

PORTS *and* HARBORS

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Amsterdam-Rotterdam Conference IAPH May 1973

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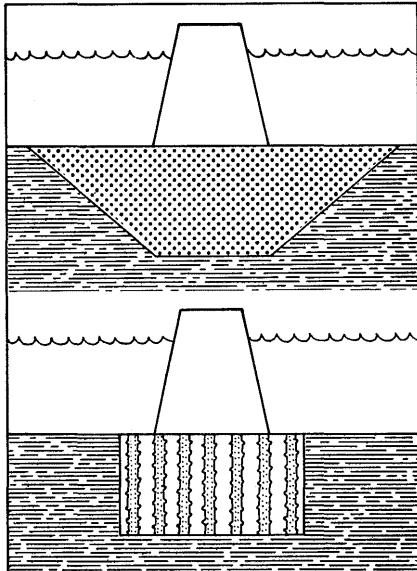
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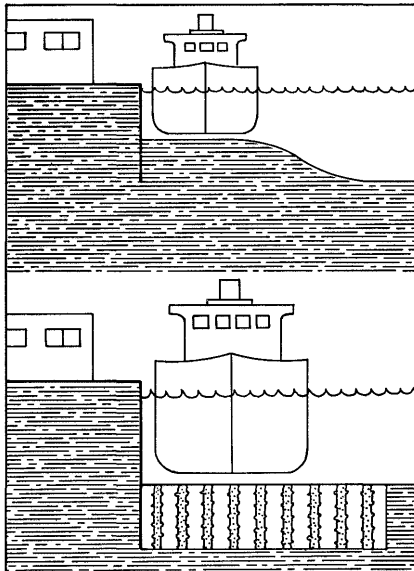


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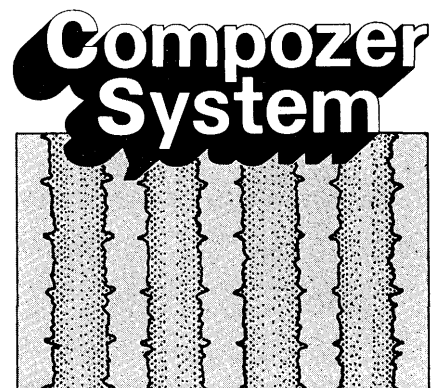
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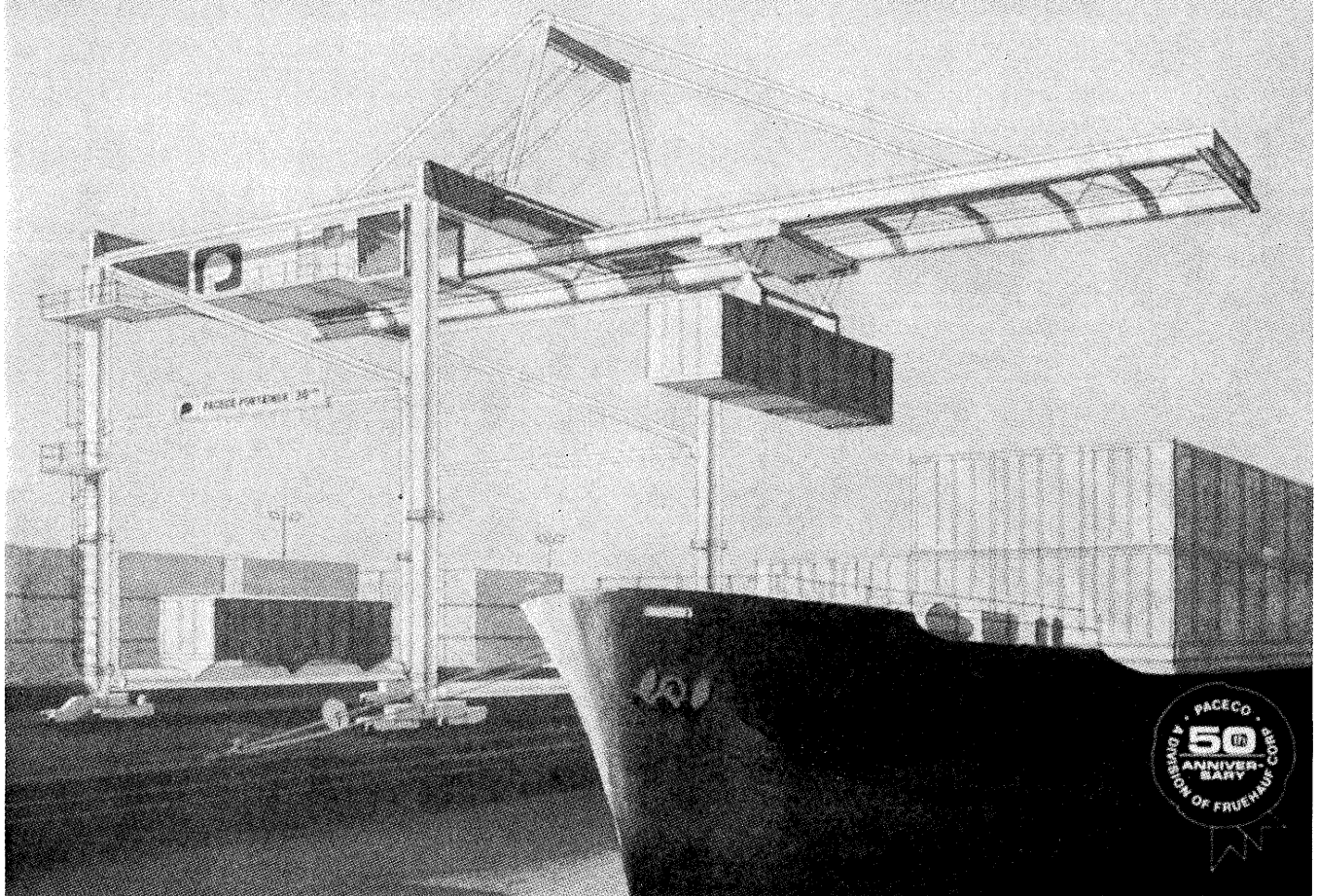
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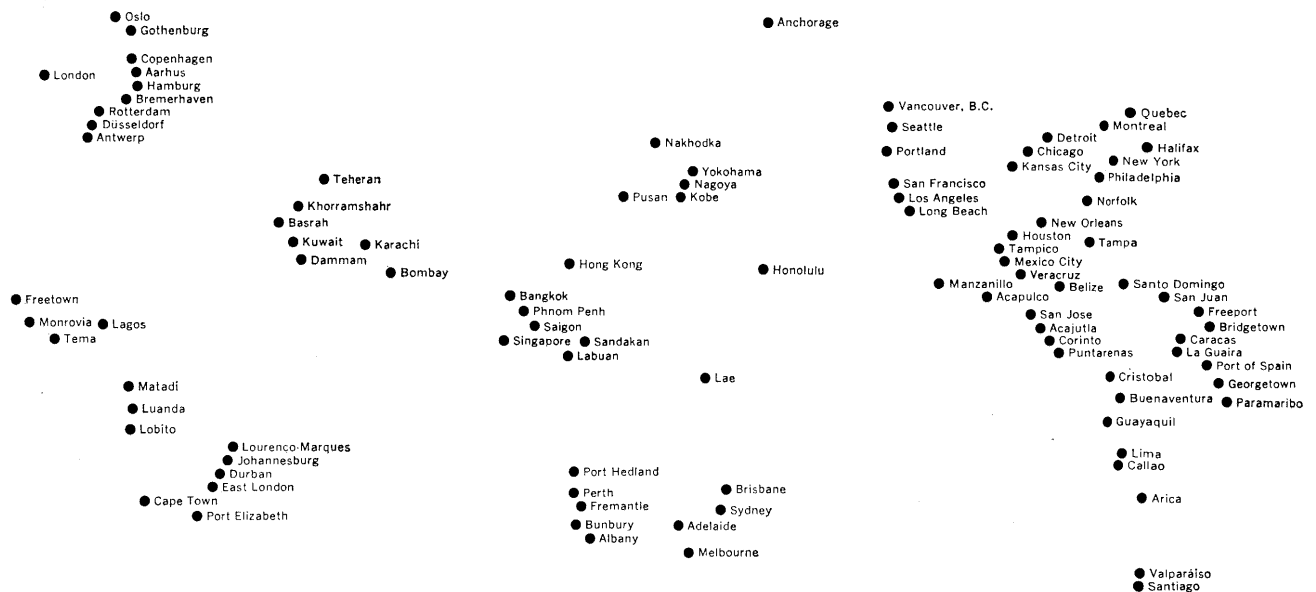
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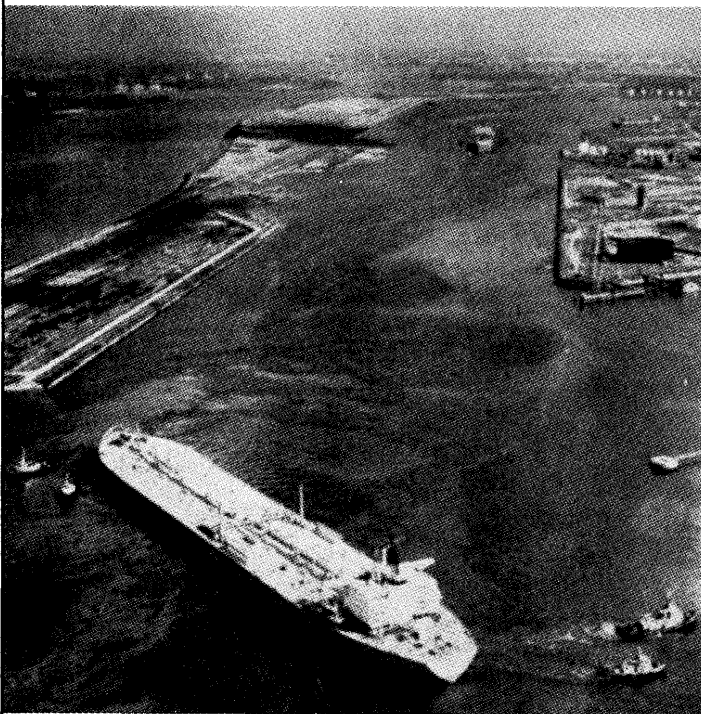
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May, 1973 Vol. 18, No. 5

CONTENTS

	Page
The Eighth Conference, Amsterdam/Rotterdam.....	7
Forum :	
East Bay Oil Spill Response Offers Case Study of Gov't-Industry Cleanup Capability	14
Topics :	
ICHCA 11th Conference	8
Amsterdam Outerport To Help Keep Pace	9
Houston International Seamen's Center Now in Full Operation	15
Great Lakes and Europe—Bridging the Information Gap by John Jursa.....	24
The Seventh Port Executive Development Seminar.....	30
Port of Toronto Opposes Compulsory Pilotage on the Great Lakes	31
Ports :	
Port Function of Kiireby Gengo Tsuboi.....	17
Record Year for Hong Kong Wharf Company (Eric White Associates Pty. Ltd.)	28
The World Port of Osaka	49
Orbiter Probe (International News):	33~50
IAPH News	33
The Cover :	
Aerial view of Manchester Canal Docks. See also photograph on page 44.	

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Sirs,

Re: Rotterdam/Europoort

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

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

Rotterdam is at the hub of transport routes to and through this market. It fronts on the North Sea, with short connections to England. It straddles the mouth of the Rhine, over which 200,000 barges carry cargo to Germany, France and Switzerland every year. It stands on several of Europe's international highways. It sends off rail cargoes direct

to every point in Europe. (Not surprisingly, half Rhine shipping is Dutch-owned. And 40% of Common Market road haulage is Dutch.)

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

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

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

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

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



Rotterdam/Europoort

Havenbedrijf
der Gemeente Rotterdam
(Rotterdam Municipal Port
Management)

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

PORTS *and* HARBORS

(Final programme)

Programme of the 8th IAPH Conference

Sunday, May 6th

- 08:30-10:00 Ways and Means Committee
- 09:30-17:00 Registration
- 10:00-12:00 Pre-Conference Executive Committee
- 11:30 Editorial Collaborators of "Ports and Harbors"
- 14:00-16:00 Pre-Conference Board of Directors
- 16:00-17:00 Meeting of 5 Panel Discussion Coordinators
- 17:00-18:00 Resolutions and Bills Committee

Monday, May 7th

- 08:00-09:00 Special Committee on Containerization and Barge Carriers—Mr. Ben E. Nutter
- Special Committee on Large Ships—Mr. Stig Axelsson
- Special Committee on Legal Protection of Navigable Waterways—Mr. Andre Pages
- Legal Counselors Meeting—Mr. J. Kerwin Rooney
- 08:30-18:00 Registration
- *09:15-12:30 Amsterdam Port Visit
- 12:00 Call on Mayor of Amsterdam by IAPH Officials
- 13:00-14:00 Resolutions and Bills Committee
- *15:30-17:00 Opening Ceremony
- *17:00-18:30 Informal Get Together
- 19:00-20:00 Special Committee on International Port Development—Mr. John Lunch (at Apollo Hotel)

Tuesday, May 8th

- 08:30-09:00 Resolutions and Bills Committee
- 08:30-12:00 Registration
- 09:00-10:00 First Plenary Session
- 09:30-17:00 Ladies' Programme
- 10:30-12:30 First Working Session
- The Functions of Port Undertakings—Mr. Stanley Johnson & Mr. D. E. Taylor
- 12:30-14:00 Luncheon
- 14:00-16:00 Second Working Session
- Preventive Measures against Air and Water Pollution in Port Areas—Mr. R. Vleugels

- 16:00-16:30 Introduction Rotterdam Day
- 17:00-18:00 Ways and Means Committee
- *20:30 Reception in the Rijksmuseum by Municipality of Amsterdam

Wednesday, May 9th

- * Visit Rotterdam Europoort

Thursday, May 10th

- 08:30-09:30 Resolutions and Bills Committee
- Nominating Committee
- Honorary Membership Committee
- 09:30-12:00 Third Working Session
- Problems of Developing Ports and their Solutions—Mr. Howe Yoon Chong
- 10:00-12:00 Ladies Programme
- 12:00-13:30 Luncheon
- 13:30-14:30 Second Plenary Session
- 15:00-17:30 Fourth Working Session
- Coordination in the Planning of Links between Ports and the Hinterland to facilitate Movement of Intermodal Transportation—Mr. Joseph L. Stanton
- *19:30 President's Reception and Dinner by the Port Authority of New York & New Jersey

Friday, May 11th

- 08:30-09:00 Resolutions and Bills Committee
- 09:00-11:00 Fifth Working Session
- Potential of Cargo Distribution by Barge Carriers—Mr. Ben E. Nutter
- 09:30-12:30 Ladies Programme
- 11:00-13:00 Third Plenary Session
- *15:30-17:00 Closing Session
- *20:00 Special Dutch Farewell Party

Saturday, May 12th

- 09:00-10:30 Post Conference Executive Committee
- 11:00-12:00 Post Conference Board of Directors

Sunday, May 13th

- 11:00 Departure Post Conference Tour
- * Accompanying ladies invited.

PRESS INVITATION

(This press invitation enclosed a Conference Brochure and a Registration Form, but here is reproduced the text only.)

Modern day port problems and possible common solutions to them

will be the theme of the working sessions of the 8th Conference of the International Association of Ports and Harbors (IAPH) to be held in the Netherlands from May 6 through 12.

The week-long IAPH Conference is sponsored jointly by the Ports of

Amsterdam and Rotterdam and the international press is cordially invited to attend the Amsterdam Port visit, the official Opening Ceremony, the working sessions, the visit to Rotterdam-Europoort and related social events.

Approximately 350 port officials

from all over the world are expected to attend the meeting where, among other things, the following points will be discussed:

- The functions of port undertakings
- Preventive measures against air and water pollution in port areas
- Problems of developing ports and their solutions
- Coordination in the planning of links between ports and the hinterland to facilitate movement of intermodal transportation
- Potential of cargo distribution by barge carrier.

Working sessions will be held in Amsterdam's RAI Congress Centre and delegates will stay at nearby hotels. The programme includes an Amsterdam Port visit on Monday May 7 and an extensive day-long tour of the Port of Rotterdam on Wednesday, May 9.

The hosts feel that this conference will be of great interest to your publication and therefore we enclose a Conference brochure which describes the events in full as well as a registration form marked "Press". Please note that all registration fees will be waived; the form is for our records and to ensure that you are included in all programmes.

For the convenience of the international press, English-language summaries of all working sessions including discussions will be made available shortly after the conclusion of each meeting. Telephone and telex facilities are available at the RAI Congress Centre along with other Press accommodations.

Registration is to take place at the RAI all day Sunday and Monday; members of the international Press might find it best to register early Monday morning before a tour of the facilities in the Port of Amsterdam which leaves from the RAI at 9.15 by coach. The tour returns to the RAI by boat in time for the official press conference at 13.30. The Opening Ceremony follows at 15.30 and working sessions begin the next day.

If you plan to attend this conference, please return the enclosed registration form as soon as possible. Press representatives do not pay the registration fee, however travel and hotel expenses are for their own account. Further information about the 8th Conference of the International Association of Ports and Har-

bors can be obtained from the secretariat:

Organisatie Bureau Amsterdam B.V., Post Office Box 7205, Amsterdam, The Netherlands. Telephone: (020) 44 08 07. Telex: 13499 (RAICO) Telegrams: ORBU Amsterdam.

ICHCA 11TH CONFERENCE

Strong Team to Test Weak Links

London, 26th February:—"The International Transport Chain—Where are the weak links?" is the theme for the Eleventh Biennial Conference of the International Cargo Handling Co-ordination Association to be held in Hamburg 14–17 May 1973.

A strong team of experts will be assembled on the platform to set the scene for this important conference in the new Congress Centrum.

Delegates will be addressed by Dr. L. Lauritzen—Bundes Minister für Verkehr, German Federal Republic and Senator H. Kern—Senator for Economy and Transport, Hamburger Bürgerschaft.

The first session will conclude with stimulating contributions from Hon. Mrs. Helen Delich Bentley—Chairman, US Federal Maritime Commission and Herr Fritz Ditz—President, Bundesverband des Deutschen Gross und Aussenhandels eV.

Some 200 applications from 26 different countries have already been received and these include delegates from Ghana, Indonesia, Japan, Malaysia, Trinidad and Yugoslavia as well as from Australia, Canada, Europe and the Americas'.

Expert Team Taking Part

London, 5th March:—"An expert team of ten leading speakers from the transport world will gather in Hamburg to put forward their views on where the weak links of the transport chain appear to be and how they are affected by them.

In the team are Arne Koch, Managing Director of ACL Services Ltd. in Southampton, and H. J. Bowers, director of Ocean Liners Ltd. who will be putting "The Shipowner's Viewpoint".

The views of the Port and Ter-

minal Operator will be presented by G. Beier, Chairman of Bremer Lagerhaus-Gesellschaft in Bremen and P. E. Evelyn, who is President of the Caribbean Shipping Association.

These are only four of the transportation experts who will be discussing "The International Transport Chain—Where Are The Weak Links?" at the Eleventh ICHCA Biennial Conference, 14–17 May, 1973.

Other presentations will be made by speakers putting forward the views of the Cargo Owners, Inland Transport and Airfreight Operations.

The demand for registration, over 200 already, indicates the importance of this Conference, which cannot be overlooked by those engaged in the transportation industry.

Six More for ICHCA's Strong Team

London, 20th March:—"Six more experts in the worldwide transportation field will be joining the strong team which will be discussing "The International Transport Chain—Where Are The Weak Links?" at the Eleventh ICHCA Biennial Conference in Hamburg from 14th–17th May, 1973.

The Cargo Owner's Point of View will be presented by F. L. Merwin—Vice - President, Transportation American Smelting & Refining Co. and G. Y. Odio—President, Ghana National Chamber of Commerce.

Dealing with Airfreight Operation will be J. Schenkels, Vice-President, Europe and Africa, Emery Air Freight Corporation, who will put the user's viewpoint, and A. d'Aymery, Director, Union Transports Aeriens, France, who will put that of the airlines.

On Inland Transport, R. E. Lawless—Vice-President, Freight Sales, Canadian National Railways and G. Antal—General Manager, MASPED, General Hungarian Transport Co. Vice-President FIATA, will be heard.

The purpose of this Conference is to discuss problems affecting specific areas of transport. Each subject will be discussed by operators and user's. There will be ample time for questions after each paper is presented and there will be daily discussion groups with panels of experts on the day's subjects.



Amsterdam Outerport To Help Keep Pace

Extracted from "View Over The Harbour"
Column of "Haven Amsterdam" January, 1973

In this issue we discuss the proposed Amsterdam outerport at IJmuiden and its implications, not only to the economy of the Amsterdam-North Sea Canal area, but to the entire Dutch economy.

The outerport project would guarantee that Holland would retain its share of total sea-going goods traffic handled in the Antwerp-Hamburg range of ports, and importantly, assure the Port of Amsterdam itself of a steady flow of goods traffic of about 25 million tons a year, a figure it is now approaching despite the recent recession.

It has been our custom in past years to look into the developments of the preceeding year in our January issue, however, we have found that in the end only the Central Bureau of Statistics figures present the official picture of international activity in our port, and will wait until these are available before presenting other calculations, in order to avoid confusion.

Suffice it to say that despite the

severe recession in the earlier months of 1972, traffic in the last months was well ahead or on the same level in most cases of those months in 1971, when a record 24.1 million tons of sea-going goods traffic was handled in the port.

The Central Bureau of Statistics figures are not available until custom's house figures are in, thus the delay, but the CBS figures are those accepted by the European Economic

Community which makes for standardization in the reporting of port statistics.

Unofficially we have noted these trends in the main groups:

Bulk goods: Kept pace in general. Grain is expected to show a decrease overall and while ore slowed down until October, a sharp recovery in the last months will keep this commodity at the record 1971 level.

General cargo: kept pace as well; in fact a slight rise is anticipated.

Timber: As seen in the December issue, this "typical Amsterdam commodity" stepped up considerably. The 800,000 ton mark will be exceeded for the first time and the 900,000 ton level approached. While this is "just a drop in the bucket" compared to the total, it's a lot of wood!

Passengers: The importance of the port is generally reckoned in tons of sea-going goods traffic, but the economic importance of passenger traffic is never reflected in these cold sober figures. There are several important ferry services operated between Amsterdam and Immingham, England and Gothenburg, Sweden by the TOR Line as well as an evergrowing number of cruise vessels calling at the "Capital port".

Passenger Terminal Amsterdam and the cruise vessels were discussed in our May issue and the graph below demonstrates the spectacular growth of this "commodity":



AMSTERDAM OUTERPORT IN NATIONAL INTERES

The first government-level feasibility study on the proposed Amsterdam outerport project at IJmuiden is expected this month. This report, made by a workgroup of the "National Zeehavenoverleg" institute is the first of four feasibility studies, and it will deal with traffic projections up to and including 1990.

"Zeehavenoverleg" is a standing advisory committee set up by the central government and representing the interests of both local authorities and private enterprise. Other reports, expected in the course of 1973, will deal with the commercial and economic aspects of the outerport, the labour situation in the North Sea Canal area and the environmental aspects of the project.

The concept of an outerport is not exactly a new one, and has been introduced several times in the past, however it was in 1969 that the Municipality of Amsterdam as well as private organizations representing port industry started pro-

motional efforts for the acceptance of the present proposal.

Preliminary reports by the municipality as well as by private organizations stress the positive effects the project will have on the economy of the Netherlands as a whole. Thus the Amsterdam outerport is seen as a project in the national interest.

