Coast of the United States, and production will steadily increase according to a planned programme.

The Manager of Hellaby Northland, Mr. J. N. Dotchin, has praised the team who, working to a tight schedule, made it possible to begin killing in March—only 15 months after the first pile was driven.

"I do not know if this was some kind of national building record," he said, "but it certainly upheld the company's policy of engaging Northland contractors and sub-contractors.

"At times the contractors had to contend with appalling weather conditions but the enthusiasm remained."

Mr. Dotchin said that everyone had been interested in the project and this interest had remained to the extent that of the 84 employed in the plant, over 40 assisted with its construction.

"Although it is a division of an

(Continued on Page 49)

Auckland-based group, we still regard it as a Whangarei company," he said, "and the jobs created and money circulated will be to the ultimate benefit of the whole community."

Mr. Dotchin added that it was his company's wish that the establishment of a new beef export plant would soon lead to growth of other industries in Whangarei, some perhaps involved in the servicing of the plant.

Mr. Alan Kerr, a Director of Whangarei's Kerr Construction Limited, said the Hellaby Northland contract had provided a challenge to he tradesmen of Whangarei. Kerr Construction formed a consortium with John Sisson and Son Limited, of Auckland, to build the works.

Speaking of the race against time to meet the deadline, he said: "Fortunately, due to the experience gained through the construction of the Marsden Point Oil Refinery, power station and fertilizer works there are probably more skilled men in Whangarei per head of population than in any other city in New Zealand."

He said a vital factor that should not be overlooked by anyone contemplating a shift to Northland was the extremely stable labour force.

The works, built on land developed by the Northland Harbour Board, has been designed and fitted to—and beyond—the most stringent hygiene requirements. In addition, the site is to be extensively landscaped. (Points North, August, 1972)

Industrial boost seen

Whangarei, N.Z.:—The New Zealand Herald foresees a "further step forward on the industrial front" for Whangarei and Northland with the opening of Hellaby Northland and the strong possibility that the Oil Refinery will soon be expanded.

In a feature story headed "Industrial Boost For Whangarei," the Herald also referred to investigations being made into enlargement of the power station, which could treble its generating capacity.

Describing the Northland Harbour Board as "the most active body in the north in encouraging industrial growth," the article said that through the months and years the Board had never let up in its pursuit of new industries.

It had made available 225 acres of land suitable for industry through reclamation and earthworks and was still reclaiming land at Port Whangarei.

Already 100 acres had been leased, said the Herald, and had been converted into sites for industry, various facilities and commercial enterprises. (Points North, August, 1972)

Penang greets queen

Penang:—It was an historic occasion for the Penang Port Commission when the British Queen, Queen Elizabeth II and her consort, Prince Philip, stepped on Swettenham Pier from the Royal Yacht "Britannia" on 8th March 1972 on a visit to Penang "Pearl of the Orient".

It was the first visit to be made by a British Monarch and the Penang Port Commission was honoured to be associated with this important event.

All ships in the harbour including the Commission's ferries and tug boats were dressed for the occasion. Swettenham Pier and the Commission's buildings were gaily decorated. The Commission put up its unique twin arches, designed by its Engineering Department, in front of its Administration and Terminal building.

As the Royal Yacht steamed into the harbour, two of the Penang Port Commission's tug boats, fully dressed for the occasion, went out to guide her and to assist her in berthing her alongside the Pier. A specially constructed gangway lined with red carpet and dressed in Red, White and Blue was rigged to the Britannia.

After the formalities on board the Royal Yacht were over the Queen followed by Prince Philip walked down the gangway and were received by the Governor of Penang, Tun Syed Sheik Barakbah and his Consort, and the Chief Minister Dr. Lim Chong Eu and Mrs. Lim.

Eight hundred invited guests witnessed the welcoming ceremony and the Queen and the Duke were presented to the State dignitaries by the Chief Minister. The Chairman of the Penang Port Commission, Tan Sri Abdul Jamil bin Abdul Rais, who was formerly the Malaysian High Commissioner to Britain, was amongst those who were introduced to the Queen.

