Today's huge, ocean-going vessels require modern harbor protection that's 100% adequate. How about the facilities in YOUR port?

Unless it's designed and constructed to accommodate today's mammoth ships, don't automatically assume that YOUR home town port is a 100% safe docking facility. If it's not doing an excellent job of protecting the ships that dock there, we'll tell you what steps to take in planning to MAKE it safe (and economically, too)!

Our TOSBAC-3400 computer system is ideally designed for analyzing various sea wave phenomena—such as the generation of sea waves, currents, mixed currents, shallow water, and so on. Practical application of this modern harbor equipment is exemplified in designing tide-block banks and in preparing computerized data for planning every type of antitide structure for marine facilities.

By putting the TOSBAC-3400 to work for you, your vital port facility can be efficiently and scientifically designed or modified, offering a truly appropriate and safe sanctuary for vessels that cost millions of dollars. And the tremendous manpower savings in planning simply can't be ignored!
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...The cab on the trolley has master controls. You can see and guide all functioning mechanisms fully. Plus, you can sit comfortably in an upholstered, adjustable chair.

You can also get out on the crane for easy inspection and maintenance. But, thanks to super structured steel and new mechanical and electrical engineering design, you can be sure of top performance even under the most difficult situations.

You have a choice of two crane sets from us, too. A patented “semi-rope” trolley gantry crane which eliminates shocks and sway of cargo. And a general purpose gantry crane to handle anything (by interchanging a lifting beam, grab bucket, cargo hook, lifting magnet and scrap ship).

And, you can be assured of quality through the fact that we have been making cranes since 1920 and have delivered over 15,000 sets of them to satisfied customers worldwide.

You can find our container cranes, for example, boosting profits at the U.S.A. Ports of Seattle, Portland and Honolulu.

You, too, can benefit by our scientific know-how through research for top quality. Put yourself in a Hitachi crane and see...
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Nippon Kokan is a steelmaker, shipbuilder, and designer, engineer and constructor of heavy industrial equipment, leading each field with advanced technology and up-to-date facilities.

In steel NKK is one of the world’s most highly computerized multimillion-ton steelmakers. NKK’s steelmaking complexes—the Keihin Works and Fukuyama Works—boast a monthly production of over one million tons.

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Vice-President: Shigeyuki Ohta
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September, 1970 Vol. 15, No. 9

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The Cover:
The Salazar suspension bridge over the Tagus with a central span of 1030 meters.
Cranes are a Sumitomo specialty. Have been for years. Now comes this container crane specially designed for the age of containerization. It provides efficient, safe, and reliable cargo-handling at container terminals.

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National Solution to A National Problem

(Reprinted from “Points North,” July, 1970)
Northland Harbour Board
New Zealand

Whangarei, N.Z.—A “national solution to a national problem” is the way in which the Northern Advocate, in an editorial, welcomes a Northland Harbour Board scheme which would preserve the provincial ports of New Zealand in the container age.

The comment was part of widespread support, from abroad as well as within New Zealand, for the Board’s plan, which is now being studied by the New Zealand Ports Authority.

The Board’s submissions set out in detail the desirability, and feasibility, of a coastal container transport service.

Its 37-page report includes a feasibility study by Dillingham Corporation, an international tug-and-barge company, which states that it would be able to provide a coastal container service if competition from other forms of transport were fair.

The Dillingham study was based on the use of tugs, and barges of 80-container capacity, to carry containers from the provincial ports to Auckland and Wellington.

Mr. Hollis Farwell, Traffic Manager of the Port of Seattle, has told the Board, after reading the submissions, that “you are certainly on the right track” in advocating a service with barges or coastal container vessels.

He cites as an example a service provided by the Alaska Steamship Company, between Seattle and south-eastern Alaska. The company, he says, sold their two container ships and the service is now being performed by barges “to the benefit of both the carrier and the cargo owner.”

Mr. Farwell adds: “I wish you every success in putting across your ideas for a workable and efficient interflow of containers in New Zealand.”