Furthermore cost/benefit calculations have demonstrated that the outerport construction can be considered as a viable venture both financially and commercially.

Most important, it is expected that the existence of the outerport would provide for a consistent level of traffic in the Port of Amsterdam at about 25 million tons a year, in addition to the traffic handled at the outerport facilities.

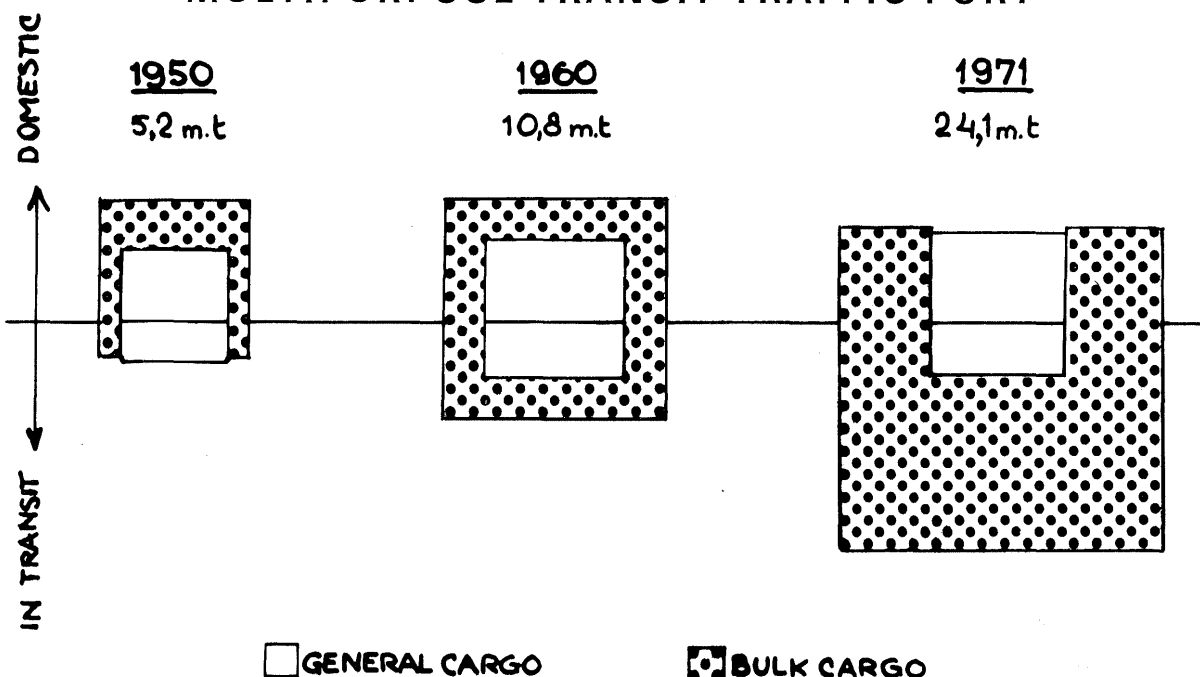
The independent reports conclude that the development of an outerport at IJmuiden would serve as a most practical and economic development to match requirements

for larger ship size and faster turnaround time. Thus the outerport would serve to protect—indeed increase—the prosperity of the Amsterdam-North Sea Canal area.

The proposed outerport is to be located at the coastline at IJmuiden, south of the southern entrance mole of the port entrance. The 1,000 acre port (about half would be devoted to land-based terminals, the remainder to deep-water berthing facilities), would be entered through a hole in this gap, so that ships would continue to use the existing harbour mouth.

Amsterdam's recent emergence as a centre of development of deep-water processing industries has helped the port's steady growth of seagoing goods traffic in the past quarter century. However, current progress and growth both in seagoing traffic and industrial development are apt to be influenced negatively in the long run because of continued developments in ship size

AMSTERDAM'S GROWING IMPACT AS A MULTIPURPOSE TRANSIT TRAFFIC PORT



(cargo volume is represented by quadrature of blocks; draught of blocks off the level is indicating "in transit"-ratio of port traffic).

and rapid-turn-around requirements.

As future optimum ships' measurements for bulk cargo vessels rise well over the 45-foot draught limit in the Port of Amsterdam itself, the better part of large scale bulk shipping will be eliminated, thus jeopardizing the backbone of actual cargo flow.

The actual limitations in deep sea access—further widening and deepening of the North Sea Canal is seen as unfeasible—are seen all the more a negative factor since several recent studies and reports made by various European authorities indicate great and continued growth of sea-going goods traffic in the next years.

In fact, the most positive reports indicate that the volume of goods traffic will triple by the late 1990's.

Although no definite plans for the lay-out of the port have been made public as yet, it is estimated that the area will be able to handle some 80 million tons of sea-going traffic each year under optimal operating conditions.

The outerport project includes provisions for the further dredging

of a maritime approach channel which will facilitate the passage of large ocean carriers in the 180,000 dwt range. The deepening project is to be done in two stages, first to 20 metres below N.A.P. and at a later stage a metre lower. Initially the outerport would be able to accommodate vessels in the 150,000 ton range.

It is reckoned that the outerport works can be completed in three years. Technical studies have revealed that the project will have

no negative impacts either on the inland links or labour markets or on the seaside where navigational factors such as the channel and coastal structures must be considered.

An important element in the financial and economic evaluations of the outer port plan is formed by traffic forecasts projected for the guide year of 1990 and traffic on other years based on this projection, is summarized in next table:

Traffic at the outerport in millions of tons

	1980	1985	1990	1995	2000
Dry bulk	11.0	17.5	34.0	39.0	43.5
Liquid cargo	2.0	5.5	12.0	21.0	30.0
Containers	1.0	2.0	4.0	5.0	6.5
Total	14.0	25.0	50.0	65.0	80.0

This is, of course, in addition to the stabilized 25 million tons of goods traffic in the Port of Amsterdam itself.

Break-even point in the cost-

benefit analysis is put at 10 years after initial operation, so that although initial operating costs would be high, long term, national, benefits are high as well.

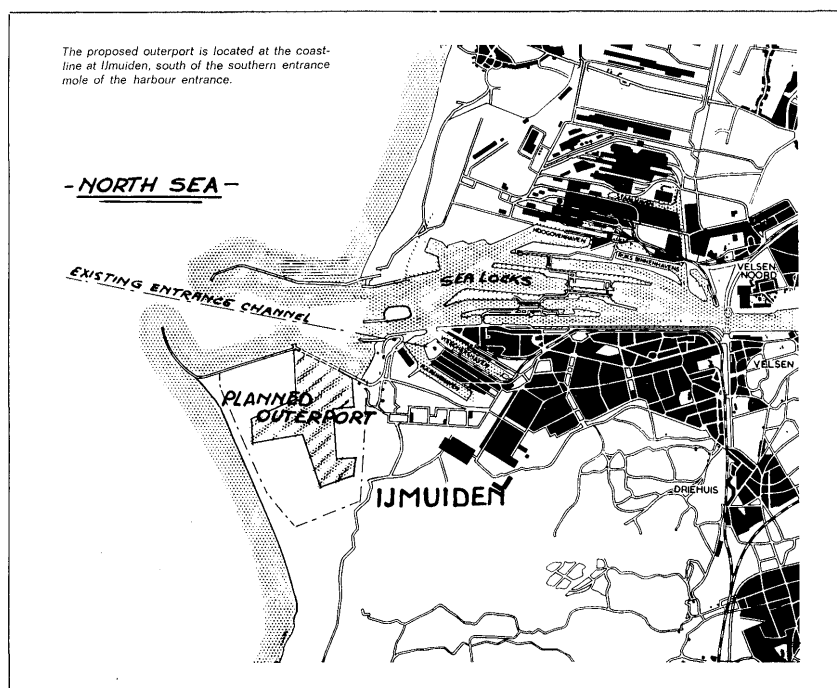
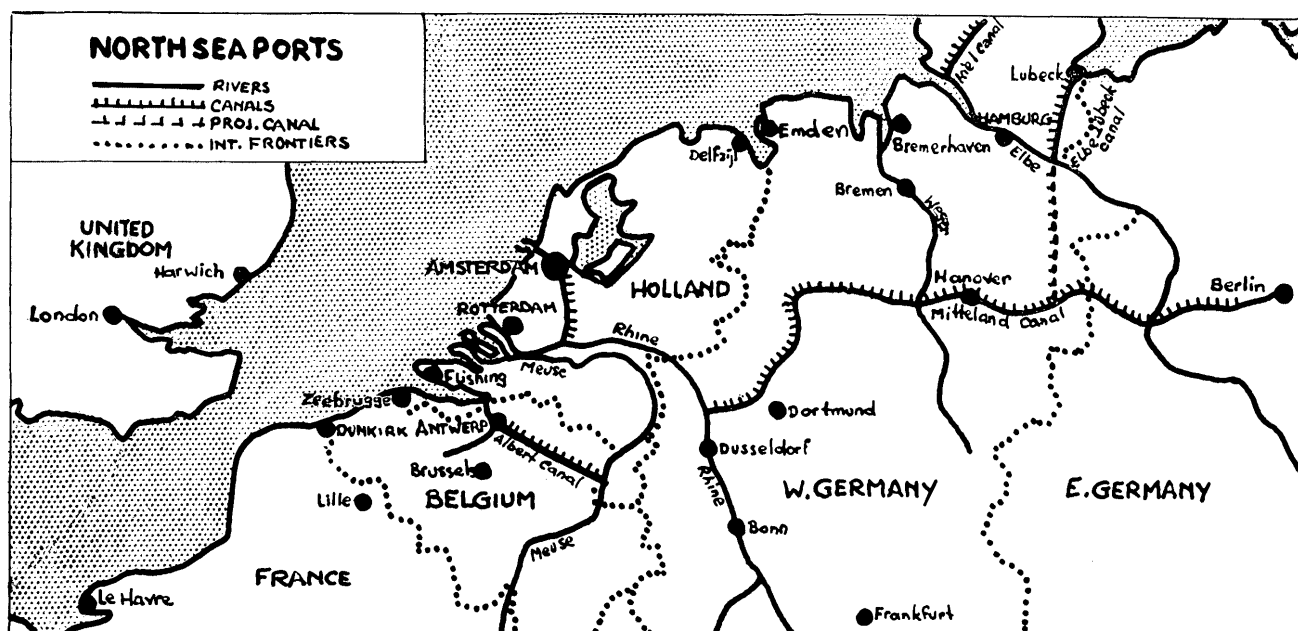
North Sea Port Traffic Expected to Triple

The Amsterdam port area is situated about midway in the Antwerp-Hamburg range of North Sea port terminals. The ports in this range take the major share of worldwide marine terminal and port transit operations.

The North Sea ports from Antwerp to Hamburg flank the key

position of Rotterdam, world's largest port, and together these ports actually handle some 500 million tons of sea-going bulk and general cargo each year. This volume of ocean-going trade represents nearly 25 percent of the entire maritime trade packet in the world, which totals about two billion tons annual-

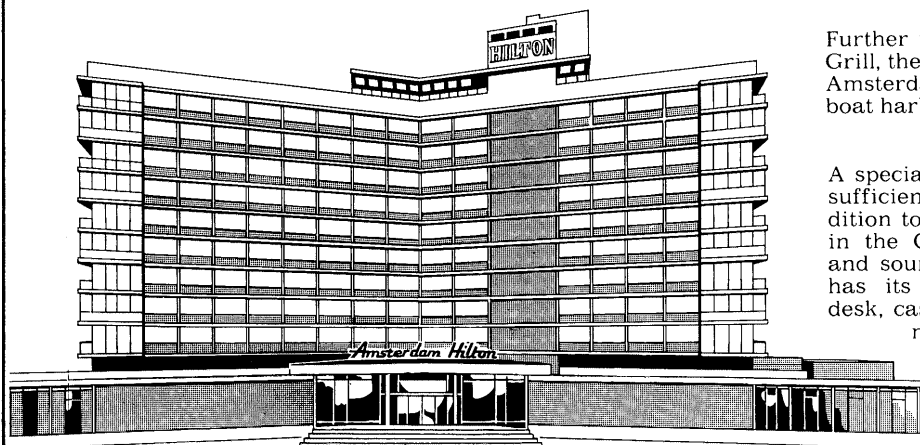
ly. The most optimistic figures indicate that the ocean-going goods traffic handled in the North Sea ports will triple by 1990—a major argument for the construction of the Amsterdam outerport at Ijmuiden. Thus the Dutch share of this trade will be maintained.





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East Bay Oil Spill Response Offers Latest Case Study of Gov't-Industry Cleanup Capability

**Marine Exchange of
The San Francisco Bay Region**

San Francisco, Calif., U.S.A.

San Francisco, January 31:—Just two years ago, here in one of the nation's, and world's, greatest natural harbors, two tankers collided to produce an oil pollution catastrophe which reverberated around a world still sensitive to the massive TORREY CANYON disaster near Plymouth, England.

Reaction to the loss of 800,000 gallons of crude oil near the Golden Gate in January 1971 is generally credited as assuring passage of subsequent Federal safety, communications and oil spill cleanup legislation. San Francisco Bay is also the site of the nation's first advanced, computer-assisted Coast Guard Vessel Traffic System, radar "control" for ship movements. Regulations enforcing Congressional response to environmental concern have assured compulsory ship-to-ship radiotelephones now in local effect. The Coast Guard has sweeping new powers to assure that ship collisions and other maritime "incidents" should seldom happen. If oil spills occur, it is also empowered to assess fines (regardless of intent), require cleanup or payment therefore, and to take whatever actions as deemed necessary to minimize environmental damage.

Thus, both as the site of the most recent massive U.S. ship oil spill, and as the "test tube" for Federal response, the Bay Region has geared its capability to meet what many consider the inevitable cost of a high-energy consumption society: some mishaps, hopefully minor.

Friday morning (January 19), it happened—but as an example of some perverse natural law, it came from a source, and in a location, least expected in contingency planning. As estimated 125,000 gallons of oil, not ship bunkers, nor imported crude, but automobile drainings, poured through storm sewers and over pavements to reach the estuary separating the island community of Alameda, and mainland Oakland, on the east shore of San Francisco Bay.

Cause? Not tankers colliding as they groped through a foggy bay. Not torn hoses on a discharging vessel, or ruptured fuel lines on a ship being fueled at dock. Man's capacity to dispoil nature intentionally is blamed alike by the Oakland Fire Department and Coast Guard. Valves on storage tanks holding service station collected used automobile crankcase drainings were deliberately opened by persons unknown. Before the spillage was detected in the nighttime abandoned industrial area, most of the contents had flowed into the narrow extension of the bay.

Officially, the Federal response to this (or any marine-caused water pollution) is centered in the U.S. Coast Guard. Corps of Army Engineers, the Environmental Protection Agency, and other executive departments are also cast in supportive but key roles. The Coast Guard in turn mandates to the Captain of the Port its full authority to act, and promptly. His role, much like that of a fire marshall at a conflagration, is to

take any action necessary to minimize loss.

In preparing its contingency plan for man-made pollution on local waters, the Coast Guard has contracted for regular cleanup services, and for a standby capability for major missions. Pacific Pollution Control is approved as its response instrument (and also as the U.S. Navy's contractor). The company, headed by Neeld D. Tanksley, has developed what is reportedly one of the most effective water barrier systems for surface pollutant containment, as well as a retrieval utilizing absorbant foam.

Within minutes of the report of last week's major spill, units of Pacific Pollution Control were on their way to the nearby disaster area. Booms to contain the spreading, and surprisingly thick, surface oil were quickly rigged, and cleanup operations commenced.

As earlier reports on the quantity of oil in the estuary were updated, from 25,000 gallons to ultimately about five times that quantity, more units and supporting equipment were called in. Clean Bay, Inc., a non-profit private corporation formed by Standard Oil Company of California and other refinery operators in the area, assumed a major coordinating role. A device developed by Lockheed Missiles and Space Company from nearby Sunnyvale, "Clean Sweep", was deployed, along with more conventional methods of oil removal.

Volunteers by the score appeared to help, and while bird life in the areas were not heavy, procedures perfected since the tankers' collision two years earlier were tried. Special techniques for oil removal from feathers were applied, along with anti-shock injections, to the several varieties of salt water fowl affected. Results, while far from fully effective, were termed as productive in learning and response ability. As the major effects of the spilled oil dwindled, and its most obvious results appeared to be hundreds of small craft berthed along the estuary, almost all coated with oil, along with their docks and floats, questions as to progress made in response capability were more frequent. Aside from prevention (in this instance, totally apart from the Coast Guard's expanding navigational safety program), was the

region's combined official and industry capability adequate? Was coordination of response effective? Was maximum utilization of "state of the arts" made? If any of these answers could be made in the negative, then progress was still to be made.

Reviewing these issues in its 125 year old role as the system's ship watchers and now central maritime intelligence service, the Marine Exchange observed that while the response did indeed appear to minimize major spread of the oil into the bay proper (a fact immeasurably helped by the geography of land containment involved), total capability may need further refinement.

In a preliminary assessment of what was accomplished, Neeld Tanksley, who also serves as chairman of the Exchange's Harbor Environment Committee, paid special credit to the response of the Coast Guard's Captain Herbert Lynch, and his staff. He included officials of Clean Bay, Inc., Forrest Smith, manager, and Jules Mayer, coordinator, in appreciation of "invaluable assistance and cooperation" in handling the coordination efforts.

Citing major variations in any spill, such as oil viscosity, wind, wave height, temperature, quantity and natural containment, Tanksley proposed increased information interchange on these factors compared with techniques used, and results obtained. "We're just beginning to learn to cope, and the effectiveness of our actions and procedures. The obvious results, how much and how fast the oil (or other pollutants) are cleaned up, are one measure. The effects on the environment are another, and the real issue. Finally, there is the question of cost effectiveness, how to deploy what resources and in what quantities, to do the best job.

The pollution cleanup expert concluded: "In this infancy stage, the more we can learn from overseas, the sooner the best methods can be agreed upon. Perhaps industry and government should increase their data sharing efforts. Firefighters do so, as do police. Our assignment is not dissimilar".

Houston International Seamen's Center Now in Full Operation

Port of Houston Authority

Houston, Texas, U.S.A.:—More than a thousand Houstonians from all walks of life turned out late last month (January 22nd) to witness dedication ceremonies at the million dollar International Seamen's Center located on eight acres of land in the very heart of the Port.

Clergy and laity, businessmen and maritime interests, school children and adults, seamen and officers all were on hand for the big celebration which brought to fruition a score of years of planning and dreaming by dedicated persons who felt the Port of Houston needed such a facility for the thousands of seamen of all lands who visit the here annually.

Howard Tellepsen, former Chairman of the Port Commission, was master of ceremonies and it was during his fourteen years as Chairman that the movement to get the Seamen's Center underway made its greatest progress. Together with J.P. Turner, Executive Director at the time, the Port Authority provided the land for the site.

At the same time the churches, both Roman Catholic and protestant, made pledges of funds exceeding \$100,000 towards the building of a Center and the project finally was off the ground.

Some two dozen people of both clergy and laity who had a part in the building of the Center were on the speaker's platform at the January dedication ceremonies and many others who had toiled for the project were in the audience of nearly 1,000. Music by the Austin High School band kept things at a lively pace before the ceremonies, which were followed by a reception in the Center's new building immediately afterwards.

Mayor Louie Welch proclaimed

the week of January 22nd International Seamen's Center Week in Houston and thousands visited the Center during the weeklong celebration which included programs by the churches, by seamen of various nations, by labor and by other groups.

Working on a basis of first things first, the Seamen's Center originally built a soccer field which has been in use for more than two years. Soccer is an international game and crews from various ships challenge each other to matches. In June of 1971 an olympic sized, heated swimming pool was opened and in April of 1972 lights were installed on the soccer field to permit night games.

Until the new building was completed, makeshift mobile units served as the only indoor facilities, where seamen could play games, write letters, read or watch television. Now, in the modern new building they have a store, snack bar, beer lounge, pool tables, reading and writing rooms, handicraft rooms, a chapel and staff of six priests or pastors on hand at all times to counsel with them should they so desire.

However, religion is not forced on the seamen—it is there if they want it—just as are the other diversions such as athletics, reading, writing, and games.

The Rev. Sam Duree is program director and senior chaplain to the port and he and his five assistants meet all vessels to advise the officers and men of the Center's availability. If the ship is docked too far away, the Center has a bus to bring the men to the Center, and is also used to take them on trips to points of interest.

Presently the Seamen's Center

Association is run by a Board of Directors made up of professional and businessmen, clergy and representatives of shipping interests. This board serves without pay and has brought together divergent efforts of various groups which have tried, over the years to provide some sort of center for visiting seamen.

In many ways the Houston center is unique in that it combines religious and lay efforts as well as the efforts of all nationalities. In many ports seamen's centers are orientated towards one or another nationality, even supported entirely by one or another government for its own seamen in that port. Similarly, there are religious denominational centers sponsored by one or another faith.

The Houston International Seamen's Center Association is ecumenical and international. Impetus for much of its present development has come from The Ministry to the Port of Houston—a group composed of Roman Catholic and Protestant ministers dedicated to this effort which came forward with funds, enthusiasm and countless hours of work to help put the present project together.

The port of Houston Authority years ago recognized the need for a meeting place for seamen where they could gather for sports and indoor recreation and meditation. As the present Seamen's Center began to take shape with the joint effort by clergy and laity, the port came forward with eight acres of prime land lying on a hill behind City Docks 22 and 23 in the very center of the port and accessible to all.

For years seamen at Houston had had no place to go. The port lies many miles removed from the heart of town as well as from such attractions as the Astrodome, museums, universities, parks, zoo and other centers. The men either stayed on ship, bored and waiting to sail, or sought their diversion in waterfront dives.

From time to time a visiting ship's crew would challenge another to a soccer game and volunteer citizens would carry the men to a park someplace for a match. When the Port of Houston provided the port-side site three years ago, the men began to hold their matches there.

Gradually a regulation soccer field took shape. The Norwegian Government Seamen's Service—which maintains a separate, full-time staff in the Center—provided goal nets and organization, and even sponsored some athletic contests along with the new active Seamen's Center Association.

It was at this time that Ministry to the Port of Houston joined forces with the Association and its Board of Directors and in the spring of 1970 ground was broken at official ceremonies and work begun on a cinder running track.

The soccer field was graded and seeded, jumping pits added to the running track and work begun on the swimming pool. Four temporary buildings were obtained from companies no longer needing them and joined together to provide an indoor meeting place.

Plans were drawn and approved for the handsome permanent building, new completed, and funds began to come in from the churches and from interested citizens and foundations. The drive was for big funds and the big funds were pledged sufficiently to build the soccer field, track, pool and the building.

Right now the Center is in full operation and has launched a drive for operating funds, as opposed to the funds for capital construction which are pledged or in sight. A year ago the Port of Houston Authority authorized in its tariff a voluntary charge of \$10 per day per ship per visit, with a maximum of \$25 per visit, in support of the Seamen's Center.

Response by the shipping companies has been good and this is providing about two-thirds of the \$5,000 to \$6,000 presently needed to operate the Center monthly. Seamen pay a modest fee for soap and towel at the swimming pool but all other facilities are free.

Very little of the operating funds go to salaries, except for pool guards and grounds keepers. Program Director Duree's salary is paid by the Methodist Church, as are the salaries of the other chaplains assigned by various denominations to the work of the Center. There are registered volunteers who come out to visit with

the seamen, and scores of families who open their homes to seamen weekends for Sunday dinner.