After the introduction the Royal Party left the wharf amid cheers from the mammoth crowd and school children who waited patiently outside the wharf and along the royal route.

An elaborate sight seeing programme was arranged by the State Government for the Royal Party.

Late in the evening about 300 guests were entertained to cocktails by the Queen and the Prince on board the Britannia. The band of the Royal Marines rendered marches and selections on the wharf to the cheers of the guests who lined the rails of the Britannia. After beating the retreat the band struck up "God Save the Queen" and the "Negara Ku" at the end of the performance.

After the last guest had left the ship, the Britannia sailed away from Swettenham Pier at 8.50 p.m. amidst a roaring farewell from the big gathering at the Pier. (Berita Pelabohan, April)

Staff suggestions

Penang:—The Penang Port Commission has recently introduced a Staff Suggestion Scheme. The purpose of this scheme is to encourage employees to participate more fully in making contributions towards improvements within the Penang Port Commission organization. The emphasis is to elicit those types of suggestions relating to the procedures, operating methods and other related matters which will contribute towards increased efficiency and productivity of the organization.

Suggestions will be examined by a Staff Suggestion Board comprising of the Director of Operations, as Chairman, and the Personnel Manager, Chief Accountant, Management Service Manager and the Heads of Departments to which the suggestion relates.

Monetary awards will be given to those suggestors whose saggestions are adopted or whose suggestions, although not adopted, have some intrinsic value or indicate that the suggestor had put in a lot of com-

Singapore:—The picture shows the t.s. Hamburg Express alongside the container berth at Singapore's Container Port on 6th August. The 55,000 grt. Hamburg Express was the second fully cellular container ship to call at Singapore since its official opening on 23rd June 1972. Shortly after berthing, container ship-shore operations began and within the first hour the two 35 ton container quay cranes handled 55 containers. Approximately 750 containers were handled altogether. Work on the extension to the container berth is still in progress and when completed 914 metres (3,000 feet) with 13.4 metres (44 feet) LWOST will provide berths for 3 large third generation container ships to berth at the same time. (The Port of Singapore Authority)

mendable thought to a particular problem.

However, matters relating to salaries and conditions of service or complaints against other staff members will not be entertained. (Berita Pelabohan, April)

World Bank Mission

Karachi:—An I.B.R.D. Supervisory Mission led by Mr. R. Roberts inspected the Karachi Port and made a comprehensive appraisal of K.P.T.'s Development Programme comprising of the Reconstruction of Berths No. 1 to 4 and the construction of 3 additional Deepwater Berths No. 22 to 24. The 3 additional Deepwater Berths were commissioned in March 1972 exclusive of the backyard storage area and are the deepest berths in the Karachi Harbour, designed for dredged depth of 38 feet. The construction of Quay Structure for Berths No. 1 to 4 is progressing satisfactorily; Berths No. 1 & 2 are nearing completion and the remaining berths will be completed by December, 1972. The I.B.R.D. Team expressed great satisfaction on the physical accomplishment of the Project Works by the Karachi Port Authorities during the financial year.

The Team also reviewed K.P.T.'s future development programme and "complimented the port for its forward and advance planning". The K.P.T. Studies for the development of the Western Backwater Complex of Special Purpose Berths will be completed in 2 months time. The Studies for the Expansion of Oil Terminal Facilities will also be completed by September 1972. (K.P.T. News Bulletin, July 15th)

Busy with containerships

Singapore, 18th August: — The Port of Singapore Authority's new Container Port is moving into top gear as it prepares for a surge of container ships expected to arrive here over the next two months.

Container ship operators have indicated that at least 16 full-cellular container ship arrivals will take place in Singapore from now till the end of November.

This works out to an average of one container vessel calling at Singapore's Container Port every five days.

All the ships are on the Europe-Far East route and most of them travel non-stop after Southampton making it to Singapore in 19 days.

The PSA is confident of handling all the container vessels efficiently and providing a quick turnround for the ships after the Container Port's recent test with the m.s. Nihon and TS Hamburg Express.

The 55,000 g.r.t. Hamburg Express—the second to berth since the opening of the Container Port in June—began ship-shore operations almost immediately after berthing on Sunday, August 6.