Mr. D. E. Chrisp, Chairman of the Gisborne Harbour Board, welcomed the report with the comment: “The Northland Harbour Board has stated clearly and factually the problems facing all ports today other than the favoured container ports.

“It is essential that the economy of our producing districts be given paramount consideration.”

The Northern Advocate editorial warned that a rail monopoly of container movement (within New Zealand), full and empty, must “put the provincial ports out of business.”

The report, produced by the Board’s Containerisation Committee after many months of study and research, submits that it is vital, in the national interest, to preserve the provincial ports as outlets for export cargo for the time—in the late 1970’s and 1980’s—when New Zealand’s exports to all world markets will have greatly increased.

It says the welfare of New Zealand will always depend upon its three main modes of internal transport—rail, road and coastal shipping—each being employed to the maximum of their economic use.

The Board warns that the “streamlined policy” submitted by the Conference Lines would be “disastrous” for the provincial export ports, for their adjacent communities and their regional areas of primary production; and for New Zealand as a whole.

(‘Under the “streamlined policy,” the Conference Line container ships and conventional ships would call only at Auckland and Wellington, to and from which ports the whole of their New Zealand cargo would be railed).
Port of Lisbon
Historical and Picturesque

General Administration of Port of Lisbon
Portugal

(Excerpts from "The Port of Lisbon in Pictures")

History
Ancient History—The Phoenicians and other Mediterranean peoples called at the port of Lisbon on their voyages to the north of Europe. Ulysses named the city "ALIS UBBO", meaning "Serene Bay".
1948—The discovery of the sea route to India made the port of Lisbon the main European centre for the spice trade.
1760—First general plan of improvements for the port.
1887—Inauguration of the works that marked the beginning of the technical development of the port of Lisbon.
1907—The port began to be managed by the State in an autonomous system.
1926—Building of wharves between Santa Apolónia and Xabregas; of the Matinha pier-bridge, Rocha and Alcântara passenger terminals, Belém and Terreiro do Paço ferryboat landing stages, Alcântara Norte warehouses, etc.
1946—Building of the docks of Poço do Bispo and Pedrouços, Cabo Ruivo pierbridge, Trafaria and Porto Brandão ferryboat landing stages and Xabregas—Poço do Bispo wharves. The Pedrouços fishing facilities also came into operation.
1967—Completion of the first stage of the Margueira shipyard.

Geographical Situation
Lisbon is situated on the most western point of the continent of Europe and is thus a unique port on sea routes linking Europe with Africa and the Americas.
The port of Lisbon, located on the mouth of the river Tagus, covers the whole wide estuary and its banks.
The bar is deep enough for large-draught ships; this fact, coupled with the port's natural conditions of ampleness and safety, makes the port of Lisbon one of the best in Europe.

Jurisdiction
The area under the jurisdiction of the Port of Lisbon Authority comprises approximately the whole of the Tagus estuary and banks. Downstream it is bounded by a line stretching between the São Julião and Bugio towers, and upstream by the Marechal Carmona Bridge at Vila Franca de Xira.
The Tagus estuary has an area of about 32,500 ha. (80,300 acres), and the utilizable shore area is 2,000,000 sq. metres (about 500 acres).

Wharves, Docks and Embankments
The wharves have an over-all length of about 11,000 metres (nearly 7 miles), with water depths ranging between -6.00 and -11.00 metres (by reference to hydrographic zero in the port of Lisbon).
They are as follows:
On the right bank—Pedrouços, Alcântara, Rocha, Santos, Matinha, Jardim do Tabaco, Santa Apolónia and Poço do Bispo.
On the left bank—Portinho da Costa (NATO), Margueira (LISNAVE), Barreiro (CUF) and Comina (SIDERURGIA NACIONAL).
Besides these wharves there are numerous pier-bridges on both banks, the main ones being:
On the right bank—Matinha, Cabo Ruivo, Olivais, Santa Iria and Alhandra.
On the left bank—Trafaria, Porto Brandão, Banática, Olho de Boi, Ginjal and Rosairinho.
These piers make up a total (Continued on Page 11)
Shipyards, in Lisbon, for ships up to 300,000 dwt. (southern bank of the River Tagus)

Alcântara Dock.