The Reverend Mr. Duree and his five chaplains board every vessel coming into the Port of Houston and talk to the men, telling them of the Center and its facilities.

"We don't try and preach religion to them," says the Rev. Roy Strange, a presbyterian. "We just let them know the Center is there and that they are welcome to come for athletics, or for fellowship."

Surprisingly enough, says the Reverend Mr. Strange, it is not necessarily the swimming pool, or volley ball court or soccer field that attracts a majority of the men but the chance to get together with other people in friendship.

"A British officer told me we might not only have the best facilities, but we provide the friendliest atmosphere he has found at any seamen's center anyplace," the Reverend Mr. Strange said. "These men find warmth here. It may be in assistance given in mailing a letter; arranging for a trip to the Manned Spacecraft Center, a ranch or a museum, or it may just be sitting down and talking to a man who might have a problem."

"These men are not looking for charity. They are willing to pay within their modest means, but they are hungry for knowledge and for friendship and for something to do. We try and provide that need for them, whether it is spiritual or recreational."

Dr. Jack Brannon is vice-president of the Seamen's Center Association and a physician who has long worked with seamen and doctored to them. "Your average merchant seaman is a fine type young man," he says, "usually going to sea for a few years before settling down ashore. What he sees and learns in other ports will influence his views in later life. We want him to have good memories of us here in Houston."

President of the Seamen's Center Association is Albert H. Liedts, long been active on the Houston waterfront in the trucking and container business and, himself, a former seaman and officer in the Belgian Merchant Marine. Treasurer is

(Continued on Next Page Bottom)

Port Function of Kiire

by Gengo Tsuboi

President
Tokyo Tanker Co., Ltd.
Japan

February, 1973

1. Economic and Geographic Conditions of Kiire Terminal

In 1967, at the early planning stages of the Central Terminal System (CTS) at Kiire, it was predicted that the total quantity of import crude oil for Japan would be around 800,000,000 kiloliters per year. When this quantity is transported by 500,000 DWT tankers, simple calculation shows there has to be 1,800 voyages a year between loading ports and the ports in Japan while for 100,000 DWT to 200,000 DWT class tankers over 6,000 voyages a year would be required. That is, about 700 vessels

of this size would be needed.

At the same time, with the fact that increased crude oil storage is vital for the economic well-being of this country, and in view of the following points, the CTS at Kiire was thus brought into being.

- 1) The increase of demand for oil will definitely lead to rapid rationalization of transportation system.
- 2) The coming super VLCC (Very Large Crude Carrier) age, with 300,000 DWT class vessels and greater can not be accommodated by the existing conven-

tional port facilities in Japan.

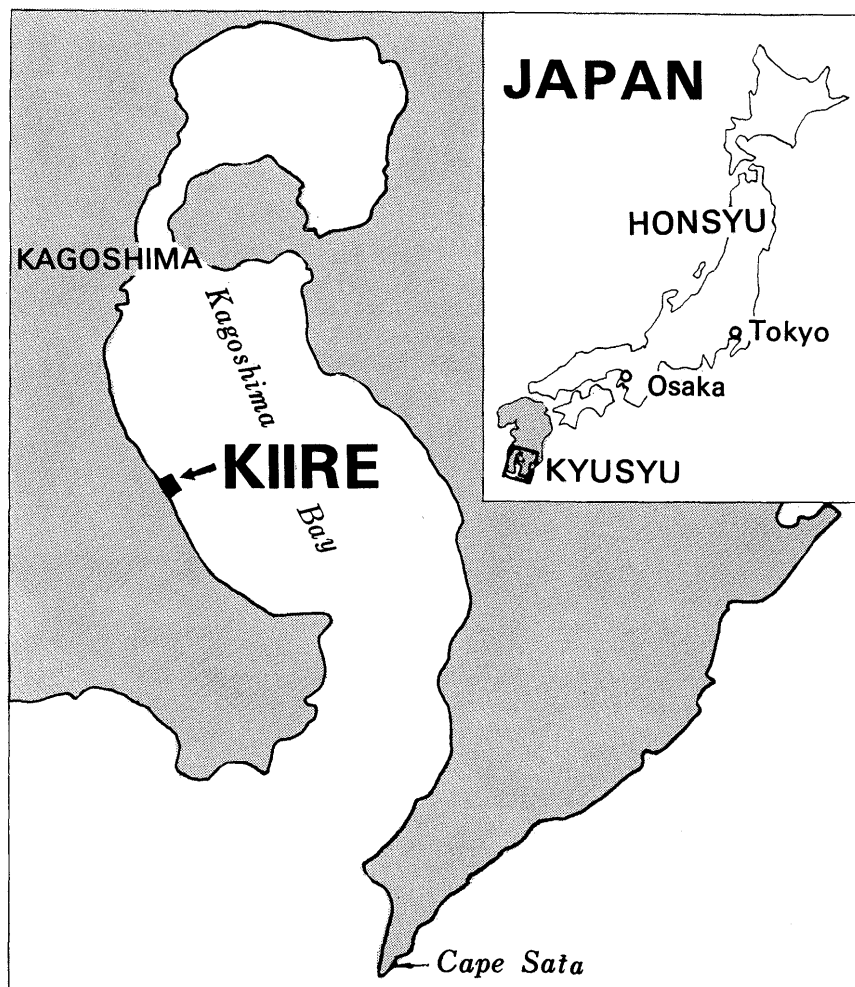
- 3) In order to maintain a stable and economic supply of oil products, crude oil storage is essential.
- 4) The fact of limited land space prevents oil companies from constructing more crude storage tanks near existing refineries.
- 5) Public opinion is against accommodating VLCC's in existing conventional Japanese ports.
- 6) The larger the crude carriers become, the more productive they are.

To compete with the tankers carrying crude oil via Malacca Straits, Nippon Oil Company and its affiliates closely studied the matter and decided that they could utilize tankers over 250,000 DWT, operating loaded via Lombok. This decision lead to the construction of berths for accommodating 500,000 DWT tankers, for which purpose Kiire in Kagoshima Bay, located in southwest Japan was selected for the following reasons:

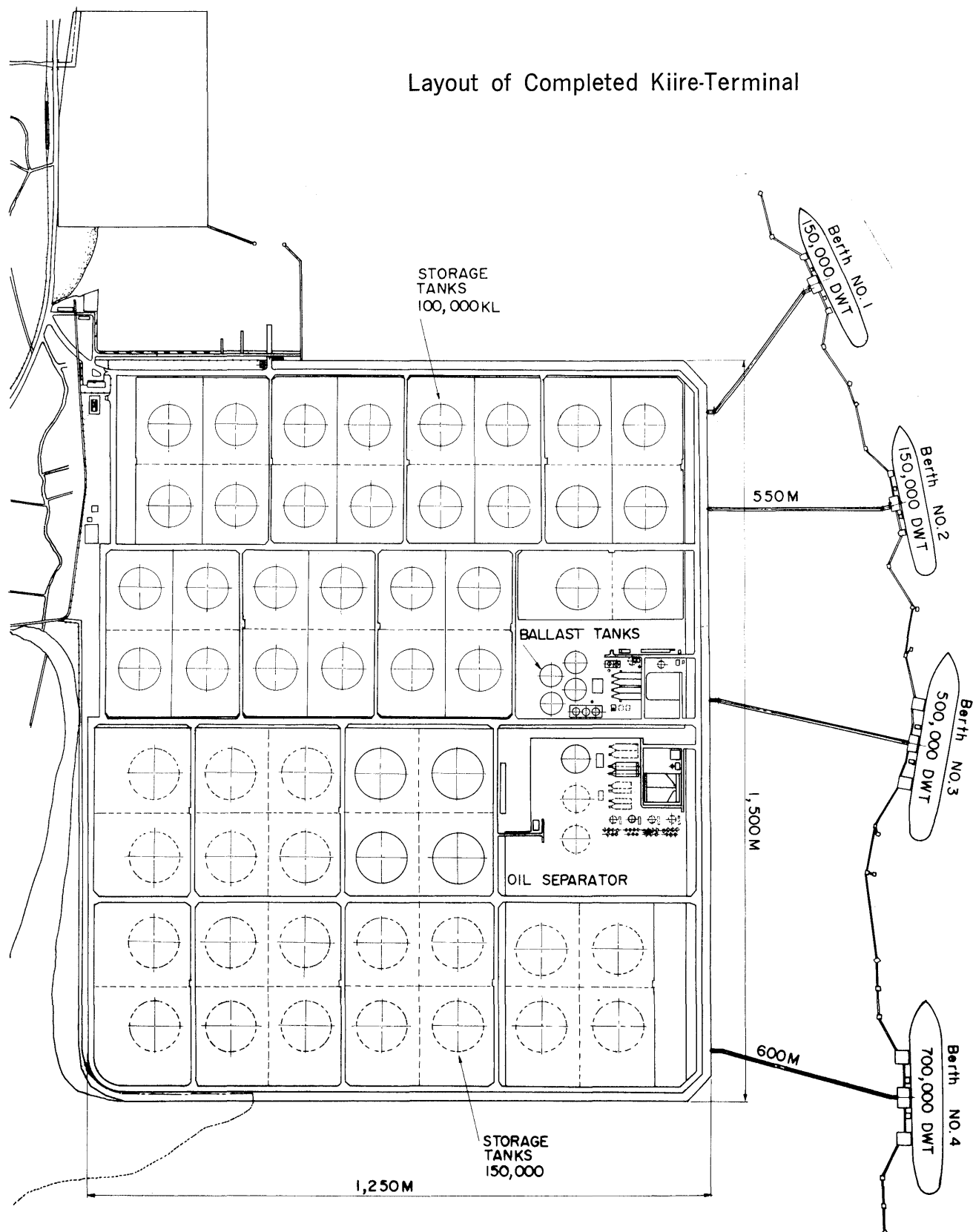
- 1) Sufficient water depth is avail-

Clarence Dupre, Jr., active in international banking circles and executive vice president of the Capital National Bank. Secretary is Vaughn M. Bryant, director of international relations of the Port of Houston.

Other directors of the Seamen's Center are the Rev. Fr. Rivers Patout, representative on the Board of the Ministry to the Port of Houston; Mrs. Kenneth Dale Owen; James Muller, Chairman of the Board, Center Scientific Co.; Robert Reid, Vice President, Hansen & Tidemann, Inc., steamship agents; D.V. Flores, Tellepsen Construction Co.; Thad Hutcheson, attorney; F. Val. Thompson, line manager, Biehl & Co., steamship agents; Sweeney Doehring, attorney; Hon. Paul E. Hedemann, Bethlehem Steel Maritime Division and Honorary Consul of Denmark; Lewis W. Homberg, Vice President of Strachan Shipping Co.; The Rev. Taft Lyon of the Presbyterian Church, is President of The Ministry to the Port of Houston and active in Seamen's Center Work, and Ralph Freidmann, head of the Norwegian Government Seamen's Service in Houston is an ex-officio member of the Board and has contributed greatly to Seamen's Center work.



Layout of Completed Kiire-Terminal

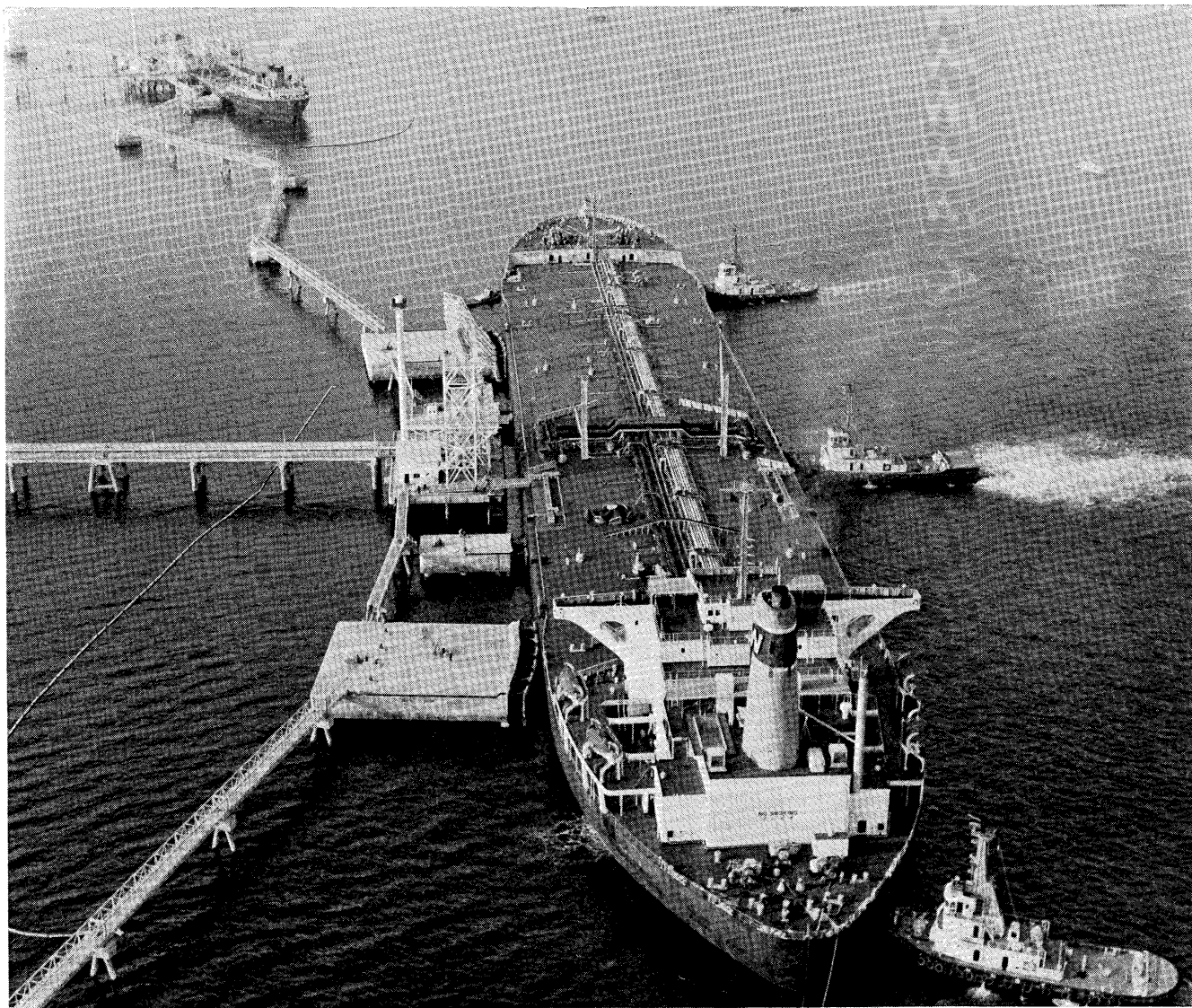


- | | |
|------------------------------------|-------------------------------------|
| able for the entrance of VLCC's. | 5) Safe sailing in and out for ves- |
| 2) Good conditions for the berth | sels. |
| construction. | 6) Safety of sea routes to and from |
| 3) Availability of land. | the port of Kiire. |
| 4) Favorable sea and climatic con- | 7) Cooperation of Kiire residents. |
| ditions for safe berthing of | |

The only disadvantage of the CTS appears to be its location within the path of the typhoon tracks in southern Japan, but this problem was solved by constructing the tanks to

(Continued on Page 21)

SECURITY SAFETY SPEED SERVICE



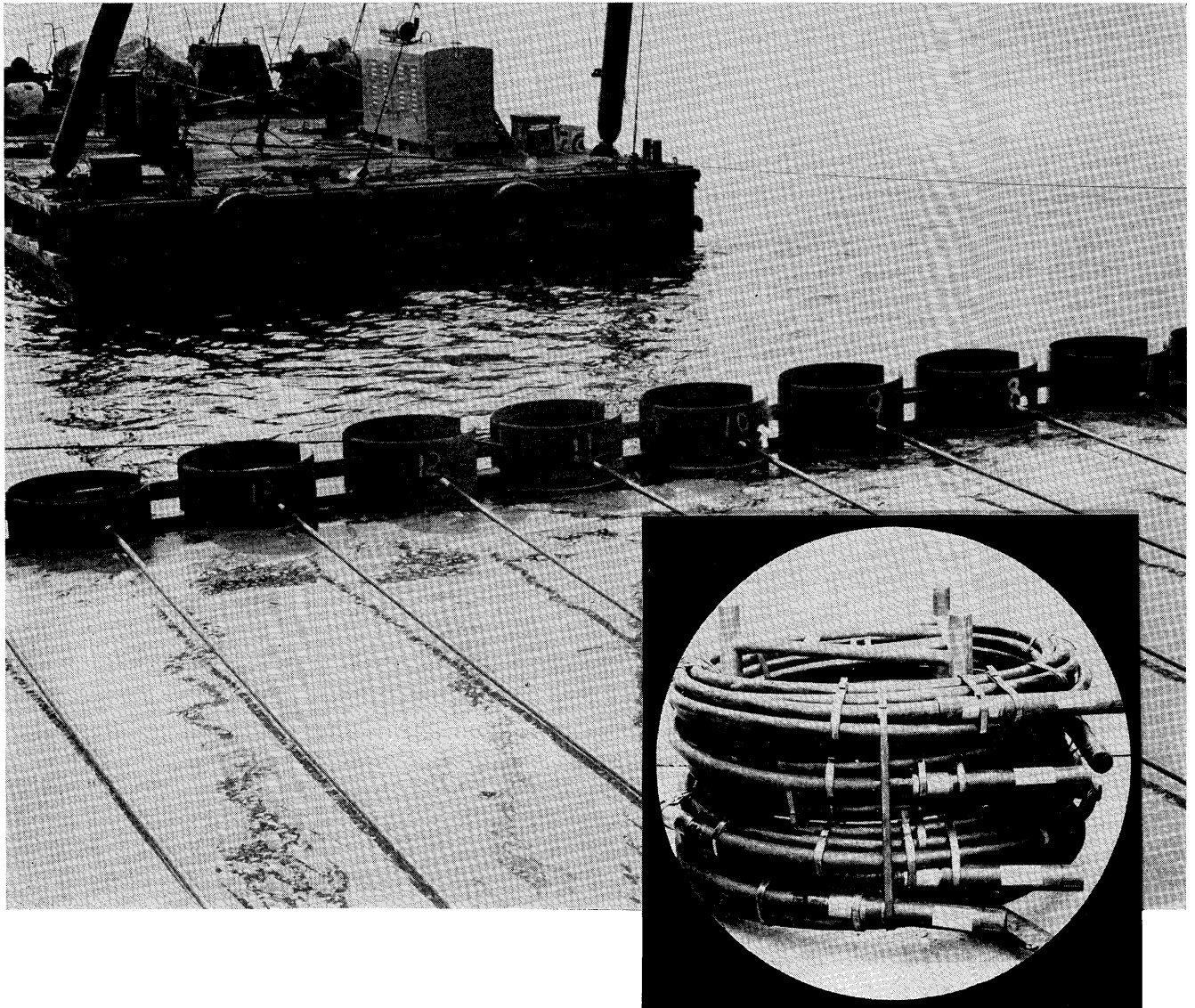
These essentials requisite to moving and storing impressive quantities of petroleum are depicted in this the most recent aerial photo of our CTS at Kiire, Kagoshima where today some of the world's greatest VLCCs discharge up to 370,000 tons of crude oil at a time. Commencing in March 1973 the first of a series of three 477,000 d.w.t. VLCCs will call regularly at the installation where by 1974 60 shore tanks with a total capacity of 6.6 million tons will have been constructed. That equates security of supply backed by safe and efficient port services geared to assure a speedy turnaround for both discharging and loading tankers.

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(Continued from Page 18)

withstand winds up to 150 miles per hour.

Further, one of the outstanding features of the CTS location is the absence of fog and smog in the bay. Also, the number of vessels that sail into the port of Kiire is only 20,000 in a year, totalling some about 7,000,000 DWT. In addition, the outer port of Kiire enjoys wide open sea room, and there exists no hazardous routes for entering and leaving VLCC's.

Coming to construction of the terminal, shallow water of less than 6 feet deep extends out 2,400 feet from the shore, then suddenly deepens to 100 feet, making the location ideal for land reclamation and berthing of VLCC's. Boring tests proved the excellent weight-bearing capability of the site.

This location was also ideal for berth construction with about 30 meters depth. Moreover, the sea bottom consists of hard sand which enabled relatively inexpensive land reclamation for crude tank sites, and also relatively inexpensive berth construction.

2. Terminal Size and Terminal Approach

The construction of Kiire CTS was divided into two time ranges. A total cost of 50,000 million yen (\$170,000,000) was estimated to be required to reclaim the land and to construct 56 tanks of 6,600,000 kiloliters total capacity crude oil, and four piers, ranging from 33,000 DWT to 500,000 DWT. An important goal of terminal layout was vessel turnaround within 24 hours.

In the early design stage, dolphin, multiple buoy, and single buoy mooring (SBM) berths were considered. Investigation showed that in the case of 350,000 DWT vessels, the dolphin type berth would in a ten year period save something like 3,500 million yen (\$12,000,000 net over the next best design in reduced vessel demurrage), so the dolphin type berth was selected.

In actual operation in the Kiire port, the master of a vessel arriving for the first time is met by the Tokyo Tanker Marine Service Co., Ltd. (TTMS) mooring master. This company has been assigned as the actual marine operation agency at the Kiire CTS for the vessel enter-

DIMENSIONS OF KIIRE CTS FACILITIES

Tank yard: 2,000,000 M² (500 acres) 1,250 M×1,600 M

Berths:

	Water Depth	Vessel Size	Loading Arms	Loading/Unloading Capacity per Hour
No. 1	-18 M	30,000-150,000 DWT	12"×5	10,000 K L
No. 2	-18 M	30,000-150,000 "	12"×5	10,000 "
No. 3	-28 M	30,000-350,000 "	16"×6	20,000 "
*No. 4	-34 M	45,000-700,000 "	24"×3 16"×2	38,000 "

(*No. 4 Berth is now under construction, completion Sept. 1973).