The first container was discharged two minutes after she came alongside.

The two giant container quay cranes, with a maximum liffing capacity of 35 long tons each, discharged close to 55 containers during the first hour of operation.

The cranes managed to average a three-minute cycle per container during the entire operation of discharging and loading over 750 containers, both 20 and 40 footers.

The arrival of the Hamburg Express inaugurated the first of the Trio Group's container vessels to PSA's Container Port.

The next scheduled arrival for a container ship is on August 23 when the m.s. Nihon makes her second voyage here from Japan on her way to Europe.

The 59,068 g.r.t Tokyo Bay, reputed to be the world's largest and fastest container ship, will make her debut in Singapore on August 31, before leaving for Japanese ports. (The Port of Singapore Authority)

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

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

Thus the world's sixth largest shipbuilder occupies one side, with heavy industries on the second side and steelmaking on the hypotenuse...three NKK divisions converging at an angle but working in parallel.

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

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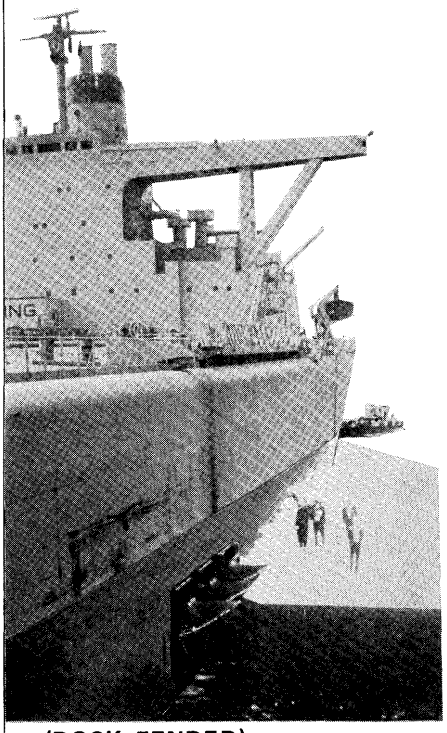
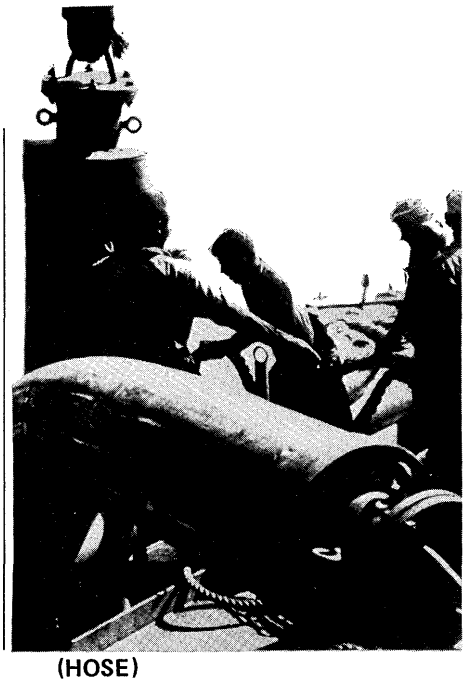
"BRIDGESTONE" is your answer when you think of "Safety"

BRIDGESTONE products made of super durable materials and developed mainly for high-speed mass transportation are the masterpieces based on the fundamental idea called "Safety"



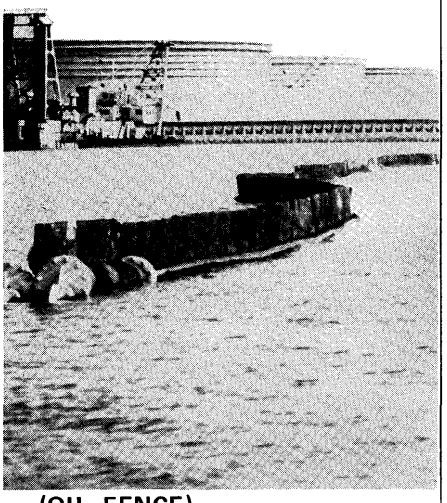
(DOCK FENDER)

The cell type dock fenders designed to suit perfectly the super large-sized vessels like tankers, and other types of dock fenders (for quaywalls) protect the ships safely. Used widely in many foreign ports, commonly known as "Wonderful Bridgestone".