Alcântara Dock.
Belém-Alcântara zone with the Belém Tower in the foreground.

Belém—Recreation Dock.
length of about 1,300 metres (about 1,500 yards), their depths ranging between −3.00 and −12.00 metres.

The shelter docks, comprising a total wet area of 430,000 sq. metres (about 107 acres), are as follows:

Pedrouços, Bem Sucesso, Belém, Santo Amaro, Alcântara, Marinha, Terreiro do Trigo, Poço do Bispo and Olivais.

There are also stone-covered sloping embankments totalling some 13,500 metres (nearly 10 miles) which serve to keep the riverside in line and protect the reclaimed land.

Equipment

Railways—About 60 km. (nearly 40 miles), of 1.67 m. normal-gauge track serve the port and link it to the country's general railway system.

Shore equipment — 94 track cranes with a capacity ranging between 12 and 1.2 tons; 13 automobile cranes with between 30 and 1.5 ton capacity; 40 stackers with a capacity ranging between 12,000 and 1,200 kg.; 18 tractors with a haulage capacity of between 20 and 5 tons; 74 trolleys, etc.

Floating equipment—9 tugs with a capacity ranging between 1,500 and 300 HP; 2 bucket dredgers with a maximum output of 500 m³/h; 2 self-propelling spade dredgers with an output ranging between 140 and 40 m³/h; 1 winch with a hoisting capacity of 100 tons; 2 floating cranes with a hoisting capacity of 60 and 30 tons, the latter being self-propelled; 20 landing-stage pontoons; 15 mud barges, two of which are self-propelled, etc.

Besides the equipment belonging to the Port of Lisbon Authority other privately-owned equipment operates in the port.

Shipyards

MARGUEIRA—This shipyard, located on the south bank, is one of the most modern in the world, having been especially designed for the repair of large ships. It comprises two dry docks, measuring 350 m × 54 m × 11 m and 266 m × 42 m × 11 m, respectively, for ships up to 300,000 d.w.t. The nearby yards have the most up-to-date
Shipyards, in Lisbon, for small craft (northern bank of the River Tagus).

Cabo Ruivo pier-bridge, serving the terminal for oil tankers, up to 65,000 tons.

equipment. This shipyard was built and is operated by LISNAVE, a company formed as a result of the association of 7 Portuguese, 3 Dutch and 2 Swedish companies, the majority of the capital being Portuguese.

ROCHA DO CONDE DE OBIDOS — This shipyard, on the north bank, belongs to the Port of Lisbon Authority and is operated under concession by LISNAVE. It has 4 dry docks with lengths of up to 180 metres.

Warehouses and Open-Storage Areas

The utilizable open-storage area of the Port of Lisbon totals 2,000,000 sq. metres (about 500 acres), 100,000 sq. metres (about 25 acres) being the covered area (warehouses). The bonded depot areas consist of Alcântara-Norte, Alcântara-Sul, Santos, Jardim do Tabaco, and Santa Apolónia. The most important is the Alcântara-Norte bonded depot, for goods from the Portuguese overseas provinces.

Fishing

Within the port of Lisbon facilities is situated Portugal’s most important fishing harbour—Pedrouços. All activities connected with coastal, sea and long distance fishing are concentrated here.

The shore facilities are organized to give scope to the tremendous possibilities existing here—to ensure easy offloading of fishing catches and their rapid preparation for plentiful supply to consumers in the most hygienic way and under the most advantageous price conditions.

Passengers

The Port of Lisbon Authority is entrusted with the supervision and control of ferryboat services for cross-river passengers. For this purpose, landing stages were built at Belém, Terreiro do Paço, Trafaria and Porto Brandão.

The ferryboat lines are operated by a number of companies whose fleet carries approximately 30,000,000 passengers every year.