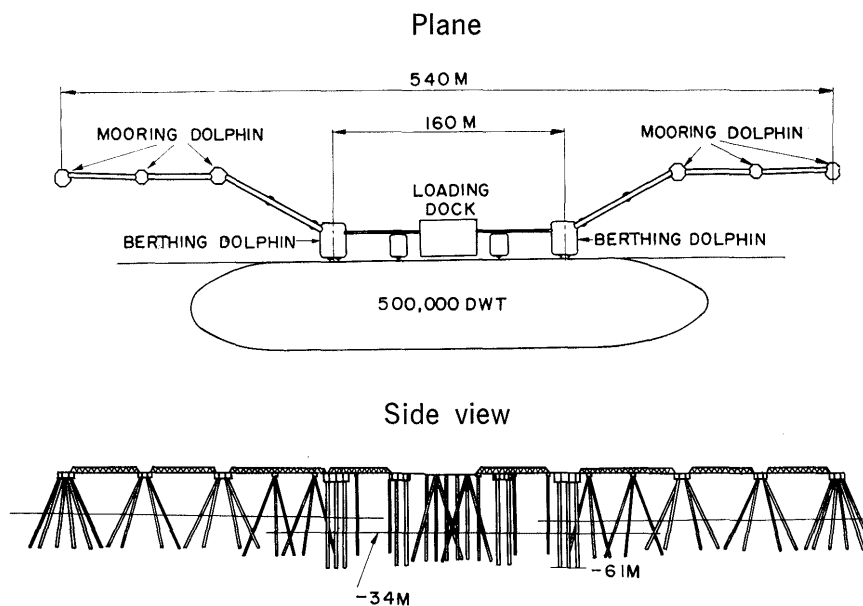
Storage Tanks:

Construction Project No. 1	100,000 K L ×30
" " No. 2	150,000 K L ×24
Total	6,600,000 K L

Lines:

In Tank Yard	60"×4 (2,700 M)
Loading/Unloading	48"×4 (3,500 M)
Ballast	24"×3 (2,000 M)

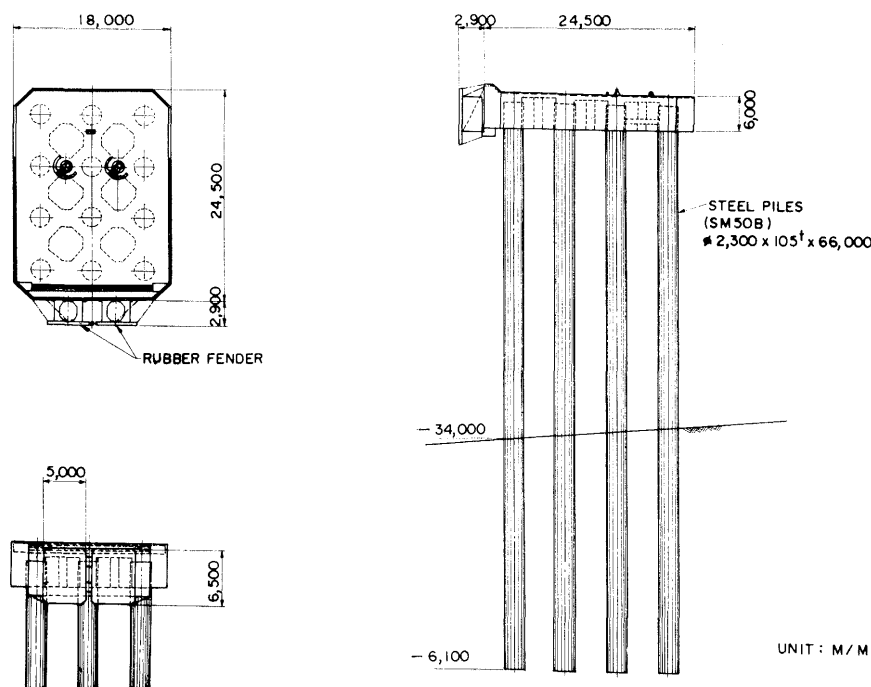
SEA ISLAND BERTH FOR VLCC



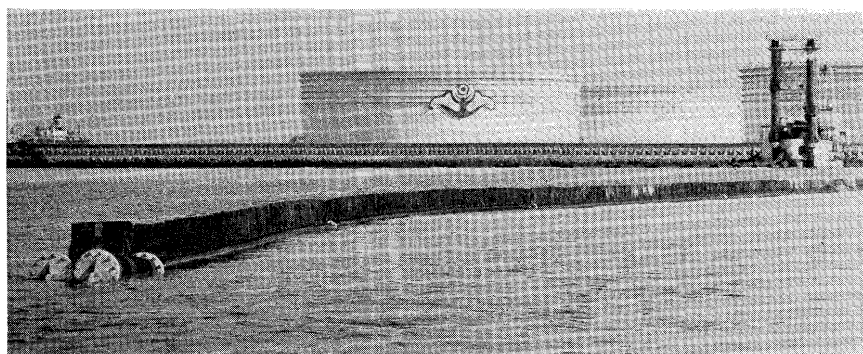
ing and leaving the port. TTMS tug boats assist in berthing the vessel. To ensure the safe approach of vessels to the berth, three light beacons have been provided to measure the vessel's approach speed. Also, the TTMS tug boats are fitted with electric log to assist in checking the speed of approach.

3. Berthing

The mooring master will stop the vessel at a point about 100 meters from and parallel to the berth. Then, by four tug boats the vessel is eased into the berth, remaining always parallel to it. In this maneuver, the rate of approach to the berth is indicated on a berth-mounted sonar



Details of Berthing Dolphin



Rising and Falling Type Oil Fence

Doppler system and communicated to the mooring master.

The strength of the berth allows safe a berthing speed of 20 centimeters per second maximum. Further, even if the vessel should approach at an angle of 12 degrees to the berth, the fenders are designed so that no damage will result. For mooring, line handling boats with 115 PS engines, together with unique apparatus for all-weather operation, are provided by TTMS.

Lighting for night time operation is supplied by a 30 meter high pipe tower with two 20 kilowatt mercury lights. Also, the dolphin line is indicated by signal lamps set on the outboard side of the berth. Moreover, a total of twelve 400 watt mercury vapor lights are installed in order to maintain a 20 lux light level.

4. Berth Structure

Number 4 berth, presently under construction by Taisei Construction Co., Ltd. of Japan, has three 24 inch and two 16 inch Chiksan arms with shore ladder installed on a 1,000 M2 (25M x 40M) loading platform, each end of which is attached to main berthing dolphins. These dolphins are pipe piles, each 105 tons in weight and 160 meters in length, driven 34 meters into the ground. For driving the pipe piles, the largest Japanese pile driving vessel, the "No. 10 Taisei Maru" (2,000 gross tons, driving force of 25 tons) was used.

To reduce cost and time, the pipes making up the piles were welded into single length piles, truly straight to permit the upper part of the berth to be of prefabricated construction.

5. CTS Organization and Operation

The organization and operation of CTS, marine and shore, are respectively handled by Nippon Oil Staging Terminal Co. (NOSTC) and TTMS. That is to say, crude oil storage and distribution are handled by NOSTC and marine operations by TTMS respectively. In particular, loading and discharging including supervision functions for vessels are carried out by TTMS under direction of NOSTC.

TTMS has been established for two years. It has a perfect record with respect of oil spills, achieved in great part by the staff listed below. This outstanding achievement is the result of strong effort by highly qualified people fully and effectively supported by such activities as pilotage, agency work, tug and line handling services, and so on.

TTMS Staff:

1) Mooring Master (Shipmaster with large tanker experience)	3
2) Terminal Officer (Chief officer/2nd officer with tanker experience)	5
3) Foreman (Personnel with tanker experience)	6
4) Agency Staff	3
5) Clerks (Male/Female)	6
Total	(23)
6) Tug boat and line handling boat seamen	36
Grand Total	57

6. Safety Measures

Next to its high efficiency, the most outstanding feature of the CTS is that every possible consideration has been given to safety, both on board vessels and on shore. The people concerned sought the advice of VLCC experts in every aspect of CTS design and operation. As a result, a considerable investment was made in equipment to prevent accidents, a partial list of which follows:

1) Rising and Falling Type Oil Fence:

Roughly described, this fence consists of a 1.1 meter wide flexible rubber sheet stiffened with glass fibre sticks on 25 centimeter centers, the whole being supported in working position by an inflatable rubber tube on each side. When not in use, the air is released from the tubes, allowing the fence to sink. Experience has shown this



BIRD'S EYE VIEW OF KIIRE-TERMINAL. Special precaution is given to prevention of oil pollution in and around CTS that is located near National Park, Kagoshima, Japan.

fence to be more economical and more efficient than the usual oil boom.

This oil fence was developed and put on the market by the well-known Japanese rubber manufacturer, Bridgestone Tire Co., Ltd., with the advice of Tokyo Tanker Co., Ltd. It is in use at other oil terminals in Japan, and is receiving much favor from the operators of these terminals.

2) Oil Skimmer:

Two different types of oil skimmer are constantly ready for use at Kiire. They are, namely, drum skimmer and vacuum pump skimmer, each having good and bad features, but each quite suited to the task. The collected oil and water mixture is quickly transferred to shore through ballast lines on the berth.

3) Tug Boat:

Always on stand-by are two 3,000 PS Voight-Schneider propeller (VSP) tug boats, with and 30 tons bollard pull each, and two 4,200 PS tug boats with Kort rudder, and with 46 tons bollard

pull each. Also, there is a 3,000 PS VSP tug boat on stand-by at a nearby port.

Each of these tug boat can provide 12 tons of oil spill chemicals and oil aspirator pumps. Each has a firefighting monitor of 3,000 liters/minute capacity maximum, 100 meters throw, and can be elevated as much as 23 meters above sea level when necessary, moreover, three 1,000 liter/minute capacity maximum monitors, totaling 6,000 liters/minute capacity, and always ready for fire and other services.

7. Anti-Oil Pollution Measures

No en-route tank cleaning for ballasting is necessary for vessels arriving for loading at Kiire since, from the standpoint of ship's work rationalization and anti-oil pollution measures, all dirty ballast is acceptable at the CTS.

The total tank capacity for dirty ballast at Kiire CTS is 118,000 kiloliters at present, but it is now being increased in accordance with the increasing number of arriving vessels.

The dirty ballast is processed by an oil separator system consisting of an American Petroleum Institute (API) oil separator, sand filter, Blue Marine make coalescer, and guard basin. This system has been developed by Nippon Co., Ltd. to provide a very high degree of separation. The criterion set by officials at the port of Kiire with regard to oil contained in water discharged from vessels is 4 parts per million (PPM). However, the limit worked to by CTS staff is 2 PPM.

It is planned to accept at the CTS dirty tank cleaning water from VLCC's after discharge and before drydocking so that the time needed for gas-freeing will be reduced at least two days. Together with this, incinerators are planned for disposing of the CTS tank sludges as well as tanker sludges. These will be under construction as soon as a proper site has been selected. It is expected that these facilities will dispose of the polluting materials economically in the immediate CTS area rather than other locations.

Great Lakes and Europe— Bridging the Information Gap

by John Jursa

Director
Public Information Dept.
Toronto Harbour Commission

Chairman
Promotion and Public Relations Committee
International Association
of Great Lakes Ports

Toronto, March 8, 1973:—Although it's still too early to place a dollar and cents value on the benefits generated by the recent trade mission to Europe by the International Association of Great Lakes Ports, representatives who took part feel their venture laid the groundwork for future trade and rekindled an interest in the great Inland Waterway.

"We found a considerable lack of awareness of the Great Lakes Sys-

tem," said W.M.H. Colvin, Port of Toronto's spokesman. "However, I believe the mission helped bridge the information gap and I think we made some mileage when we pointed out the potential of the Seaway and Great Lakes System to the European Business Community."

"The fact that we were able to meet face-to-face with the shipping fraternity, freight forwarders and businessmen in such centres as London, Hamburg, Split, Milan, Genoa,

Rotterdam and Antwerp and emphasized the benefits of the Great Lakes area was worth the trip," said F.D. Flori, of Buffalo, IAGLP president who headed the 12-man group.

"Some of the guests at our reception in Hamburg were surprised to learn that the sailing distance from Buffalo to Hamburg is 3,528 miles which is 73 miles less than the distance from New York," said Flori.

"The trip proved that people wanted information," Flori said. We explained that the Great Lakes ports could match any other port in the world as far as equipment was concerned. In our Hamburg discussions I noted that the only restriction on their capacity was the 27-foot-depth of the St. Lawrence Seaway. Apart from that, they had the same facilities at their disposal as other ports."

Flori also told IAGLP guests that nearly all ports on the Great Lakes handled containers and that the volume of container traffic was considerable, carried either on combination break-bulk semi-cellular vessels or on the container feeder service.

The IAGLP represents 17 United States and five Canadian Ports and was formed in 1960 to discuss matters of common interest so that appropriate action may be taken by members whenever situations of mutual concern arise. One of its chief aims is to promote the movement of cargo via Great Lakes ports.

The trade mission to Europe marked the first overseas trip for the Port of Toledo's J.A. McWilliam since becoming president of the American Association of Port Authorities last fall.

McWilliam believes that the trade outlook for the Lakes looks good this year.

E.F. Avery, Port of Toledo's Director of Commerce and Traffic, said the trip was one of the most successful he has ever made.

"Ship owners were impressed with the Lakes-wide trade and with the improving economy the steamship line operators hope to have a good year," he said.

According to Canadian spokesman, W.M.H. Colvin, the three main topics of discussion at each of



Members of the International Association of Great Lakes Ports trade mission to Europe . . . on London's Westminster Bridge with Big Ben and the Houses of Parliament in the background. From left, are: Robert Lewis, St. Lawrence Seaway Development Corporation; E. F. Avery, Toledo; Ian Brown, Toronto; F. D. Flori, Buffalo; S. Hamilton, Oswego; W. M. H. Colvin, Toronto; Charles Gress, Windsor; R. K. Jorgensen, Milwaukee; and R. H. Van Derzee, Ogdensburg.



Ontario's Agent General Ward Cornell (second right) welcomes Ontario representatives of the International Association of Great Lakes Ports at Ontario House in London. From left, are: W.M.H. Colvin, Port of Toronto; Charles Gress, Port of Windsor; and Ian Brown, Port of Toronto, Secretary-Treasurer of the IAGLP.

the receptions were: the proposed extension of the St. Lawrence Seaway season to at least 10 months; the good labour relations and the high level of productivity that exists within the Great Lakes ports; and the viable alternative offered by the Lakes ports to the use of East Coast container ports.

Shortly after the mission returned at the end of January, Manchester Liners, the British shipping line, announced that it was re-introducing direct service from the United Kingdom into the Great Lakes this year, using conventional ships.

The line has been operating a full containerized service into Montreal since 1970, using smaller feeder container ships into the Great Lakes ports.

Golden Cross Lakes Line, a wholly owned subsidiary of Manchester Liners, will operate a monthly service with two 7,000-ton ships. The first sailing from Manchester is slated for the end of March.

A spokesman for the line said: "The ships will carry cargo that would not normally move in containers. We are finding that we have a demand for this kind of service."

The Golden Cross Lakes Line's break-bulk vessels are expected to carry steel, tractors, heavy equipment and other cargo that does not lend itself to containerization as well as bulk vegetable oil.

"While there have been rumours of reduced service into the lakes, we

learned of only one line (Fjell-Fred Olsen) that was in fact withdrawing," Colvin said.

"Another line trading into this area," revealed Colvin, "is currently negotiating for the business carried by the Fjell-Fred Olsen Line, and if successful, the continuing line will increase its service from a three-week to fortnightly one."

The Scanlake Line announced that it was dropping its service from Scandinavian ports to Canada but the slack in this area will be picked up by the Norwegian America Line which is providing monthly sailings between Great Lakes and Baltic and Scandinavian ports.

In Split, the Yugoslav Great Lakes Line indicated that it was going to maintain its present level of service into the Great Lakes with a good possibility of increasing traffic, said R.K. Jorgensen, Milwaukee's Port Traffic manager.

"Our mission drew a lot of interest in Genoa," observed Ogdensburg Port Director, R.H. Van Derzee, "because some of the Mediterranean ports find themselves in similar competitive circumstances with northern European container ports as the Great Lakes find themselves with respect to the East Coast container ports."

During the London meeting, Canadian members of the IAGLP delegation expressed optimism about shipping prospects despite imponderables posed by British entry into the European Common Market.

"We don't feel that British entry will affect us that gravely," Colvin told a Canadian Press reporter in London. "Six years of promotional work in Britain by the Port of Toronto and other Great Lakes ports and the growing container figures on the Seaway are reason for optimism about the future of U.K. traffic," he added.

"Container traffic more than doubled at the Port of Toronto last year," he noted. The number of containers shot from 5,928 in 1971 to 11,951 last year. Container tonnage in 1971 was 56,112 tons compared with 119,728 tons in 1972.

"The main job," said Colvin, "is to convince more British and mainland European shippers about the advantages of switching their container traffic to inland ports such as



Port of Milwaukee traffic manager R.K. Jorgensen explains port facilities to H. Goltz and B. Heske of Hapag-Lloyd during the International Association of Great Lakes Ports reception in Hamburg. Looking on is Charles Gress, Chairman of the Windsor Harbour Commission.

Cleveland, Toledo, Detroit, Windsor, Chicago, Milwaukee and Toronto."

Charles Gress, Chairman of the Windsor Harbour Commission, said that in the long run "membership in the Common Market will be good for Britain and good for the Great Lakes."

Latest statistics from the St. Lawrence Seaway Authority show that cargo tonnage on the Montreal-Lake Ontario section totalled 53.6 million tons of which 20,466,976 tons made up overseas business.

"This surpasses the overseas tonnage carried in 1971 which was abnormally high due to labour problems affecting many North American ports," the Authority noted.

"The business is there," said Gress. "All we have to do is go out and get it and convince shippers that the Great Lakes do fit into their shipping plans."

Reflecting on the impact of the trade mission, Flori remarked: "From what I and the rest of the people saw and heard, I know that the IAGLP was on the right track. I know of no other way to get our message across and I don't think it is too early to start planning for the next trade mission."

And trade missions there will be. The next one is slated for the Far East later this year or early next January. Tentative plans call for business promotion meetings in Japan, South Korea, Hong Kong and the People's Republic of China.

Trade missions are also in the works for Eastern Europe and South America.

**The 8th conference of
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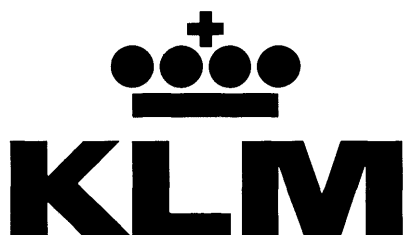


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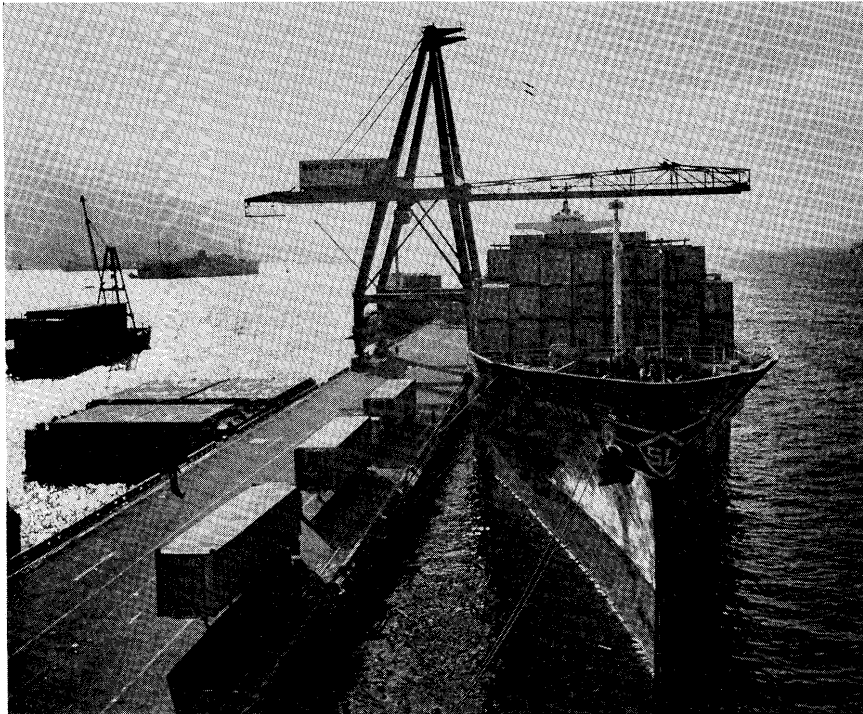
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Record Year for Hong Kong Wharf Company

(Eric White Associates Pty., Ltd.)



This 800-ft. finger pier, owned and operated by The Hongkong & Kowloon Wharf & Godown Company offers the service of a 24-ton Portainer crane to container vessels.

Hong Kong's largest wharf company, in a report on 1972 operations, underlines the port's switch to containerization while spotlighting a still sizeable conventional or break-bulk trade.

The complex owned by The Hongkong & Kowloon Wharf & Godown Co. Ltd.—known popularly as Kowloon Wharves—includes the prestigious 1,250-ft Ocean Terminal, home of visiting passenger liners, and three finger piers of 650,700 and 800-ft, the latter being serviced by a 24-ton Portainer crane.

Its competition involves a few other scattered wharves, vessels moored on buoys in the stream serviced by rival lighter fleets, and the now-completing Kwai Chung Container berths—built and owned by the lines that will principally use them.

Mr. D. R. Bland, Commercial Manager of Kowloon Wharves, releasing the figures, pointed out that container movements in 20 ft. equivalents had jumped by 149.40 percent over 1971.

The company had handled 126,200 20-ft equivalents compared with 50,606 the previous year.

In terms of actual boxes of 20, 35

and 40-ft lengths, 37,500 were lifted inbound and 36,500 outbound—up 129.50 percent—although many inbound containers were empty, as reflected in the cargo figures.

These showed that Kowloon Wharves' four freight stations, totaling 166,000 square feet, had moved 222,400 tons (inbound) and 1,005,000 tons (outbound) of containerized cargo.

Overall the Portainer averaged 7,000 lifts per month (including lighter-wharf-lighter) with a peak last May of 11,000 lifts—quite an impressive performance by a single crane.

Hourly movements ran out at 25-28 containers, which appears to be well above Australian and British figures, and roughly comparable with those of Japan, the United States mainland and Hawaii.

Perhaps the most surprising element disguised by these figures is that the company has only 6.5 acres of back-up space.

When one considers that the Hong Kong Government's container committee originally visualized a 25-acre berth at Kwai Chung handling 100,000 20-ft containers annually, the comparable performance of Kowloon Wharves is quite remarkable.

The types of vessels handled at the wharves, naturally enough, also reflect the trend in Hong Kong.

Clearly, then, the tendency has been for lines which previously tried for break - bulk - pallet - container "transition" cargoes to become increasingly more specialized.

The Pacific Far East LASH ships coming alongside, incidentally, may be puzzling to some, since Hong Kong harbour would appear to offer an ideal setting for the LASH concept. They berth, however, because quite a lot of the line's local trade is in normal containers and not many

Vessels Alongside	1972	1971
Self-sustained container vessels	87	76
Non-sustained container vessels	133	24
Semi-container or combo vessels	236	297
Lash vessels	38	16
Break-bulk/passenger vessels	370	437
Sub-total	864	850
Vessels in Stream (worked by Kowloon Wharves lighters)		
Break-bulk vessels	335	343
Grand Total	1,199	1,193

shippers have their own piers nor sufficient volume of cargo to fill a LASH barge with a capacity of over 400 tons.

Other lines using Kowloon Wharves last year included Sealand, Zim, K-Line, Seatrain, Maersk, Barber, the MedClub (which recently looked at and rejected Kwai Chung), and Fesco Lines, the latter running an alternative pro-Europe container concept by shipping containers to Nakhodka near Vladivostok, and thence on the trans-Siberian railway to Moscow and Europe.

Together, these lines were responsible for a total of approximately 700,000 tons of inbound cargo and 1.3 million tons of outbound cargo—a 43 percent increase overall.

Sealand, the biggest customer, moved on December 31 to its own berth at Kwai Chung, leaving Zim, with mainline sailings every 15 days, and two 80 × 40-ft capacity feeder vessels, as the principal user.

Mr. Bland says the company is not particularly worried by this development. "Other lines have simply been unable to obtain requested facilities here because of Sealand's considerable requirements," he said. "We do not anticipate too much difficulty in filling the gap left by their departure."

Dealing with the figures in general, he said that whilst the company was moving with modern cargo-handling trends by converting or building facilities for containers, it preserved the awareness that conventional cargo handling still had its place in the Port of Hong Kong.

This involved particularly Southeast Asian coastal trade, as well as non-containerisable cargo from and to all parts of the world. He pointed out that the wharves had handled approximately 460,000 tons inbound and 330,000 tons outbound of break-bulk cargo in 1972—about the same as the previous year.