(HOSE)

Not a single day passes without petroleum. Safe and high-speed mass transportation is a prerequisite for the petroleum industry. The picture shows the marine hose in service in the Middle East.



(OIL FENCE)

This valuable petroleum changes immediately to a terrible threat when it flows out into the sea. Safety measures are absolutely necessary for the transportation of petroleum. Oil fence manufactured by Bridgestone is highly efficient having high speed surfacing and submerging function.

BS **BRIDGESTONE**

Industrial Rubber Products Export Section

Head Office: 1, 1-chome, Kyobashi, Chuo-ku, Tokyo, Japan
Tel.: 567 0111 Cable Address: BSTIRE TOKYO Telex: J22217

Epoch-Making New Type Tie-Rod

Tible

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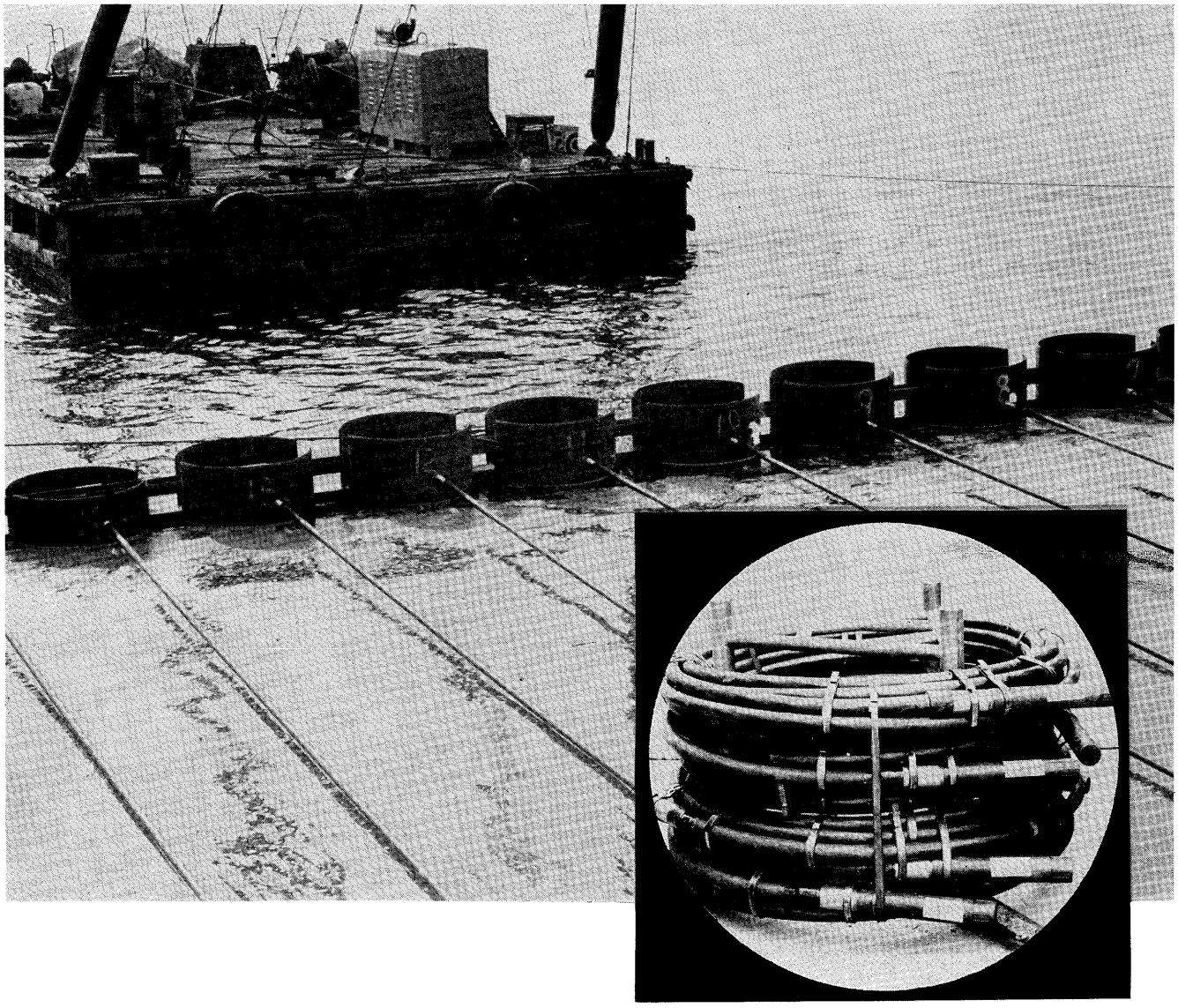