For sea passengers there are the terminals of Rocha do Conde de Obidos and Alcântara, and also the car ferry terminal.
Administration

The port of Lisbon is operated by the Port of Lisbon Authority, an independent organization with full juridical rights, under the Ministry of Communications.

The structure of administration and management of the port of Lisbon is composed of the Board of Directors, the President of the Board of Directors and the Executive Committee. There is also a Technical Committee and an Advisory Board.

<table>
<thead>
<tr>
<th>Year</th>
<th>Sea Traffic</th>
<th>River Traffic</th>
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<tbody>
<tr>
<td>1967</td>
<td>8,253,520</td>
<td>2,336,546</td>
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<tr>
<td>1960</td>
<td>6,098,143</td>
<td>1,049,997</td>
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<tr>
<td>1950</td>
<td>3,928,348</td>
<td>1,009,007</td>
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1969 A Record Year for Traffic at Docks Board Ports

British Transport Docks Board

London, (July 22, 1970):—The 19 nationally-owned ports operated by the British Transport Docks Board dealt with a record 78.7 million tons of traffic during 1969, a 3.2 million-ton increase over 1968, the previous best year. The number of passengers passing through the Board’s ports rose by 18.4 per cent to 2,705,000.

In his report to the Minister of Transport out today, Sir Clifford Dove, C.B.E., E.R.D., Chairman of the Docks Board, states that considerable success attended the activities of the Board during 1969. Existing business expanded and new trades were secured in a year which marked the completion of many major projects and substantial progress of others.

Bulk traffics accounted for the major part of the tonnage handled—petroleum traffic reached 43.8 million tons—but a particularly noteworthy feature of the year’s operations was the continued growth of container and unit load services carrying general cargo. These now operated from nine of the Board’s ports and carried 2,493,000 tons of cargo during 1969.

Major Projects

Capital expenditure by the Board during 1969 amounted to £16.8 million, bringing the total since the Docks Board was formed in 1963 to over £73 million, of which nearly £34 million was financed from its own resources. Additional new works valued at over £23 million were authorized during the year.

The main projects completed during 1969 were the 28-acre Queen Elizabeth Dock at Hull, giving 4,750 ft. of new deep-water quays and including a new container terminal; the Immingham Oil Terminal for tankers of up to 200,000 tons; and the first part of the Southampton Container Terminal, now being extended to nearly five times its present size at a further cost of £14 million to cater for new business. The construction of the new Port Talbot Harbour for 100,000-ton ore carriers was nearing completion at the year end.

At Swansea the new Ferryport roll-on/roll-off terminal was brought into use in May, and at Newport a deep-water container terminal was completed at South Dock. At Goole a scheme to provide three new berths and additional storage accommodation was also completed. Other new works were in progress or completed at several of the Board’s smaller ports.

Finance

Gross receipts during 1969 were £29.6 million, an increase of £1.3 million over the previous year, but against this working expenses, excluding depreciation, rose by £2.5 million to £22.9 million, giving an operating surplus of £6.7 million and a surplus on Revenue Account of £161,367 after charging historic depreciation and interest on the capital debt allocated to Revenue Account. An additional charge of £601,448 to provide for depreciation on a replacement cost basis necessitated a transfer from General Reserve to meet the resultant shortfall of £140,081. Exceptional losses of £4,533,463, relating mainly to premature obsolescence of dredging craft and other plant and equipment due to the effect of technological change and the rationalisation of facilities were also met by transfer from General Reserve.

Staff

The Docks Board’s wages and salaries bill was increased substantially during the year following the introduction of new pay structures resulting from job evaluation and productivity agreements and throughout the year there was notable and welcome freedom from industrial disputes. At the end of 1969 the Board and its subsidiaries employed 11,341 staff including 3,124 registered dockworkers.

Thirty-three courses held at the Docks Board’s residential Staff College at King’s Lynn were attended by 398 students, of whom 30 were from other authorities.