The company's profit figures for 1970 were US\$3.3 million, for 1971—US\$4.9 million, and the 1972 results should again show a considerable improvement.

Apart from its three 74-ft span Paceco 30-ton rubber-tyred transainers (the secret behind the company's ability to store 3,000 20-ft containers in 6.5 acres), it also has a 70-vessel lighter fleet ranging in



Part of the fleet of Container Services Ltd, an associate company of The Hongkong & Kowloon Wharf & Godown Company. The fleet provides a comprehensive container drayage service to user lines as well as to individual shippers and consignees.

capacity from 30 to 300 tons, supplemented by four motorized junks and eight high-powered towing launches.

Container storage, stuffing, and transport activities extend considerably beyond servicing ships at the company's own wharves. An associate, Container Services Ltd., has 30 Nissan prime movers and over 100 container chassis of various lengths, with fleet movements controlled by radio telephone.

In addition, Kowloon Wharf owns godowns (Far East word for warehouse) on Hong Kong Island (150,000 square ft) and at Tsuen Wan, cunningly sited near the new Kwai Chung container berths.

A further development adjacent to this latter property will provide

500,000 square ft of storage space this year, including a unique side-loading building 11 stories high.

Each level of this building is served by two 30-ton capacity container—hoists able to position up to four 40-ft containers on each level at any one time.

Dockage fees charged by the company range from roughly US\$500 for general cargo vessels per day at finger piers to just over US\$1,000 for cruise ships at the Ocean Terminal.

Container ships pay a little less than US\$1,000 at the Portainer berth. Portainer crane hire is US\$270 an hour.

Overall, says Mr. Bland, it should be quite an interesting year for the company.

The Seventh Port Executive Development Seminar

**at Rivergate Exhibition Center
New Orleans, Louisiana, U.S.A.**

June 24 through June 29, 1973

The American Association of Port Authorities offers an intensive 5-day session designed to enhance the professional problem solving skills of Port executives. This highly successful Seminar, which started in 1969, has had 170 participants from the United States, Canada and Latin America representing all segments of the port industry. This Seminar presents the managerial methods used by forward-thinking port administrators along with new ideas from the academic community.

Seminar Objectives

Today in most ports, the pressure generated by increased competition and demands for service, limited funds, and rapid technological changes are increasing the importance of efficient port management. The seminar provides the participant with an educational experience that will tangibly increase his professional skill in problem solving in the port environment. The seminar is designed: (1) to develop a greater understanding of the principles of management, and to broaden each manager's view of the managerial process and the interrelationship of managerial problems. (2) To enhance each managers' ability to acquire and apply existing and new knowledge to the problems of port management. (3) To provide knowledge and understanding of the economic, social, political and technical forces which influence the management of a port. (4) To develop increased personal skills in leadership and human relations. (5) To provide an intensive experience in decision-making at the top administrative level of ports. This Seminar is directed at middle and top management and technical specialists who

are expecting expanded responsibilities. Case studies developed by EMSCO staff from AAPA member ports, combined with specialist lectures, maximize the participants' learning experience. The seminar exposes the participant to the range of problems faced by top port executives, compressing many years of operational experience into five days. The Seminar is completely tailored in content and language to the port industry.

Topics to be Covered:

Project management methodologies and matrix organizations for effective control of schedules and costs for development and construction projects; Determination of port capacities; Sources of Federal Government financial aid to ports; Leasing policies; Sources of information on commodity movements for developing marketing and trade development programs; Linear programming techniques for optimal allocation of land and water resources; Environmental considerations in re-development of waterfront areas; Development of preventive maintenance programs; Development of tariff structures; Long range planning, programming and budgeting systems; Long range trends affecting the port industry; Port administration/commission relationships.

Spanish-Speaking Participants:

As in previous seminars, simultaneous translation facilities will be available. Ernest Jewell, Senior Associate of EMSCO, who has considerable port experience, will serve as the translator and will be available for all study periods in addition to the classroom sessions.

FACULTY

DR. JOSEPH. D. CARRABINO

Dr. Joseph Carrabino, Professor of Management, Graduate School of Management, University of California at Los Angeles. Board Chairman EMSCO (Engineering and Management Sciences Corporation). He served on the Los Angeles Board of Harbor Commissioners (1961-65) and was President (1961-62). He also Authorities. He authored a University of California at Los Angeles School of Engineering Research Monograph on **An Engineering Analysis of Cargo Handling-Containerization**, a definitive study which had an international impact on containerization developments.

HARRY C. BROCKEL:

Harry C. Brockel, Lecturer at Center for Great Lakes Studies, University of Wisconsin at Milwaukee. He served as Director of the Port of Milwaukee, and as President of The American Association of Port Authorities. He has also served as a Member of the Advisory Board of the United States Seaway Development Corporation.

DR. JOHN L. HAZARD:

Dr. John L. Hazard, Assistant Secretary for Policy, Plans, and International Affairs, U.S. Department of Transportation; Professor of Transportation, Graduate School of Business Administration, Michigan State University (on leave).

PAUL A. AMUNDSEN:

Executive Director, The American Association of Port Authorities, Washington, D.C.

DONALD D. ALLEN:

Public Information Director, The American Association of Port Authorities, Washington, D.C.

Inquiries: Inquiries should be addressed to: Paul A. Amundsen, Executive Director, The American Association of Port Authorities, 1612 K St., N.W., Washington, D.C. 20006. Telephone: 202-638-6263.

Registration: The Seminar has been designed for live-in sessions. The first session begins at 8:00 P.M. on Sunday, and continues until noon on Friday. Applications will be processed in the order received. **(Continued on Next Page Bottom)**

Port of Toronto Opposes Compulsory Pilotage on the Great Lakes

**Toronto Harbour Commission
Toronto, Ontario, Canada**

Regulations that would encourage compulsory pilotage on the Great Lakes and in all Canadian ports smack of "feather-bedding" and are being vigorously opposed by the Toronto Harbour Commission.

The proposed regulations came to light during a meeting early this month in Toronto between the Great Lakes Pilotage Authority Limited and representatives of interested shipping associations.

"I learned of the meeting strictly by chance," said Toronto Harbour Master, Capt. John Mann, who attended the hearing with Hamilton Harbour Master, Floyd Day.

Drawn up by the Pilotage Authority under the provisions of the Pilotage Act, the most controversial clauses in the 17-page draft of regulations are those dealing with so-called compulsory pilotage.

"The Commissioners are on record with both the Ministry of Transport and the Royal Commission on Pilotage in opposition to compulsory pilotage in areas of open waters such as Lake Ontario because this practice presents unnecessary and needless cost to the ship owner," said Capt. Mann.

"The fact that the proposed new regulations indicate that a pilot does not have to be on the bridge in open waters points out dramatically the

feather-bedding aspect of the situation," he added.

Capt. Mann pointed out that the Port of Toronto is also objecting to the section of the regulations which seems to make it mandatory to have pilotage certificates on board tugs and other small craft when engaged in normal work.

He said it could lead to the "ridiculous situation where three pilots would have to be engaged in one docking operation when two tugs were assisting a ship to berth.

"Ports such as Toronto and Hamilton are considered safe ports with pilots not being essential for the safe movement of vessels within the harbour," he said. "However, it is believed that harbour pilots with a thorough knowledge of prevailing conditions should be available to any ship requiring this service," said Capt. Mann.

Compulsory pilotage would mean that vessels anywhere on the Great Lakes would have to carry a pilot or have captains who hold pilotage certificates. Use of pilots is now voluntary in most areas:

The Pilots' Association feels there should be more pilotage and not less.

According to existing rates, all ships would pay \$120 to take a pilot on board to cross Lake Ontario with an additional \$60 for every docking. A shipping source said that it could cost up to \$4,200 to pilot a ship from Montreal to Thunder Bay and back.

In 1972, the U.S. Department of Transportation said in its Great Lakes Pilotage Review that the present requirement of the pilotage act demanding that vessels navigating in "open waters" must have a registered pilot on board was not a

valid requirement in the light of the past history of the system.

The Royal Commission on Pilotage, formed in 1963, recommended the abolition of open water pilotage in August, 1971.

Capt. Mann explained that the Port of Toronto wants to be involved in all future deliberation concerning the proposed regulations.

"All ports in the Great Lakes are attempting to keep costs down to encourage vessels to use the St. Lawrence Seaway," he said. "Any unwarranted charges are bound to have a detrimental effect," he noted.

The International Association of Great Lakes Ports, at its quarterly meeting in New York recently, passed a resolution opposing open water pilotage on the Great Lakes and his safe ports. (Toronto Harbour Commission)

Commercial Vehicles in Container Show in 1974

Toronto, March 9:—In a recent statement, David J. Crockford, exhibition manager for Intex Trade and Consumer Shows Ltd. announced plans to include the commercial vehicle industry for the first time within the scope of the Containerization and Physical Distribution Exhibition to be held in Toronto, April 23–25, 1974.

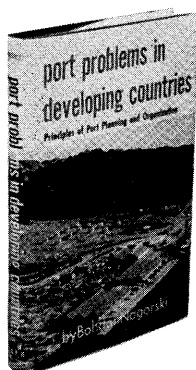
The new segment will be called the Commercial Vehicle and Accessory Show and will coincide with the three-day container show in the Automotive Building, Exhibition Park, Toronto.

"We expect to attract international equipment manufacturers and suppliers to Toronto to take part in this exhibition which has already been acclaimed a resounding success", Mr. Crockford said.

"This is an opportunity for buyers and users of distribution and transportation services and equipment to view under one roof all the latest innovations from around the world."

The session is limited to 35 participants. Hotel space will be reserved for each confirmed applicant.

Fee: The full registration fee of \$400 is payable in advance. This fee includes the cost of tuition, teaching materials and refreshments. It does not include the cost of room and meals. Rates at the Monteleone Hotel will be a flat rate of \$18.00 for single room and \$24.00 for a double.



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—Assistant Secretary General, ICHCA

IAPH 8th Conference

—Amsterdam/Rotterdam 7-12th May, 1973

Conference Chairman: **Ir. J. den Toom**, Managing Director, Port of Amsterdam

Conference site: **International Congress Hall, RAI, Amsterdam**

Working sessions will be held on the following five topics:

1. Coordination in the planning of links between ports and the hinterland to facilitate movement of intermodal transportation.
2. Preventive measures against air and water pollution in port areas.
3. Problems of developing ports and means of assistance available.
4. Potential of cargo distribution by barge carriers.
5. Scope of operational responsibility of the port authority.

ICHCA 11th Conference

—Hamburg 14-17th May, 1973

Conference will be opened by Senator Kern and the Keynote Paper will be presented by Herr Konsal Dietz.

Conference site: **Congress Centrum, Hamburg**

Conference theme: **"The International Transport Chain—where are the weak links?"**

Further Information From: **Conference Secretariat ICHCA**

Grosse Elbstrasse 14, 2000 Hamburg 50.

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Orbiter Probe

IAPH News :

Travelers

• **MISSION FROM BREMEN**—Prominent Local shipping and trading company executives and journalists were invited to the reception held by the Press Conference of the Free Hansestadt Bremen and the Bremen Port Authority in Hotel Okura, Tokyo on Friday, March 9, 1973 from 6.30 p.m.

The hosts were represented by twenty-three gentlemen including Mr. Dietrich Wieland, President, and Mr. Lothar Bagemihl, Vice President, of the Press Conference; Dr. Dieter Klink, Bremen State Assembly President; Senator Oswald Brinkmann, Bremen's Senator for Ports, Shipping and Transport; Senator Oskar Schulz, Bremen's Senator for Finance; Dr. Rolf Fastenau, Board Member of the Bremen Port Authority; and Mr. Hans-Joachim Weil, Director of Central Office of Public Relations, Bremen Port Authority.

All-time Records in 1972 Traffic

Ottawa, March 2:—All-time records are indicated in the St. Lawrence Seaway's 1972 Traffic Report with bulk commodities dominating the scene once again.

Cargo tonnage on the Montreal-Lake Ontario section totalled 53.6 million tons, an increase of 1.1% over 1971, and 64.1 million tons in the Welland section, upward of 1 million over last year. These new tonnage levels were attributed to record grain shipments in both regions.

The combined Seaway traffic, which is calculated by eliminating duplication between the two sections also reached an all-time high of 72.5 million tons in 1972. The previous record was set in 1970 with 71.1 million tons. Bulk shipments accounted for 88.9% and general commodities for 11.1% of the combined

total.

The main commodities shipped through the Montreal-Lake Ontario section of the Seaway this year were iron ore, wheat, manufactured iron and steel, barley, corn and fuel oil, which accounted for 74.3% of total traffic, compared with 67.6% last year.

The number of transits decreased by 1% over last year in both sections reflecting the efficient use of larger vessels. Ocean vessels carried 28% and lakere 72% of the total combined tonnages. Although ocean vessels made fewer transits this year, the overseas tonnage amounted to 20,466,976 or 38.1% of the total tonnage in the Montreal-Lake Ontario section. This surpasses the overseas tonnage carried in 1971 which was abnormally high due to labour problems affecting many North American ports. (The St. Lawrence Seaway Authority)

Port Charges Reduced by 50%

Montreal, Quebec, March 22:—Mr. Nicholas Beshwaty, Port Manager at the Port of Montreal today commented that there had been a change in the basis of charges for shedded and open space at the Port of Montreal.

"The National Harbours Board at its recent regular meeting accepted my recommendation that existing charges for utilization of such space in the port would be reduced by 50 percent commencing March 1, 1973. This is in accordance with the policy of the Board to relate such charges as realistically as possible to circumstances and conditions in a port as they may change from time to time. In addition, I am informed that the Board is considering the application of a charge for the usage of such space in various other ports under its administration. This will be consistent with the policy of the National

Harbours board to maintain such charges as standard and uniform as possible in the ports for which it is responsible." (Port of Montreal)

Overseas Tonnage Record

Toronto, March 6:—Overseas cargo shipped through the Port of Toronto last year reached a record 1,715,262 tons, an increase of 70,733 tons or 4.3 per cent over 1969, the previous record year.

New marks in the container trade were also set in the number of containers handled and in the amount of tonnage moved. Last year the port handled 11,951 containers (total equivalent 20-foot units) compared with 5,928 in 1971 and 6,334 in 1969.

The figures represent a 102 per cent increase over 1971 and an 89 per cent rise over 1969.

A total of 119,728 tons of containerized cargo moved through the port in 1972 compared with 56,112 tons in 1971, representing an increase of 63,616 tons or 113 per cent.

Port officials estimated a 10 per cent rise in overseas cargo at the beginning of the season last year. The increase was bigger than expected, reaching 464,722 tons or 37 per cent more than in 1971.

Higher tonnage figures also carried through to the marine terminals. Last year 860,207 tons of general cargo moved through the terminals compared with 662,406 tons in 1971 and 763,713 tons in 1969. These figures indicate an increase of 30 per cent over 1971 and 13 per cent over 1969.

Domestic tonnage dropped by 940,545 tons from 3,070,203 tons in 1971 to 2,129,658 tons in 1972. Coal, which decreased by 683,360 tons, accounted for the major portion of the drop. Cement decreased by 71,464 tons and petroleum by 76,958 tons.

Port officials hope for a swing upward in domestic tonnage this year. (Toronto Harbour Commission)

Port of Toronto—Dredging Contract

Toronto, March 8:—The contract for Phase II of the main harbour channel dredging, to create a new



Boston, Mass.:—An aerial view of Logan International Airport, eighth busiest airport in the world, owned and operated by the Massachusetts Port Authority. The airport, located in East Boston, recently passed the 10 million mark in scheduled air carrier passengers within a calendar year. (Massachusetts Port Authority)

entrance for ships into the Port of Toronto, was awarded by the Toronto Harbour Commissioners to McNamara Marine of Whitby, Ontario, with a tender of \$7,171,000.

Other companies submitting bids were: J.B. Porter Co. Ltd., Canadian Dredge and Docks Ltd., and Peter Kiewit Sons Co. of Canada Ltd.

The contract involves the hydraulic dredging of roughly 7,750,000 cubic yards of material to form new

harbour channels of Seaway depth. Also included in the contract is the removal of approximately 3,320 linear feet of east channel structure in order to widen the eastern entrance into the Inner Harbour.

Dredge material which would normally be deposited in deeper areas of the lake will be placed at the end of the Outer Harbour Headland to form a land fill base for a 188-acre Aquatic Park.

Work is expected to begin in April of this year and will take about two years to complete. (Toronto Harbour Commission)

New Transportation Head Appointed

Baltimore, Md., March 8:—The Maryland Port Administration today announced the appointment of Eldered N. Bell, Jr., to the position of Director of Transportation.

Mr. Bell's duties with the MPA, an agency of the Maryland Department of Transportation, will involve freight rates, tariffs and responsibility for litigation before the Interstate Commerce Commission (ICC), the Federal Maritime Commission (FMC) and other regulatory bodies. His appointment is effective March 19, 1973 according to Joseph L. Stanton, Maryland Port Administrator. (News from Maryland Port Administration)

Maritime Industries Conference

Corvallis, Oregon, U.S.A.:—Less than thirty years ago the United States was first among the maritime nations. In this period, while international trade has continued to grow, the U.S. merchant fleet has atrophied.

By 1960 only 26 percent of the \$24.7 billion commerce moving through our ports was carried on vessels of American registry. In 1971 the value of ocean commerce had increased to \$50.7 billion, but the share transported in American ships had shrunk below 5 percent.

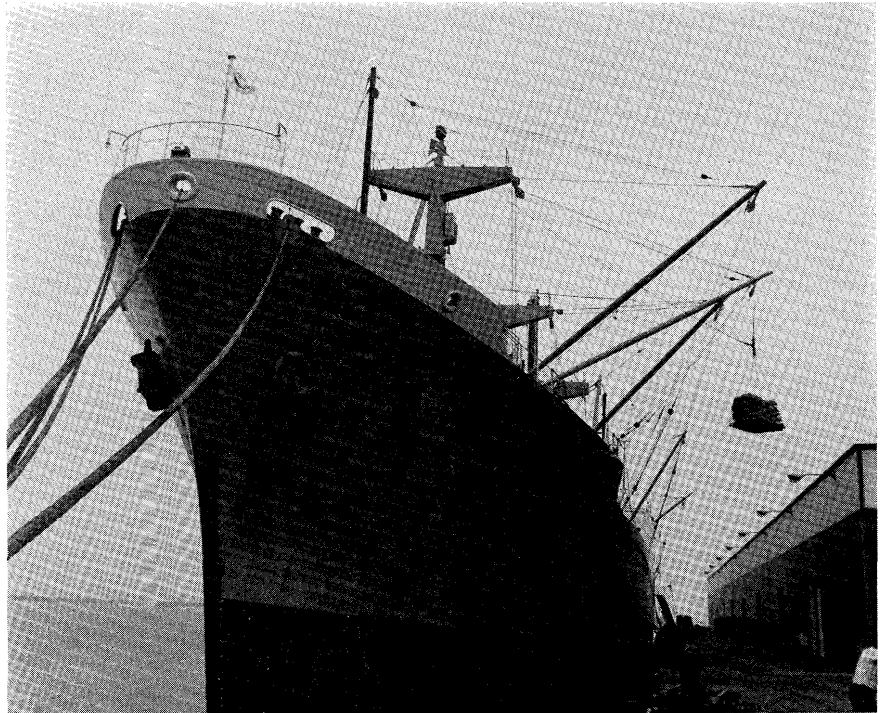
In light of the continuing plight of the U.S. maritime industry, Oregon State University's Extension Service is planning a conference to evaluate the future of Oregon's maritime industries.

Slated to coincide with the observation of National Maritime Week, the conference will be at the Sheraton Motor Inn in Portland on May 23 and 24.

Edward J. Condon, extension oceanographer, sees a threefold objective for the meetings: to take a first step toward allying the several factions making up the maritime industry; to impress the federal government and the electorate with the difficulties that handicap the industry; and to inform the public of the extent to which ocean-born commerce affects everyday living.

During the first day of the proceedings, speakers from maritime labor, management, and the government will diagnose the ills and offer prescriptions for treatment of their sectors of involvement.

On the second day, attendees will divide into six panels to map programs in six problem areas.



Buffalo, N. Y.:—BAGGED BEANS. The Jamaica Maru, a Japanese ship, recently arrived at Seaway Piers to load 1000 tons of metallurgical ores manufactured by Airco Speer in Niagara Falls. When the oreloading job was completed, the vessel moved to the NFTA Port Terminal Complex to take aboard an additional cargo of 1,000 tons of bagged beans for export. (Niagara Frontier Transportation Authority)

Condon expects to collect the deliberations into the beginnings of a plan for strengthening maritime commerce on the Pacific Coast.

He notes that complex influences, from deliberate inefficiency in labor practices to discouraging governmental regulations and policies, afflict the industry.

Therefore this first Conference on the Future of Oregon's Maritime Industries will address itself the challenge of reaching a consensus on how to meet this challenge.

Edward G. Westerdahl, executive director of the Port of Portland, adds, "the Port is pleased to see a conference of this type. It is high time the several activities concerned with our maritime industry got together."

Westerdahl said that he hopes to see meaningful projects emerge from the deliberations so that there can be a move toward a unified attack on a set of common objectives.

For Additional Information on THE FIRST CONFERENCE ON THE FUTURE OF OREGON

MARITIME INDUSTRIES Contact Edward J. Condon, Extension Oceanographer, Oregon State University, School of Oceanography, Corvallis, Oregon 97331, Tel. (503) 754-3354.

"Shippers Dialogue Southwest"

Houston, Texas:—"Shippers Dialogue Southwest" is being sponsored by the Port of Houston Authority and the Containerization Institute, Inc. at the Hyatt Regency Hotel, Houston, Texas May 2nd and 3rd, 1973.

The conference theme is "Progress in Intermodal Shipping in the Great Southwest". Principal officers are—General Chairman: George W. Altwater, Executive Director, Port of Houston Authority; Program Coordinator: Henry M. Broadnax, Director of Trade Development, Port of Houston Authority; Executive Director: William J. Marquette, Executive Director, Containerization Institute, Inc.



Two MACH Portainers for I.T.S. Long Beach Terminal

USL Moving to New Terminal

Long Beach, Calif.:—United States Lines, Inc. will move into its permanent new \$6-million container terminal at Berth 230 in Port of Long Beach on April 1, following approval here today of preferential assignments and leases by the Long Beach Board of Harbour Commissioners.

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

United States Lines' headquarters office and container freight station at 980 Windham Avenue is adjacent to the new facility and covers nearly four acres.

William J. Klauberg, vice president Western division for the ship-line, noted that the first vessels worked at Berth 230 will likely be the American Liberty April 2 eastbound and the American Archer April 6 westbound.

U.S. Lines inaugurated its Tri-

Continent container service linking Europe and the Far East via Long Beach two years ago this month, utilizing a fleet of eight Leader and eight Lancer class containerships over one of the world's longest cargo routes.

Interestingly, the American Liberty was the first U.S. Lines ship to call here, arriving on February 9, 1971, to start regular service via Port of Long Beach. (Port of Long Beach News)

New Cranes for ITS Long Beach

Alameda, Calif., March 13:—A second contract for two MACH System Portainers has been awarded to Paceco, A Division of Fruehauf Corporation, Alameda, California, by International Transportation Services, Inc. for their terminal operation at the Port of Long Beach, California. This second order comes less than twelve months from the installation date of I.T.S.'s first two MACH (Modular Automated Container Handling) cranes from Paceco.