Advantages :

- Perfect Anti-Corrosion
- No Need of Ring-Joints
- High-Tensile Strength
- Safe and Handy

Applications :

- Tendons of Marine Structure
- Cables of Suspension Bridge
- Anchors of Sheet Pile

Information :

For further information and inquiry, please contact your nearest office of **Mitsubishi Corp.**

Head Office : C. P. O. Box 22, Tokyo, Japan
New York : 277 Park Ave., N.Y., U. S. A.
153 Branches all over the world.

S.E.E.E. JAPAN

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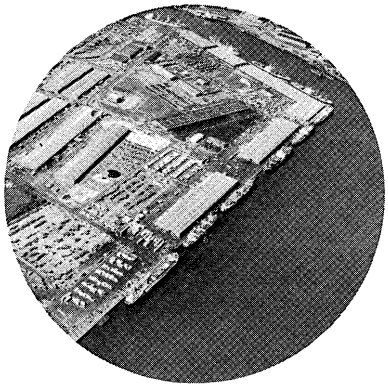
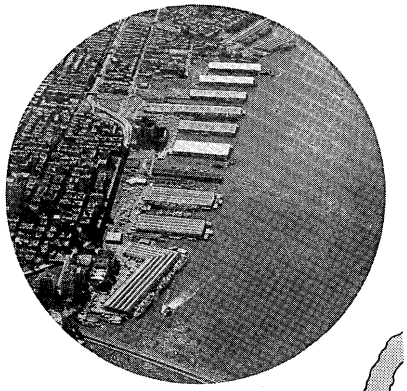


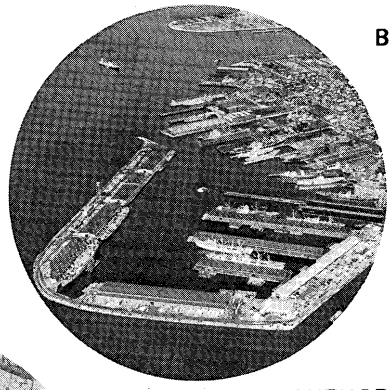
PORT NEWARK

HOBOKEN PORT AUTHORITY
MARINE TERMINAL

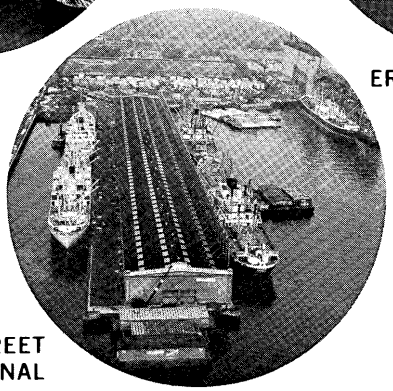


BROOKLYN PORT AUTHORITY
MARINE TERMINAL

ELIZABETH PORT
AUTHORITY
MARINE TERMINAL



ERIE BASIN PORT AUTHORITY
MARINE TERMINAL



COLUMBIA STREET
MARINE TERMINAL

$9.25 Billion of International Trade moves through these six marine terminals in the Port of New York every year.

The Port Authority of New York and New Jersey

MARINE TERMINALS DEPARTMENT.
111 EIGHTH AVENUE. NEW YORK. N.Y. 10011

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