Engineering Research

The demands upon the Board’s Research Station continued to increase during the year and necessitated a larger amount of field work. The experimental investigation into the oscillation of long cylindrical piles in fast-flowing water, commenced in 1968 in collaboration with the National Physical Laboratory, continued as a full-scale field study in association with the Construction Industry Research and Information Association and other interested parties. Another major project is the Humber Estuary Investigation, which is a combined field and model study the purpose of which is to obtain reliable scientific information on which the future development of the Humber can be based.

Dredging

The large quadruple grab dredger ‘Aberavon’ and the new survey launch ‘Soniarus’ ordered last year were delivered and went into service in the South Wales dredging fleet.

Computer Services

The Board’s Computer Centre building, situated adjacent to their Research Station at Southall, was completed in March. An I.C.L. 4-50 computer was installed and on conclusion of satisfactory trials was commissioned in May. A uniform method of data classification and coding was developed so that the capacity of the computer to extract maximum information from the commercial and accounting data might be fully exploited. Programs were being written in a form suitable for use by all ports and for conversion to decimal currency.

Subsidiary and Associated Businesses

The Board’s wholly owned subsidiary stevedoring companies, the Hull and Humber Cargo Handling Co. Ltd., Hart Hull, and General Workers Stevedores Ltd., Grimsby and Immingham, continued to operate successfully throughout the
year.

The Board has a 50 per cent interest in the Southampton Cargo Handling Co. Ltd., and also in the International Cold Storage Co. Ltd., Southampton.

Market Research and Economic Studies

During the year the Board further developed their market research activities. A survey of the origins, destinations and routing of British exports to and imports from the United States and Canada was carried out. Some 4,300 companies were approached and over 68 per cent completed questionnaires. Further surveys of this type are in hand, including a major project covering British trade with the Far East. A long term regional port development study was carried out for the Central Unit for Environmental Planning in connection with the Government's Severnside survey.

Some Facts At a Glance

FINANCE 1969

Operating surplus £6.7 million (1968 £7.9 million)
Net surplus, after providing for historic depreciation and interest £161,367 (1968 £2 million)
Receipts £29.6 million (1968 £28.3 million)
Working expenses, including depreciation on historic cost £25.7 million (1968 £23 million)
Interest £3.7 million

TRADE 1969

Total traffic through the Board's 19 ports 78.7 million tons (1968 75.5 million tons—a rise of 4.3%)
Main Traffic:
Ores 7.915m tons—a drop of 7%
Timber 1.456m tons—a drop of 10.8%
Coal 9.030m tons—a rise of 11.5%
Petroleum 43.828m tons—a rise of 6.6%
Manufactured goods and other commodities 16.504m tons—a rise of 2.3%
Unite load traffic handled 2.5 million tons (1968 1.3 million tons—a rise of 85.5%)
Sale of container ships

Assembly in Japan of World Trade Center Association

WTCA Press Releases

Executives of the World Trade Centers Association have announced plans to establish an automated

1,113 (1968 872)
Sailings of roll-on/roll-off ships 3,146 (1968 2,820)
Number of passengers passing through the ports 2.7 million—a rise of 18.4%
Number of vessels entering and leaving ports 137,706
Net registered tonnage of shipping using ports 108.7 million tons

CAPITAL INVESTMENT 1969

Capital Investment during 1969 £16.8 million
Total since Board's inception in 1963 £73 million

MAJOR SCHEMES 1969

Hull—Queen Elizabeth Dock completed. Comprises 4,750 ft. of quays and 28 acres of deep water. Inaugurated by the Queen in August.
Immingham—Oil terminal completed. Capable of taking 100,000 ton fully laden and 200,000 ton partly laden tankers.
Port Talbot—Construction of new tidal harbour for reception of 100,000 dwt ore carriers almost completed.
Southampton—Container berth completed. Consists of 1,000 ft. quay, linkspan for roll-on/roll-off traffic, two transporter cranes and 20 acres of marshalling area.
Newport—Deep-sea container terminal completed.