Like the first two MACH Portainers, the new cranes are built with a high speed power package and Paceco's container "Sway Stop". They have the ability to load and unload containers in a continuous

high speed operation with maximum control of the container at all times. The operation of the MACH crane depends less on the skill level of the operator. The new cranes also have provision for the addition of modules for future automation.

The new Portainers will be equipped to handle two 20 ft. containers simultaneously and will have telescoping spreaders to handle 20, 27, 35 and 40 ft. containers. At the time of installation, the Port of Long Beach will have twelve Paceco Portainers operational—ten of them being MACH.

I.T.S. has also contracted with Paceco for three Rubber Tired Transtainers which will handle terminal area loading and stacking requirements. The three new Transtainers are also capable of lifting two 20 ft. containers simultaneously and have telescoping spreaders to handle 20, 27, 35, and 40 ft. containers. Each has a 40 Long Ton capacity. The five new Paceco cranes for I.T.S. are scheduled to be operational at the end of 1973. (PACECO News)

1973 Port Pilot Awards

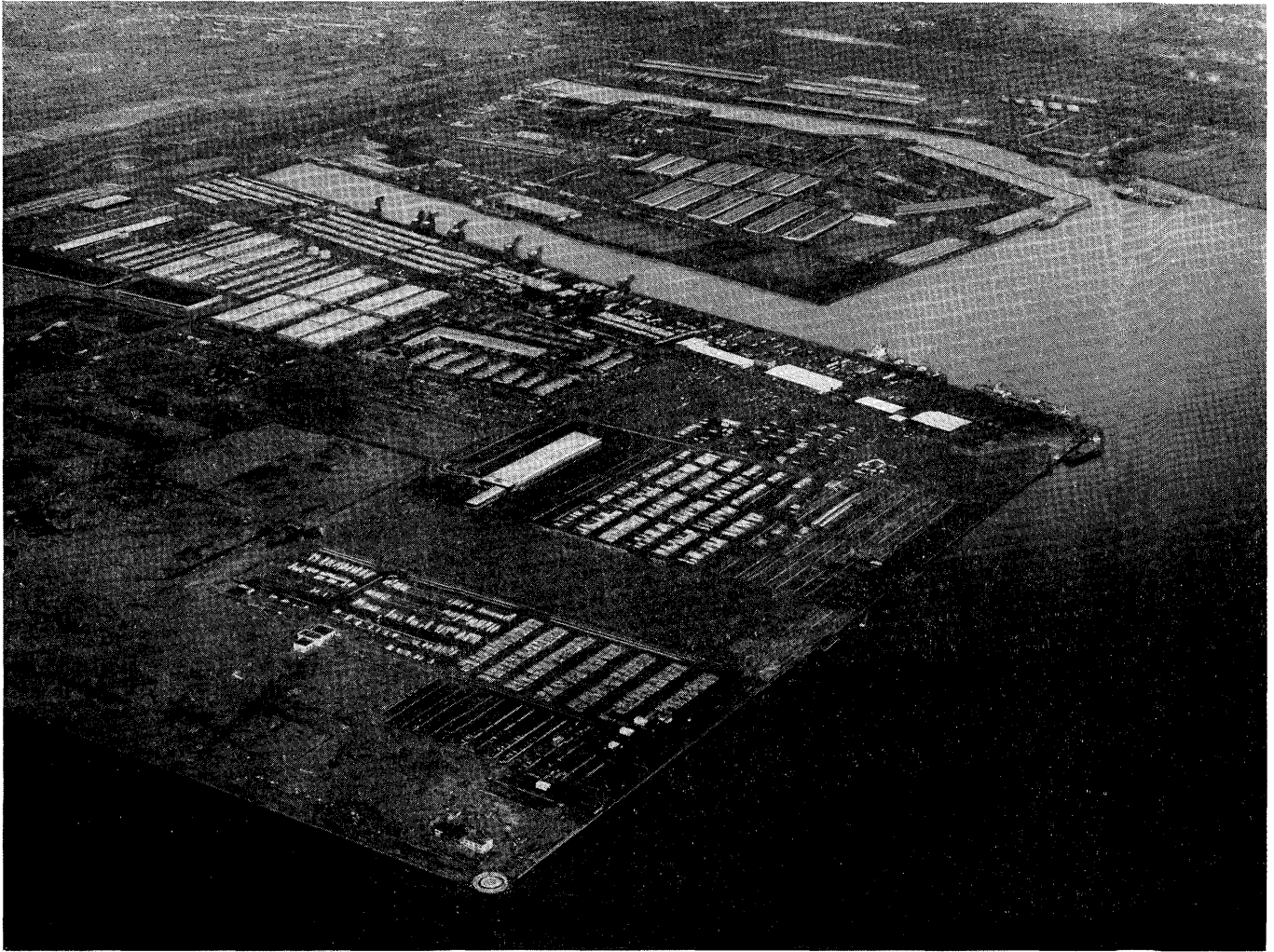
Long Beach, Calif.:—Two noted governmental officials—Congressman Glenn M. Anderson and U.S. Customs Commissioner Vernon D. Acree—will be honored by the Long Beach Board of Harbor Commissioners for "outstanding service to the maritime industry" at a reception to be held at The Mayflower Hotel in Washington, D.C., March 28.

Congressman Anderson and Commissioner Acree will be presented with Honorary Port Pilot Awards by Long Beach Mayor Edwin W. Wade and by Harbor Commission president James G. Craig, Jr.

In announcing the awards, the Harbor Commission noted that Congressman Anderson, who represents California's 35th Congressional District, is a member of the Committees on Merchant Marine and Fisheries and on Public Works, as well as the Subcommittees on Oceanography, Fisheries and Wildlife Conservation, Rivers and Harbors, and on a Special Subcommittee on Maritime Education and Training.

Anderson has had a long and de-

(Continued on Page 38)



Elizabeth / Port Newark

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

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

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

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

The Port Authority of New York and New Jersey

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

(Continued from Page 36)

voted interest in U.S. maritime matters.

Commissioner Acree's 36 year government career has until recently been largely concerned with the security operations of Internal Revenue Service. His many honors include the Arthur S. Flemming award for leadership and meritorious contribution to the Federal Service, the Treasury Department Gold Medalion Exceptional Service Award and the Association of Federal Investigators Leadership Award.

The National Civil Service League Career Service named him one of the Government's ten outstanding career executives in 1970. Last year Commissioner Acree received a Rockefeller Public Service Award, highest form of recognition the private sector grants to a Federal career servant. He is a founder of the Association of Federal Investigators and served as its president and on its executive committee. He was named U.S. Commissioner of Customs by Secretary of the Treasury John B. Connally in April of 1972.

Long Beach's Port Pilot tradition began in 1954 with President Eisenhower and among the 40 recipients in the 19 years since have been His Imperial Majesty Haile Selassie I and former Prime Minister Eisaku Sato of Japan (Port of Long Beach News)

Chicago Sales Manager

New Orleans, La., March 12:—The Port of New Orleans has promoted Paul Arthur Kreis to manager of mid-west sales in its Chicago trade development office. Kreis had served as assistant manager in that office since 1970. He replaces Thomas Hyland, who recently joined the staff of Lykes Bros. Steamship Agency, Inc.

Kreis came to the port in 1970 with nine years of experience in import-export trade, having served as sales representative for Norton, Lilly & Co. and as district manager for Farrell Lines, Inc. in Chicago. He is a native of Joliet, Illinois, is married and the father of three children.

The Chicago port office promotes trade for New Orleans in 11 mid-western states. The port also has

similar offices in New Orleans, St. Louis, Tokyo, Brussels, New York, London, Panama, Melbourne and Hong Kong. (Port of New Orleans News Release)

Safety and Environmental Control Officer

New Orleans, La., March 13:—The Port of New Orleans has taken another step forward in its efforts to promote safety and to strengthen its program of improving port environmental quality. Following certification by the Louisiana Department of Civil Service, Clarence J. Young, a retired military career officer has been appointed to the classified civil service position of safety and environmental control officer.

A native of New Orleans, Young's last military assignment was that of commanding officer of the U.S. Military Detachment at Bangkok, Thailand. His responsibilities there included handling matters of safety and sanitation in the Bangkok port area. He has also served the army as commanding officer of the Second Traffic Region in Viet Nam, and as Chief of Thai customs for U.S. Military Forces.

Young earned a Bachelor of Science degree at Southern University in New Orleans in 1953, and a Master's Degree in 1966. He retired from the army with the rank of Lieutenant Colonel.

The Port of New Orleans has been and is now aggressively interested in its responsibilities in matters concerning ecology and sanitation," said Port Director E. S. Reed. "Mr. Young's experience and background make him a valuable asset to our staff and will enable us to better keep pace with new trends and techniques for improving the port's safety and its environment." (Port of New Orleans News Release)

Ship Activity in American Ports in 1972

New York, March 8:—An analysis of the 1972 vessel activity at the largest United States ports reveals that the Port of New York handled about one-fifth of the nation's total, thus continuing its position as America's leading port.

The study, which was prepared by the Maritime Association of the Port

of New York, showed that 43,530 ocean-going vessels arrived at eleven continental United States ports in 1972. Of this total, 9,347 entered at the New York-New Jersey Port. This figure, which is 341 more than the previous year, is close to twice the volume of any other United States port.

Nearly 6,000 of the New York arrivals were container, general cargo and break-bulk vessels. The balance was composed of 2,891 tankers and 464 passenger vessels. A further study revealed that over two-thirds of the arrivals at the New York-New Jersey Port were foreign flag vessels and that they flew the flags of 59 of the world's nations. (News from The Port Authority of New York and New Jersey)

Pier 88 on the Hudson

New York, N.Y., Feb. 8:—Work will begin this Spring on the interior finishes of Pier 88 on the Hudson River—the first of three piers being rebuilt by the Port Authority as part of the new Passenger Ship Terminal in midtown Manhattan.

At their regular monthly meeting today, the Commissioners of the bi-state agency awarded a \$4.6 million contract for the work to Nab Construction Corp. of College Point, New York. The job, to be completed early next years, includes the furnishing and installation of elevators and escalators, heating and air-conditioning, plumbing, electrical power and lighting. Similar interior work on adjacent Piers 90 and 92 is scheduled to start early this summer. (News from The Port Authority of New York and New Jersey)

United Parcel Service

New York, N.Y., Feb. 8:—United Parcel Service will occupy a substantial part of the operating space in the New York Motor Truck Terminal beginning March 1, it was announced today by Chairman James C. Kellogg, 3rd, of The Port Authority of New York and New Jersey following the monthly Board meeting. The four-block-long terminal, located conveniently near the Holland Tunnel in lower Manhattan, is bounded by Spring, Greenwich, West Houston and Washington Streets.

United Parcel Service delivers packages throughout the country. The terminal will be used for the consolidation, sorting and local delivery to UPS customers. It will serve as an adjunct to the UPS facility on West 43rd Street which serves parts of New York City and provides specialized service for the mid-town garment center. It is expected that traffic loads on Manhattan streets will be reduced as a result of this additional UPS location in the downtown area. (News from The Port Authority of New York and New Jersey)

New Grain Elevator

Portland, Oregon, February 14:—The first new construction of grain elevator facilities on the lower Columbia River in more than a decade became a reality today when the Port of Portland Commission approved a letter of intent for issuance of \$12,000,000 to \$15,000,000 worth of revenue bonds for construction of a 3,000,000 bushel export elevator at the Port's Rivergate Industrial District.

Cook Industries, Inc., a Memphis-based conglomerate, will operate the elevator under a 30-year lease. Full cost of the facility will be repaid to the Port during the life of the lease, which will carry two five-year renewal options.

In a report to the Commission, Ogden Beeman, Port marketing director, said that before 1980 present lower Columbia River elevators will be unable to handle forecasted grain export demands. The Port of Portland, he said, has moved to meet this need.

About 80 percent of the export grain shipped from the Pacific Northwest moves out of the lower river ports of Portland, Vancouver, Kalama, Longview, and Astoria. Portland Merchants Exchange figures for 1972 show that Portland's three elevators handled almost 3 million tons which was approximately half of the grain exported from the lower Columbia River.

Beeman also told the Commission that Pacific Northwest grain exports climbed 161 percent between 1955 and 1970.

Portland has a favorable rate advantage for over 60 percent of the

wheat production of Oregon, Washington, and Idaho, he said. For the remainder of the production, rates to Portland are at parity with Puget Sound ports.

This is due, he said, to the water-level transportation route for rail, truck, and barges along the Columbia River.

The new elevator will be served by all three transportation systems.

Construction on the elevator, on a 30 acre tract on the Willamette River will commence this summer. It is expected to be completed in time to handle the 1974 crop. Under terms of the lease, the Port will prepare the site and provide all utilities, including road and rail access to the site.

The grain division of Cook Industries, Inc., with local offices in the Board of Trade Building, will operate the elevator. Although the firm has been in the grain marketing business in Portland since 1964, this will be the first west coast elevator it has directly operated.

Port President John M. Fulton expressed the Commission's satisfaction at the success of negotiations with Cook Industries. He noted that the Port's recognition of the need for modern grain elevator facilities will preserve Portland and the lower Columbia River as the center for almost 30 percent of the nation's export wheat trade. (Port of Portland News Release)

San Diego Unified Port District Newsletter—March

Tenth Ave. Marine Terminal:—It's busy at Tenth Avenue Terminal . . . 911 Suzuki automobiles arrived from Japan on the WOK-O . . . silos were filled with 15,000 tons of potash which was loaded on the KRISTINE BROVIG . . . and, at the bagging plant, 1,500 tons of fertilizer were bagged and loaded into 87 containers for shipment on the PRES. TYLER.

Container Crane:—Application to the Coastal Zone Regional Committee for construction of the container crane was made Feb. 20 . . . early fabrication of the crane has been completed with components due to arrive in San Diego from Tokyo (Hitachi America, Inc.) about the end of May . . .

Paper Cubes:—Tenth Avenue Marine Terminal's Papakube Corporation soon hopes to be shipping 6,000 tons of paper cubes a month . . . each cube is about 1¼ inch square . . . (It takes about ten pages of newsprint to make one cube, which weighs about two ounces.) Papakube ships the cubes in containers to Japan where they are manufactured into box board, wall-board and newsprint . . . Soon, Korea and Taiwan will receive shipments of the cubes.

APL's Container Ships:—PRESIDENT TAFT visited San Diego for the first time this month . . . the TAFT is the first fully containerized ship ever here . . . the TAFT is one of four American President Lines' ships to be modified at a cost of \$6 million each . . . a Seamaster, the ship was literally cut in half and extended to a capacity of 1,066, 20-foot container equivalents and 12 passengers . . . also visiting this month was the PRESIDENT TYLER, a Searacer . . . It has a capacity of 459 containers . . . These ships are part of APL's new monthly cargo shipments into San Diego.

You Never Can Tell Department:—The District's SAILING SCHEDULE recently carried a picture of the Broadway Pier while the SPIRIT OF LONDON was docked. The picture featured the cruise ship, but "incidentally" shown in the photo was the huge Smith-Rice derrick. The derrick attracted attention of an official of Westinghouse Electric Corp. back in Pittsburgh. He has inquired about the crane's capacities. It appears Westinghouse might have merchandise destined for the West Coast requiring services of a giant derrick. You never can tell . . .

Master Plan in the Mail:—Copies of the Unified Port District's Master Plan are now being mailed to interested citizens throughout the District . . . mailing list includes local, state and federal governments, country board of supervisors, local civic groups and the news media.

AAPA Officials Arrive Soon:—Senior members of the American Association of Port Authorities will arrive in San Diego this month (25, 26 and 27) to inspect the site of its upcoming convention . . . arriving will be Paul Amundsen, executive



San Francisco, Calif., March:—HALL AND FAREWELL TO ONE OF THE WATERFRONT'S MOST ACTIVE WORKERS—Ceremonies were held recently at the World Trade Club by the Marine Exchange upon the departure of Nestor "Nick" Cretan. Cretan, deputy executive director of the Exchange for over eight years, takes over as executive director of the Maritime Association of the Port of New York. Remembrances of Nick's long and productive career by the Golden Gate were presented by Exchange president Edward D. Ransom (left), Miss Joanne Hendricks, president of the San Francisco State University Alumni Association, and Dr. S. I. Hayakawa, University president. Robert H. Langner (far right), Exchange director, also bade Nick farewell. Over 100 industry leaders attended the fond farewell reception.

director of AAPA, Helen Doherty, assistant executive director, and Don Allan, public relations director . . . the visitors will meet with UPD officials and members of the convention's general committee, including convention chairmen, Dudley D. Williams, UPD chairman, and John V. Banks, president of NASSCO . . . discussion will include the "evening" traditionally sponsored by the New York Journal of Commerce . . . the convention commences Oct. 14 for five days at the Sheraton-Harbor Island.

Far East Trip:—Robert Mercer, UPD's director of Trade Development, recently returned from the Far East . . . to sell the Port of San Diego and particularly tell shippers about the new container crane . . . locations visited during the trip included Tokyo, Taipei and Hong Kong . . . in Hong Kong, Uni-Shield International Corporation stated it will open a manufacturing operations (Patio Products, Inc.) for Tiki Torches and an importing operation (Capri Candle Company) in San Diego during 1974 . . . commodities to be imported or manufactured here include housewares, hardware, plumbing supplies,

automotive supplies and leisure-time products . . . in Tokyo Mercer met with members of Japanese consortium, Yamashita-Shinnihon Line, Japan Line, Mitsui-O.S.K. Line and Kawasaki Line . . . Mercer expressed desire for members of the Japanese consortium to call or serve UPD at regular intervals, perhaps by rotating each line into San Diego . . . the Chinese Telecommunication Administration will contract for over \$5 million of submarine cable with ITT Cable-Hydrospace Division, National City . . . project (called SC-1) calls for cable to be loaded aboard ship by year's end.

Marine Exchange Appoints New Deputy Executive Director

San Francisco, Calif., March 8:—Appointment of Robert L. Bruno as deputy executive director of the Marine Exchange of the San Francisco Bay Region has been announced by Edward D. Ransom, president of the 124-year old Golden Gate shipping intelligence and pre-motional agency.

Bruno replaces Nestor "Nick" Cretan, who took up new duties last

week as executive director of the Maritime Association of the Port of New York. (Marine Exchange of the San Francisco Bay Region)

Eastern Regional Manager

Savannah, Ga., March 9:—M. Fred Whelan, Director of Trade Development for the Georgia Ports Authority, has announced the appointment of Vincent J. Gerard, Jr., as Eastern Regional Manager for the Authority to be headquartered in New York.

Gerard is a native of Rutherford, New Jersey and a 1960 graduate of St. Peters College. Formerly, Sales Manager of the Caribbean Trailer Express Gerard's career, in all phases of transportation, dates back to 1962.

As Eastern Regional Manager, Gerard will direct the sales promotion of the Georgia Ports which involved the supervisoins, throughout a fourteen state area, of the G.P.A.'s solicitation of freight moving in international trade.

The New York office of the Georgia Ports Authority is located in Suite 4645, One World Trade Center. Georgia Ports Authority News Release)

Record Tonnage Handled at Port of Tampa in 1972

Tampa, Florida:—A record 40,895,282 tons of cargo were handled at the Port of Tampa during 1972, Guy N. Verger, Port Director, announced. This compares with 36,032,198 tons handled in 1971, an increase of 13.5 percent.

Total inbound cargo amounted to 20,587,498 tons and outbound 20,307,791 tons.

Phosphate rock continued to be the largest single outbound cargo with a total of 19,734,699 tons, an increase of 2,499,233 tons over 1971. Of this 12,402,766 tons were exported to foreign markets, while 7,326,421 tons moved coastwise.

Petroleum products were the largest inbound cargo, with a total of 9,764,017 tons. During 1971 petroleum cargo amounted to 9,593,263 tons.

General cargo tonnage increased 25 percent over the previous year, with the total movement set at 1,140,754 tons. This increase can be attributed to the importation of motor vehicles

from Japan, the export of fresh citrus products to Japan, increased meat, steel, banana and lumber imports and other general cargo items including olives and newsprint.

There were also increased movements of bulk sulphur, coal, potash and ammonia.

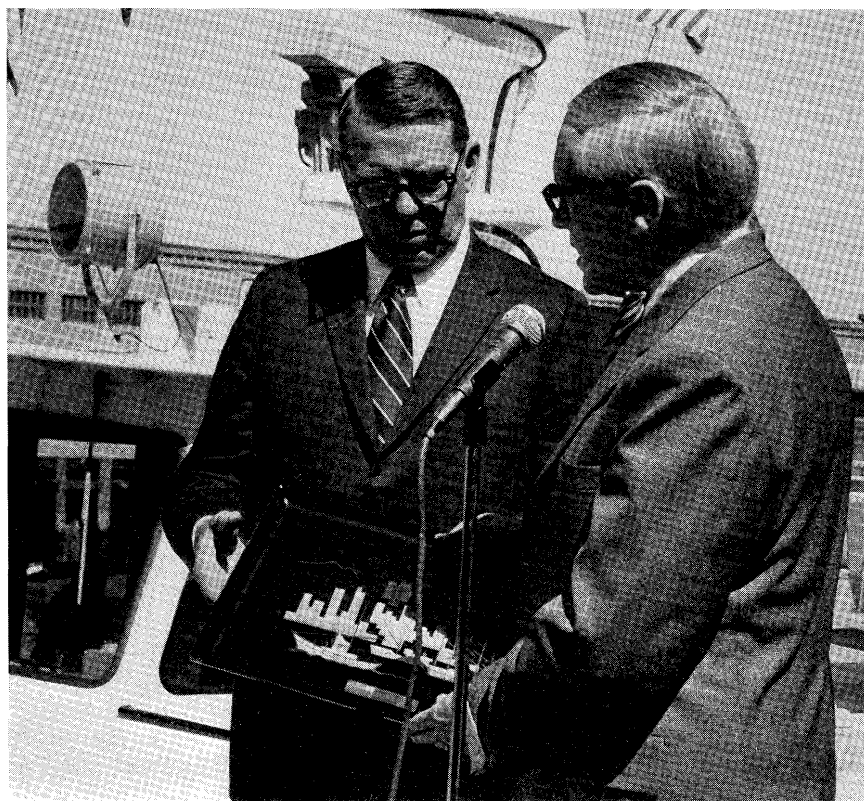
The Tampa Port Authority expects to begin construction on at least four new general cargo berths at the Holland Terminal on the East Bay Channel and Turning Basin within the next 90 days. Financing will be through the issuance of \$100,000,000 in revenue bonds. A fifth general cargo berth is also planned and will be financed through the same issue.

Financial feasibility for the issuance of the bonds has been established through the authority's fiscal and engineering consultants and validation of the bonds is planned in the near future.

Tampa Harbor Deepening was given a large boost when President Nixon included \$586,000 in his budget sent to Congress for preliminary engineering on the project. A total of \$300,000 was appropriated last year for engineering and these funds were released by the Office of Management and the Budget. If the additional funds budgeted are appropriated, and there is no reason to believe they will not be, preliminary engineering can be completed and actual construction work can begin by 1975. (News from the Tampa Port Authority)

Port of Antwerp Day in Nürnberg

Antwerp:—As a result of the recent inauguration of the Port of Nürnberg, the Port of Antwerp became linked up—via the Rhine and the Danube—with the German Federal State of Bayern. As a result thereof the Port of Antwerp, being the second European Rhine seaport, is able to offer a wide range of possibilities to the industries of the Nürnberg region. In order to inform the industries concerned about these assets Antwerp holds a Port of Antwerp Day was arranged in that German City on 7th November last. The event was arranged by the Port of Antwerp Promotion Association and the Antwerp City Authorities. It



San Francisco, Calif., March 22:—WELCOMING OF NEW BAR PILOT BOAT—The 111-year old San Francisco Bar Pilots Association recently christened their specially-designed new boat **SAN FRANCISCO**. The 85-foot, twin 365-HP Caterpillar diesel, dual control craft was built by Colberg, Inc. in Stockton and will replace the pilot boats **CALIFORNIA** and **GOLDEN GATE**, soon to be sold. Approximate cost of the **SAN FRANCISCO** was \$500,000. The new boat allows direct transfer of pilots from the **SAN FRANCISCO** to and from piloted vessels—most Golden Gate traffic, contrasted with former need to utilize a small craft between the outmoded pilot boats and ships served. To commemorate the occasion, Marine Exchange Director Werner Lewald presented Captain Archie Simenstad, president of the Bar Pilots Association, with an inlaid, engraved tray depicting an historic San Francisco Bay maritime scene. The Exchange—the nation's oldest ship intelligence agency—regularly welcomes ships on their maiden voyage to the Golden Gate.

stood under the patronage of the Ambassador of Belgium in Bonn, Mr. C. Schuurmans and of the Consulate General of Belgium in München. Moreover it was supported by the local Chambers of Commerce and industry and by the Deutscher Kanal und Schifffahrtsverein Rhein-Main-Donau e.V.

During an Informative Session arranged on that occasion a paper was delivered by Mr. R. Vleugels, General Manager of the Port of Antwerp, who dealt with the organization and situation of the world port on the river Scheldt. He especially stressed that the port of Antwerp having a centuries old tradition is

in a position to render great services to the German economy in general and to the port of Nürnberg, the youngest port in the world, in particular. Mr. Vleugels also pointed out the importance of the Rhine as a communication route between Antwerp and the German Hinterland. In 1971 8.2 million tons of cargo were shipped between Antwerp and the German inland ports, making of Antwerp the second North-sea port for Rhine traffic.

The second speaker was Mr. F. Somers, President of the Working Group "German traffic" of the Port of Antwerp Promotion Association (Assipor), who talked about the

Antwerp port customs, and more in particular about the reception of incoming maritime cargo and the Antwerp Rules 1951 for delivery by lighter to liner vessels. (Antwerp Port News)

"N.P.C. Survey of Non-Scheme Ports and Wharves"

London, 22nd March:—The PLA today welcomed the publication of this report by the National Ports Council.

The Director-General, Mr. John Lunch, said:—

"A factual survey of this nature is invaluable in establishing the real extent of the problem and the NPC should be congratulated on the care they have obviously taken in its preparation.

"The report contains a great deal of information which we will study carefully". (News from PLA)

Dockland Study Report

London, 5th March: — The P.L.A., which owns about half of the land involved in the Dockland Study area, today welcomed the publication of the full report. The Director-General of the Authority, Mr. John Lunch, said: "We will study the report carefully. There are a number of interests that P.L.A. must clearly protect and foster—port workers, customers, tenants, and stockholders. Our property in dockland is an important part of our assets on which P.L.A.'s stock is secured.

"The assumptions about dock closures made in the report are those of the consultants and not the P.L.A., who have made no decisions about future closures. "P.L.A. see a continuing requirement for upper dock facilities for the foreseeable future but the nature and extent of those facilities depends on the level and pattern of trade and international developments in cargo-handling techniques. "There will be a need to rationalize facilities further to meet the requirements of the future, reflecting these changes.

"Although not a party to the Study, "P.L.A. welcomed its initiation by the Secretary of State and have co-operated in providing information to the consultants because we recognize the unique opportunity

for the creative development of the area made possible by the gradual move of the Port downriver.

"Recognizing the social needs, P.L.A. have agreed to the early release of some 120 acres of land in the Dockland area required urgently for housing.

"But we are concerned that early progress should also be made with P.L.A.'s own commercial developments in the area, which include a port commercial and operating centre, combined with a merchandising centre, at the western end of London Dock, and other commercial facilities in the Dockland area, all of which will provide employment for dock workers and others who derive their livelihood from the Port of London. This needs to be matched with early progress in providing homes, recreational facilities, transport and those things which, in addition to jobs, will improve the quality of life of the people who live and work in the area.

"Above all P.L.A. will be looking for a considerable degree of flexibility in any plan for dockland development because we wish to take every opportunity to win trade and maintain employment in an international industry where the degree of change makes firm long term planning very difficult". (News from PLA)

PLA's Business Interest

London, 27th March:—The Port of London Authority are currently discussing with Comprehensive Shipping Ltd. and its associated companies the possibility of acquiring a majority interest in the group.

This move is in line with the P.L.A.'s policy of widening the services it can offer and it is anticipated that the move will benefit the customers of both P.L.A. and Comprehensive.

The company would continue under existing management. Mr. D. J. Harrington will remain as managing director and it is intended that other directors and managers will continue in their present positions. The P.L.A. will appoint a chairman and other directors to the Board.

Talks are being held with the Unions concerned. It is intended that Comprehensive will move from Metropolitan Wharf, Wapping to

new premises at South Side, Royal Victoria Dock. Comprehensive already employ registered dock workers at their groupage depot at Wapping. (News from PLA)

Port Competition Increased by Modern Transport Techniques, Docks Board Managing Director Says

Mr. Stanley Johnson addresses Harbours Association of New Zealand

London, 14 March (B.T.D.B.):—Changes in shipping and transport technology had made traffics more footloose, and shipowners more flexible in their choice of port, Mr. Stanley Johnson, managing director of the British Transport Docks Board, said in New Zealand today (Wednesday, March 14).

Mr. Johnson, who was guest speaker at the Fortieth Conference of the Harbours Association of New Zealand, said shipowners were becoming free to choose port routings that were best from a through transport viewpoint. The situation between ports could become very much more competitive and it was up to port undertakings to make the most of their case by "selling" the use of their ports.

"The need is for active marketing which brings out—from choice, in cost terms—that it is in the interest of those concerned to use a particular port," he said.

Total through transport costs to and from inland destinations might be provided by port undertakings and even consolidated through charges quoted—techniques which, Mr. Johnson said, were all in current use by the Docks Board.

He described the development of the 'scheduled through bulk service' as a result of co-operation between shipowner, port authority, and terminal operator. Shippers and receivers of relatively small consignments of tropical hardwoods for example—previously carried by liner services—were being given the cost benefits of bulk shipment, as well as a through transport service under this new system.

There was no reason why this concept should not be applied to other commodities, and no reason, he added, why port undertakings should not act as 'marriage brokers',

bringing together relevant exporting, shipowning, and receiving interests, with whom they must in any case closely co-operate for such developments to work smoothly and be acceptable.

New Hydraulics Research Facility Completed

London, 14 February (B.T.D.B.): —Scientific staff at the British Transport Docks Board's Research Station at Southall (Middlesex) have begun carrying out a series of hydraulic model tests for Hull's new riverside ferry berths, using a new reinforced concrete flume, believed to be the only one of its kind in the country.

The flume, which was designed at the Research Station, is 70 ft. (21.3 m) long, and 20 ft. (6.1 m) wide and has been installed primarily for investigations into the behaviour of ships navigating towards jetties and the forces acting upon ships once they are moored. It has a pump capacity of 25 cubic feet per second (0.7 cumecs).

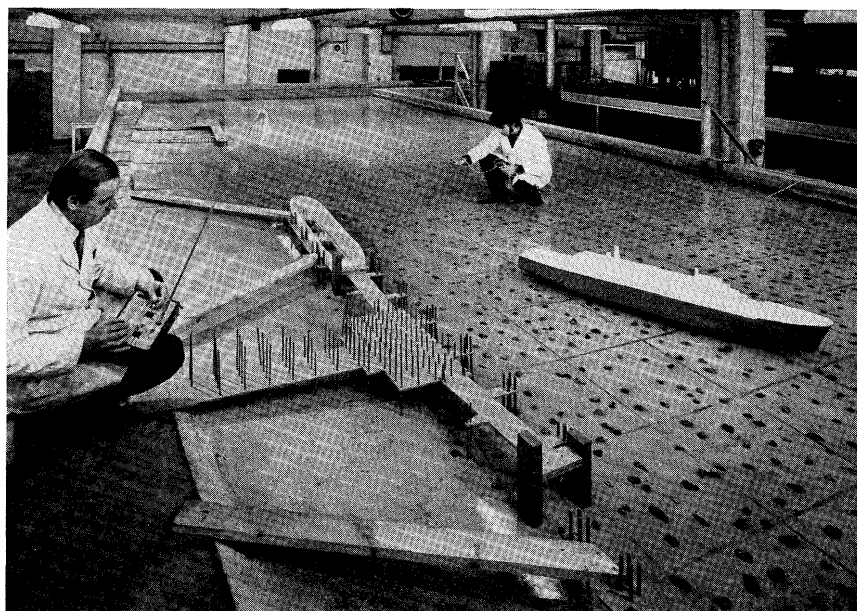
A secondary glass reinforced plastic flume, also 70 ft. (21.3 m) long, and with a 4 ft. × 4 ft. (1.2 m × 1.2 m) section, is linked to the main flume. It permits an unrestricted flow of return water to either end of the main flume, and is, itself, available for suitable investigations.

Commenting on the versatility of the new installation, the Docks Board's director of research, Mr. W. H. Jackson, said that although it was currently being used to test proposed designs for the Hull jetties, it could be readily adapted to similar problems at other sites and to a variety of other problems.

A contoured bed could be used to reproduce individual locations and the flume's variable pitch and reversible pumps could create conditions of flow corresponding to any state of the ebb or flood tide.

"Although priority will be given to Docks Board problems," Mr. Jackson went on, "we expect to have time available for hiring out the facility to other ports or to consultants, for the study of their own problems."

Contractors for the new installation were: W. S. Try Ltd., of Ux-



Hydraulic model test being conducted by scientific staff at the British Transport Docks Board's Research Station at Southall (Middlesex). (B.T.D.B.)

bridge, who constructed the main flume; Concargo Ltd., of Weston-Super-Mare, who supplied the GRP flume; and Armfield Engineering Ltd., of Ringwood, Hants., for the pumps.

Special Publication to Mark Docks Board's Tenth Anniversary

London, 16 January (B.T.D.B.): —A special 16-page souvenir supplement has been published by "Docks" the journal of the British Transport Docks Board to mark the tenth anniversary of the Board's formation in January, 1963.

The publication lists brief details of the main events and achievements of the Docks Board's first ten years and provides an interesting record of the £100 million-plus modernization and development programme which it carried out during that time. This has included such major schemes as Port Talbot Harbour, Southampton Western Docks Extension, Queen Elizabeth Dock at Hull, Immingham Oil Terminal, and no fewer than fifteen roll-on/roll-off terminals.

The January issue of "Docks", which is changed to a larger, A4, format, also includes a New York message from the Docks Board man-

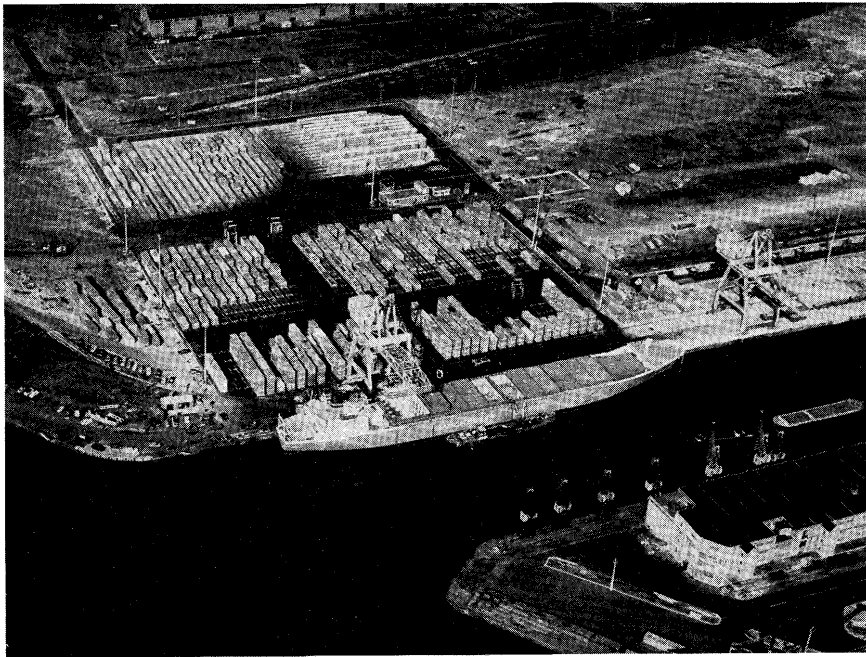
aging director, Mr. Stanley Johnson, in which it is recorded additionally that during the 10-year period 665 million tons of cargo passed through Docks Board ports; £40.8 million were paid to the Government in interest; and £147 million were paid in wages and salaries.

Depths for Big Tankers in Denmark

It has been incidentally learned from a recent revelation by Mr. Eigil Andersen, General Manager of Port of Copenhagen Authority that one of the Danish Refineries is considering plans to establish water depths of 20 metres in order to receive tankers of up to 225,000 d.w.t. The Refinery in question and the Danish Hydrographic Department are at present making further investigations on the matter.

Port of Le Havre Flashes—January

Arrival or Departure Every 18 Minutes: On November 15th, 78 arrivals or departures were recorded by the Harbourmaster's Office in a period of 24 hours, making the highest number of movements ever known. The breakdown into categories is particularly interesting, as there were 35 freighters, 22 tankers,



Container Terminal, No. 9 Dock, Manchester Docks. (See front cover also.)

11 containerships and 10 car ferries on the same day, which agrees exactly with the usual pattern of shipping movements in Le Havre.

Visitors from Belgium: On November 14th we were honoured by the visit of a delegation from the Province of Hainault, led by the Governor, M. Emilien Vaes. Many matters of common interest in the field of commerce and industry were discussed at a working session, with particular emphasis on oil. In this connection, the question was raised as to whether refineries in southern Belgium might not be supplied from the future Antifer oil terminal.

Large Cargo of Iron Ore: A Greek ship, the *Prometheus*, docked at Le Havre on November 9th after a non-stop voyage from Brazil, with almost 60,000 tons of iron ore on board. The consignment was on its way to the iron and steel complex at Pont à Mousson, in Lorraine, and completed its journey by rail.

Car Ferry to Ireland: Le Havre and Rosslare are to be linked from June 2nd next by a direct service operated by the Irish Continental Line, which is represented in France by Normandy Ferries. Three sailings a week are scheduled in each direction throughout the year, with four each

way in July and August. A new ferry to be launched in February, the *Saint Patrick*, will have cabin accommodation for 550 passengers plus space for either 200 cars or thirty 40-ft lorries, or any combination of the two.

942 More Ships in Le Havre in 1972: 7834 commercial vessels entered the port of Le Havre last year, i.e. 13.7% more than in 1971. Total traffic amounted to 66 million tons, i.e. 7.4% more than the year before.

Further details in our next issue.

"Yes, We Have Some Bananas!": In 1971 over 120,000 tons of citrus fruits passed through the port, which is equally well equipped to handle bananas. 55,000 tons of these tropical fruits were unloaded during the same period, mostly from the Cameroons.

New Lines: Since last November the Quai de l'Atlantique has seen two USL containerships loading or discharging each week. This follows the United States Lines' recent decision to make one direct sailing a week in each direction between New York and Le Havre.

* * *

On December 6th, USL also inaugurated a new weekly service from Le Havre to Lisbon and Leixoes. It will be especially useful for the on-

ward dispatch to Portugal of freight brought over from the United States on the large inter-continental containerships.

More about Antifer: The on-shore installations of the new port will be protected to the north by an 11,500 ft breakwater, composed mainly of a single base, a rubble core of flint and limestone, and an outer casing of concrete blocks. The upper part of the breakwater, which will be capped with concrete, will carry a service road and the oil pipelines, as well as the various pipes and conduits required for provisioning ships and bringing up fire-fighting materials. The breakwater has been designed to withstand waves up to 26 feet high without serious damage.

Special Visit for Planners: About a hundred engineers and heads of planning departments, together with a number of journalists from specialized magazines, came to Le Havre on December 7th, where a special programme of informatory talks had been laid on for them before the traditional visit of the port, the industrial zone and the Antifer site. They were all people who may one day be called upon to work on important new projects connected with our region.

Our Office in New York: Christian Guary, who studied both law and business in Paris before going to work for the Port of Le Havre Authority, was director of the port's trade promotion offices in Paris and London prior to being assigned to his American post in November 1970. While based in New York, he makes his home in Port Washington, L.I., with his wife, Claire, his daughter Marie-Laure, aged 5, and his sons Gabriel, 4 and Antoine, 2.

His present duties as Manager of the New York office fall into two categories. The first includes making contact with shippers and ship owners in North America and the Far East, and acting as a liaison between shippers, brokers, forwarding agents and the port itself. Secondly, he is engaged in the sale or lease of land in Le Havre to large American industrial concerns, and in relaying long-range plans for the development of Le Havre on a grand scale.

Bangladesh Liner in Bremen

Bremen, 27th March:—A vessel of the Bangladesh Shipping Corporation, Dacca, recently made its first ever appearance in Bremen's Überseehafen. The MV "Banglar Doot" (9150 BRT) took on cargo for Chittagong and Chalna in Bremen. In future the company (Agent: Karl Geuther & Co.) will operate a regular liner service from Bremen. (Via Bremen Bremerhaven)

New Grain Transport Company on the Lower Weser

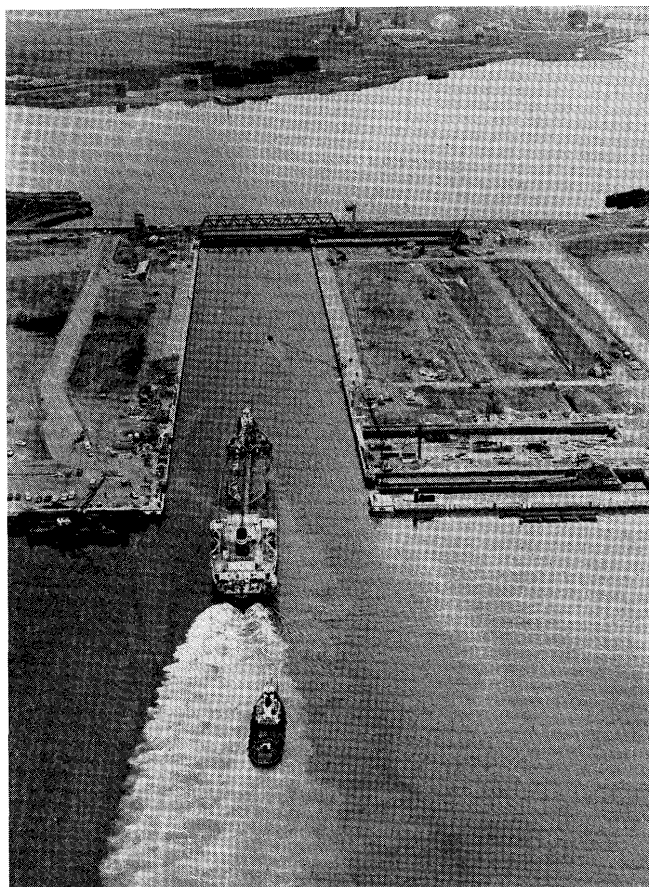
Bremen, 8 March:—A new transport company specializing in grain and feed-stuffs was founded recently in Bremen and will start business on 1 April this year. The company will be called "CVW Getreideverkehr Weser GmbH & Co. KG". The partners in this company, having equal participation, are the Bremer Lagerhaus-Gesellschaft, Bremen (the Port Operating Company of Bremen and Bremerhaven), the "Midgard" Deutsche Seeverkehrs - Aktiengesellschaft, Nordenham, and the shipping company B. Dettmer & Co., Bremen.

Messrs. Horst Evers and Diedrich Rickens have been appointed managing directors of the company which is based on Bremen.

In founding this company the Bremer Lagerhaus-Gesellschaft and the "Midgard" are putting into practice what has been the result of a lengthy process on the lower Weser: the uniform management of grain-handling, grain-transport and barge-traffic, or rather the close linking of these three branches in the grain-and feed-stuffs business. Hitherto the BLG and "Midgard" confined activities to the handling business, just as the firm B. Dettmer & Co. Reederei was not involved in grain-transport and grain-handling in the ports. The new company will concentrate solely on the grain and feedstuffs business; it will not extend its activities to other branches of port transport. (Via Bremen Bremerhaven)

First Vessel at New Pier

Bremen, 27 February:—On 26 February a new pier at the Bremer



The largest lock in the world, with a capacity of 22,700,000 cu. ft. (643,000 m³), just ahead of the Zandvliet Lock near Antwerp, which has a capacity of 21,650,000 cu. ft. (613,000 m³). (Port of Le Havre Authority)

Lagerhaus-Gesellschaft's grain silo was opened with the arrival of Hapag-Lloyd's MV "Norder Piep" (Agents: Gebrüder Specht). This site, which loads only barges and coasters with grain and feed stuffs from the silo for the time being, has a capacity to 400 tons of heavy grain per hour and is equipped with three delivery pipes enabling two ships to be laden side by side.

The construction of this pier has been brought forward in preference to other building projects because the old Pier B where barges and coasters hitherto took on grain, has been pulled down. Meanwhile work is going ahead to expand silo capacity and build a new quay for discharging grain. The ceremony celebrating the completion of the basic structure of the site as a whole is planned for May already and the new silo is expected to be operational by the beginning of 1974. The site will then be the scene of considerable

improvements. The capacity of the silo and the flat storage area is to be increased from 125,000 tons of heavy grain to 151,000 tons. Two new pieces of mechanical discharging equipment will replace Pier B's present pneumatic suction equipment. This equipment is particularly suitable for discharging feed stuffs which form an increasing proportion of the silo's overall turnover. The new lorry loading unit is of particular importance especially for the local residents. In future less dust will be produced during loading of lorries at the silo and the nuisance which has sometimes been caused to local residents will be a thing of the past. (Via Bremen Bremerhaven)

Navigation Tower Defies 95 Knots Cyclone

South Melbourne, Victoria, Australia, 15 February:—Cyclone Kerry, which recently hit the Port Hedland, W.A., area with gusts of up to ninety



Hapag-Lloyd's MV "Norder Piep," the first vessel at a new grain silo pier of the Bremer Lagerhaus-Gesellschaft.

five knots, caused extensive damage to port installations and equipment. Early estimates indicate that structures costing some millions of dollars have suffered severely.

It is to the credit of Nautical Service (Australia) Pty. Ltd. that the Sarus navigation tower, which they designed and installed only recently at Port Hedland, withstood the buffeting successfully.

Although it is positioned 8 miles off-shore, connected to its sea-bed anchor by an articulated link, it did not sustain any damage and continued to function efficiently throughout the cyclone period.

It is reported by the port authorities that the Sarus tower in spite of the excessive strain, did not shift position at all.

The stability of this new type of structure, which can be adapted for a wide variety of off-shore duties, lies in its slim, cylindrical shape, its carefully designed buoyancy chamber, its overall toughness of manufacture and the excellent method used for anchoring.

It is of interest that the tower at Port Hedland took only eight weeks to construct and the positioning and total installation was achieved in one day. The speed of installation is due to the whole tower being able to be launched in a horizontal position, towed to its mooring site, and then making full use of its in-built buoyancy and refined balance, allowed to attain an erect position ready for linking to the sea-bed anchor.

Sarus towers are appropriate for duties as navigation aids, port markers, mooring stations, and off-shore pollution disposal units. Further information available from: Nautical Service Aust.) Pty. Ltd., 53-57 Market Street, SOUTH MELBOURNE, VIC. 3205

Glebe Island Container Terminal Commissioned

Sydney, 2nd March:—The first ship to use the Glebe Island Container Terminal will be the "ACT III" which will commence operating at the Terminal on Monday, 5th March, 1973.

This was announced in Sydney today by the President of the Maritime Services Board, Mr. W. H. Brotherson.

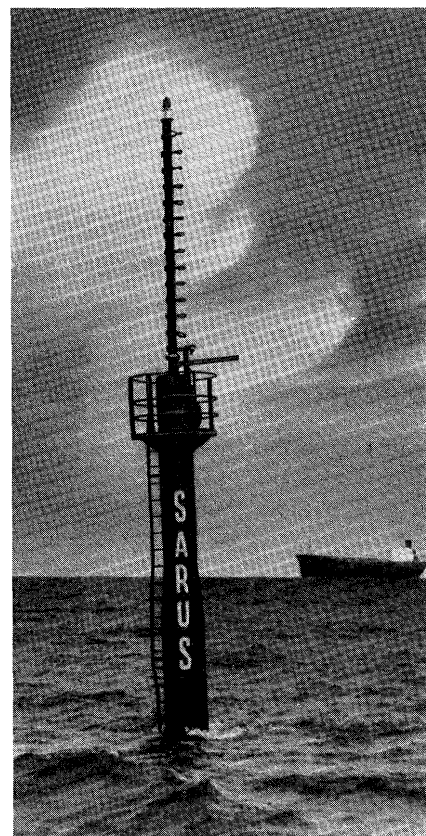
The Terminal was opened by the Premier and Treasurer of New South Wales, Sir Robert Askin, at a function attended by approximately 350 people connected with shipping, trade, commerce and industrial organizations associated with waterfront labour on Thursday, 22nd February, 1973.

Mr. Brotherson said the twenty-five acre, two-berth container terminal will become the common user container facility for the Port of Sydney.

He said that Seatainer Terminals Limited, the Company which operates Nos. 5 and 6 Berths at White Bay will take over on lease, the adjoining No. 4 Berth, White Bay, which has now been vacated by the Board.

Seatainer Terminals Limited will then control the three berths in the

(Continued on Page 48)



The Sarus navigation tower at Port Hedland, W.A., held its position in spite of the 95 knot cyclone Kerry.

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(Continued from Page 46)

White Bay area in its container terminal activities.

Mr. Brotherson said that one hundred and fifty thousand containers moved through the Port of Sydney last year and, with the steady increase in the container trade, the Glebe Island Terminal became a necessary expansion to cater for the needs of the industry in the immediate future.

He said the "ACT III" is one of the fleet of ships operated in the round the world service by Associated Container Transportation Limited. All of the ships of this line are to be handled at the Board's common user container terminal at Glebe Island.

The cellular container ships trad-

ing to the North American continent in the ownership of Columbus Overseas Services Pty. Limited and the Farrell Lines will also use the common user terminal and their ships will be frequent visitors to Glebe Island as from Monday next. (The Maritime Services Board of N.S.W.)

Hong Kong Yearbook

Hong Kong, 1 March:—Today, the government's annual report 'Hong Kong 1973' went on sale to the public. This year, the report has made a major break with tradition, taking on an entirely new format and style.

Increased page size allows for a more effective use of colour illustrations, making it among the most attractive official yearbooks anywhere

in the world. Besides a new title (reflecting the year in which the report is published), the new look is extended to all chapters which are now substantially revised.

The 255-page Hong Kong yearbook, which is a review of 1972, also features 10 colour sections comprising some 85 full-colour plates which cover such subjects as the Cross-harbour Tunnel, the Port. Movement, the Royal Visit last year, and even Calligraphy.

'Hong Kong 1973' is available at HK\$13 a copy from most leading booksellers or from the Government Publications Centre, Star Ferry Concourse, Hong Kong—or in Britain, from the Hong Kong Government Office, 6 Grafton Street, London W1X 3LB. (The Week in Hong Kong)

The World Port of Osaka

Port & Harbor Bureau City of Osaka

Osaka:—The Port of Osaka constructed its first container berth in the South Port in August 1969, which was followed by the inauguration of the regular containership service between Osaka and Australia, and since then the volume of cargoes has been steadily increasing year after year, contributing greatly to the promotion of trade and understand-

ing between the two nations.

With more ardent wishes to develop international trade through its own port, the City of Osaka, in co-operation with Osaka Chamber of Commerce and Industry and other influential economic organizations, has kept close contact with related freight conferences to get the status of 'base port' officially recognized by

these freight conferences.

The City also dispatched to Europe in August 1971 a foreign trade promotion mission headed by Deputy Mayor Shinzaburo Fukuyama to discuss the matter with the authorities concerned, including Japan-Europe Freight Conference.

Recognizing the present conditions and future potentiality of the Port of Osaka, the Freight Conference took action to nominate the Port as Container Service Port and it was formally recognized as such on and after August 30 1972, initiated by the call of "Christian Mærsk".

Four freight conferences including Trans-Pacific Freight Conference also followed suit to authorize the status of Osaka Port as Base Port from January 10 for the Pacific Coast of North America with the arrival of "Pacific Phoenix", and from February 3 for the Atlantic Coast with the arrival of "Zim Genova".

Through thus established regular liner service, the Osaka Economic Sphere has been directly connected to various markets in the world, which will eventually lead to the promotion of Osaka's foreign trade. The photos show the welcoming ceremony at the container terminal on each occasion.

Development Projects

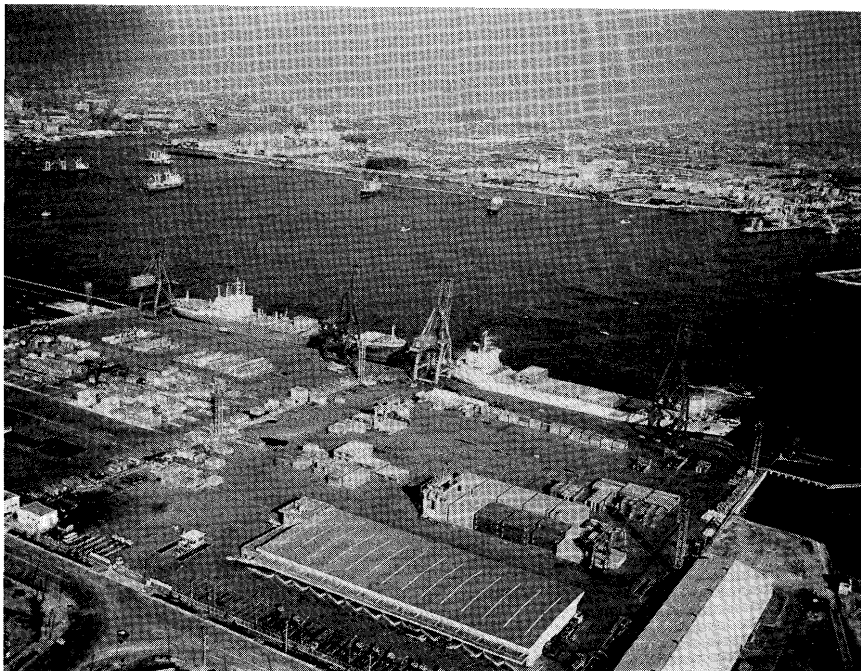
Penang:—Work on a number of development projects being undertaken by the Port Commission is proceeding satisfactorily.

1. Ferry Service Expansion

The ferry service expansion project which involves the construction of additional berths and an initial three additional ferries is progressing according to schedule. Tenders for the construction of the three ferry vessels and the terminals have been received and are now under consideration by the Port Commission. Construction work is expected to commence in March 1973 on both the ferry vessels and the terminals. This \$18 million expansion project is expected to be completed by the end of 1974.

2. Bulk Cargo Terminal at Prai Industrial Estate

The Port Commission's Consultant Engineers have been requested to



Shown is the container terminals in Osaka South Port. Three berths are in full operation serving Australian and European regular routes, plus Pacific and Atlantic Coasts of North America since last January and February.



The regular containership service between Osaka and European ports was started from August 30, 1972, initiated by the call of "Christian Maersk."

undertake feasibility study on the proposal to develop a bulk cargo terminal at the Prai Industrial Estate. The purpose of this terminal is to provide direct ship to shore loading facilities for bulk dry and liquid cargo for a number of new and existing industries. When operational, this terminal will considerably increase the port's loading rate for bulk cargo.

3. Housing Facilities for Security Personnel

Plans are being prepared for the construction of three 11-storey blocks of flats for the Security personnel of the Port Commission. Construction work of the flats is expected to commence in late 1973. When completed by 1974, these flats will provide housing facilities for 270 Security personnel and their families.

4. Other Projects

Three large traders' godowns, totalling 142,000 sq. ft., are to be built this year at Butterworth Wharves to meet the traders' demand for such godowns. Tenders for these godowns have been invited and construction work will commence in early 1973.

An additional storage godown is planned for Butterworth wharves to cope with the increase in cargo tonnage being handled at Butterworth wharves.

A dangerous cargo shed is another facility to be added to Butterworth Wharves this year. There has been a gradual increase in the volume of dangerous cargo discharged at this port and, in consequence, a godown is to be provided for this type of cargo. (Penang Port News, January)

Long Service Awards

Penang:—At a Dinner and Dance held at the Club premises of the Penang Port Commission Recreation Club on 20th November 1972, two retired officers, Messrs. Kam Boon Kheng and Toh Cheng Lai were presented watches in recognition of their long service with the Penang Port Commission. The presentation was made by Encik Ismail bin Ngah Marzuki J.M.N., P.K.T., Director General of the Penang Port Commission. Mr. Kam Boon Kheng retired as Cost Supervisor after having

worked for 34 years in the Penang Port Commission. He joined the service of the Penang Port Commission in August 1938 as Clerk/Typist. Mr. Toh Cheng Lai retired as Assistant Accountant after having served the Penang Port Commission for over 37 years. He started working as a clerk in the Penang Port Commission in January 1935.

The Dinner and Dance was organized by the Penang Port Commission Recreation Club to help raise funds to send participants to the Inter-Port Meet to be held in Kota Kinabalu this year. This Inter-Port Meet is a biennial event with teams from ports of Penang, Port Klang, Singapore, Sabah and Sarawak participating. Each port authority takes turns to host the Inter-Port Meet. The last Meet was hosted by Kuching Port Authority in 1971. The Penang Port Commission has plans for charity matches, conducted tours for members and other social events in a campaign to raise funds for this purpose. (Penang Port News, January)

New Port Project Launched

Sabah, Malaysia:—The commencement of Construction Work of Sabah Ports Authority's new ports of Kota Kinabalu and Sandakan was launched by the State Minister of Communications & Works, Datuk Pang Tct Tshung, on behalf of the Chief Minister Tun Datu Haji Mustapha bin Datu Harun on Monday 28th August 1972. The brief but colourful ceremony which was attended by more than 100 guests was held at the site of the proposed Kota Kinabalu port at Tanjong Lipat. In his message delivered on his behalf by the Minister of Communications and Works, the Chief Minister expressed his confidence that Sabah Ports Authority would improve the state economy, through shipping. The Tun said that Kota Kinabalu and Sandakan will need wharves and godowns for handling goods which are increasing annually the years ahead. Only through the building of new ports equipped with appropriate facilities can the success of Sabah Ports Authority be guaranteed, said the Tun.

Among the VIPs present were the Assistant Minister of Communica-

tions and Works Y.B. Herman J. Luping, the Chairman of the Authority, Y.B. Tuan Haji Kassim Kamidin, and the President of Penta-Ocean Construction Co. Ltd. Mr. Tetsutaro Mizuno.

The ceremony was followed by a buffet dinner in the evening of the same day at the Gardenia restaurant.

Both ports are expected to be complete and operational by 1975. The contract for the construction work was won by M/s. Penta Ocean Construction Co. of Tokyo, Japan.

The Construction Co. since the award of contract on 27th May, has brought into Sabah more than \$12 million worth of modern equipment, and construction plants for the construction works of the project. For the last few months, effort has been concentrated on preliminary works. The accomplishment on site includes erection of prestressed concrete pile casting plant, Temporary Jetty, Travelling Gantry Cranes, Concrete Batchers, Cement Silos, Site Office and Accommodation Buildings etc. Although there is very little permanent work being carried out at both sites at the moment, the preparatory work for full scale production is now nearing completion. It is expected that the construction work of permanent nature will be carried out in early 1973. (Sabah Port News, July-Sept. 1972)

Surcharge Deferred by USA Conference

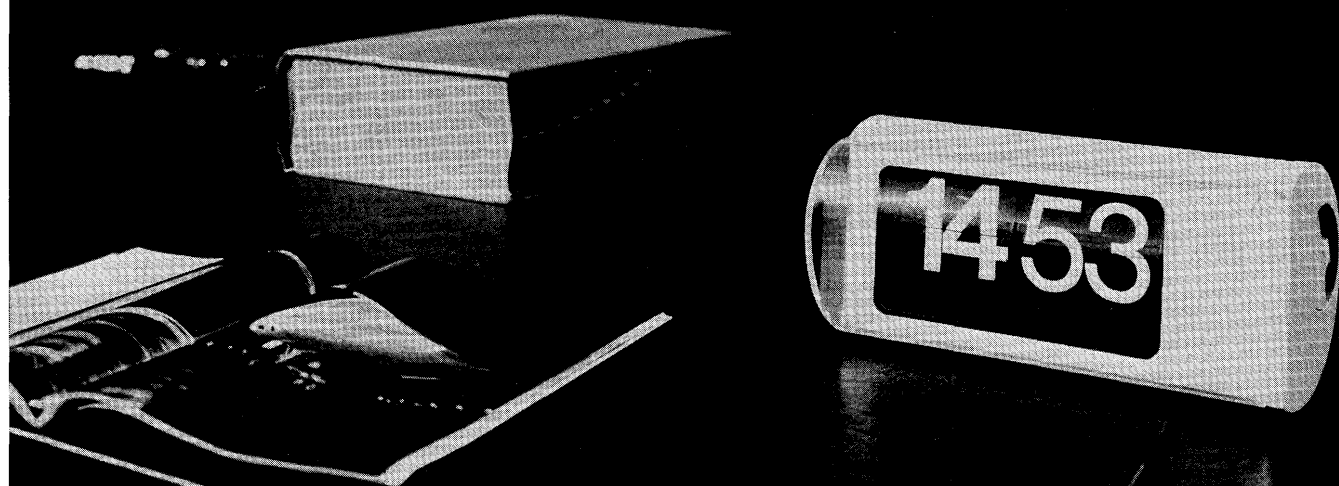
Karachi, 20th February:—The West Coast of India & Pakistan/USA Conference has further deferred the levy of their proposed Port Detention Surcharge for Karachi Port until 15th March, 1973.

This was communicated to the Chairman, Karachi Port Trust, in a letter by the Chairman of the Karachi Committee of the said Conference.

It would be recalled that the West Coast of India & Pakistan/U.S.A. Conference had initially given a notice to levy surcharge of 20 per cent on shipments to Karachi Port from U.S.A. with effect from 1st January, 1973, but subsequently it has been deferring the surcharge in view of the improving conditions at Karachi Port. (Karachi Port Trust Press Release)

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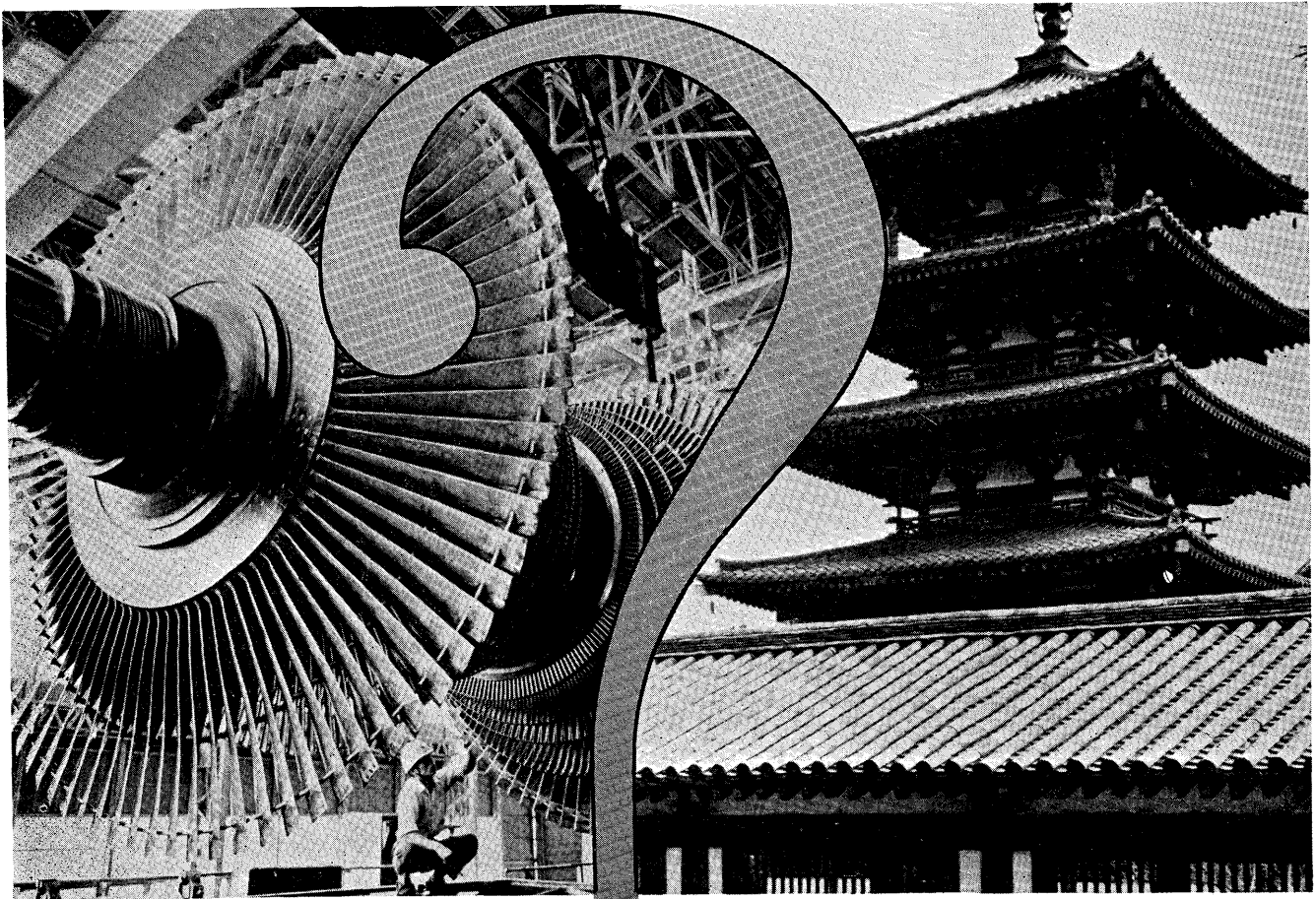
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about
JAPAN

Surely a little, maybe a lot. And whatever you have learned will be useful for getting a foothold in this dynamic economy. But to unravel the intricacies of Japanese business you will need the assistance of specialists. In fact, you will need FUJI BANK.

Fuji's distinguished economists and experts have researched the problems you will be most likely to encounter, and have helped many foreign firms to set up flourishing businesses here. It's part of the comprehensive service offered by Fuji, the leader in Japanese commercial banking. Even those already well-informed about Japan will find it very useful to consult Fuji.

It pays to go with FUJI and grow with FUJI

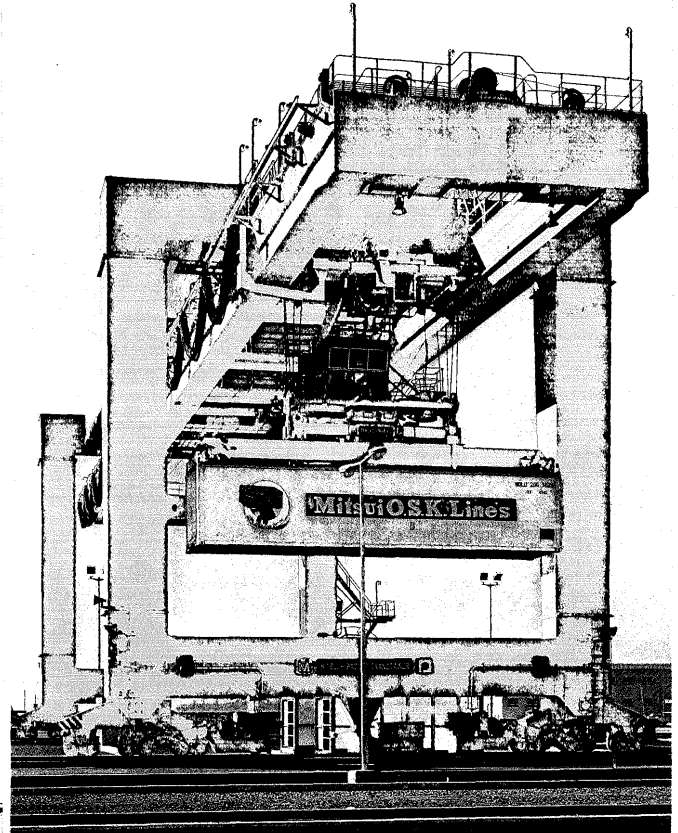
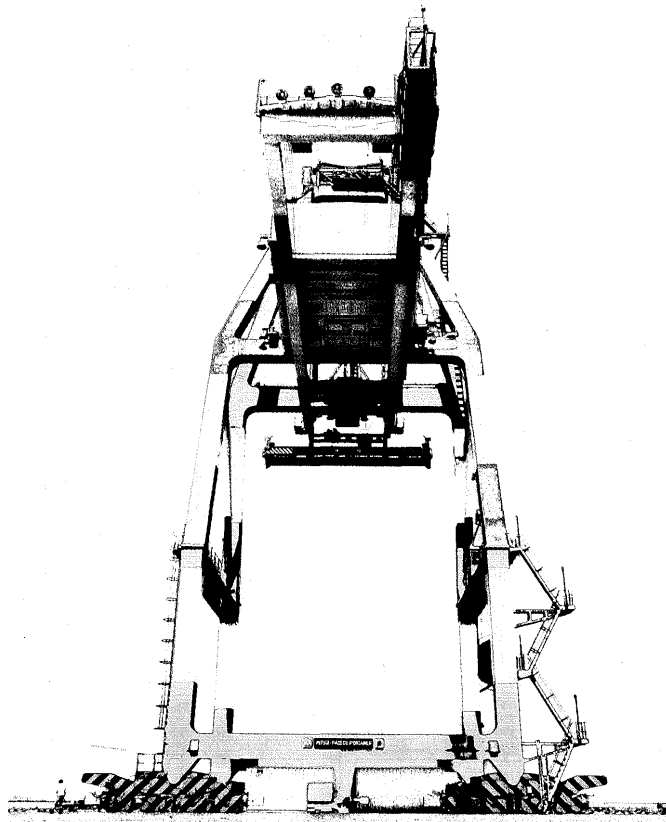


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