STAFF 1969

Total staff employed 11,341 including 3,124 registered dock workers
Training courses 33 attended by 398 staff

inter-trade center file of world trade information services. The plan was described to over 200 delegates to the Association's General Assembly in Tokyo and Kobe, Japan, concluded July 6.

To be called "Interfile," the new service was conceived and will be implemented by the World Trade Center in New York, to be open for first occupancy at the end of year. It is planned that the service will start in New York in mid-1971 and will gradually be extended to include trade centers being developed in major trading capitals around the world.

Interfile will be an automated index to the information resources of hundreds of information agencies cooperating with the New York trade center. As more trade center join Interfile, they will add data on the information resources of their respective regions, using a prescribed format. Thus, an identical file will be available in all the participating trade centers, and the file—and inquiries—will grow with each trade center joining the network.

Hosted by the World Trade Center of Japan, the Assembly was attended by delegates from Belgium, Colombia, France, Denmark, Germany, the Netherlands, New Zealand, the U.S.A. and Japan.

The participants, those planning or interested in establishing world trade centers, were urged to strive for excellence in promoting international commerce and communication. Austin J. Tobin, Honorary Chairman of the Assembly and Executive Director of The Port of New York Authority, which is establishing the New York Trade Center, said:

"The real contribution of a world trade center is not new buildings and office rentals. To be worthy of the name, a world trade center must truly promote inter-
national commerce.”

The delegates cited Gaku Matsumoto, President of the World Trade Center of Japan, for his leadership since 1968 in fostering the concept of an association of trade centers.

Guy F. Tozzoli, Director of the New York project, which has served as headquarters for the Association, was elected President of the international organization. Others elected to the Association’s Board are Pierre Capgras (Paris), Paul Fabry (New Orleans), J. Hagemaa (Rotterdam), G.O.J.A. Nuesink (Amsterdam), Anselme Vernieuwe (Brussels) and T. Yamada (Japan).

Mr. Tozzoli announced that 14 additional organizations were accepted for membership in the Association, bringing the total membership to 38. The World Trade Center of Brussels will host the 1971 General Assembly, with the Association’s programs being developed by working committees in the interim.

The World Trade Centers Association was established in New Orleans in April 1968 to encourage mutual assistance and cooperation among members, promote international business relationships and foster increased participation in world trade by developing nations.

**Resolutions adopted at the WTCA General Assembly**

WHEREAS, it is recognized that trade information services and modern communications facilities are fundamental aspects of world trade center operations; and

WHEREAS, it is desirable that world trade centers should develop an effective information network providing mutual assistance and avoiding duplication whenever possible,

THEREFORE, BE IT RESOLVED, that each member of the World Trade Centers Association should seek to provide extensive trade information services and modern communications facilities, and these services and facilities should be developed in accordance with guidelines established by the Association.

BE IT FURTHER RESOLVED, that each member should develop for its own region a file of data, sources and services as part of an inter-trade center network for information exchange.

WHEREAS, information of value to the world trade community is at present provided by numerous governmental and private agencies;

BE IT THEREFORE RESOLVED, that all members of the World Trade Centers Association should seek to cooperate with existing international trade information services in planning and operating their respective trade information services; and

BE IT FURTHER RESOLVED, that, wherever possible, each world trade center should work with organizations already providing trade information in order to improve the quality and availability of existing information services; and

BE IT FURTHER RESOLVED, that each world trade center should attempt to develop such trade information presently unavailable from existing sources.

WHEREAS, the prime purpose of a world trade center should be to stimulate international commerce by providing for the centralized accommodation of agencies and services devoted to world trade;

BE IT, THEREFORE RESOLVED, that all members of the World Trade Centers Association should adhere as closely as possible to this concept in planning world trade center functions and in arranging for leases and other participation by appropriate government and business organizations.

WHEREAS, it is generally recognized that international trade tends to promote knowledge and understanding among the countries of the world; and

WHEREAS, part of the mission of the World Trade Centers Association is to encourage increased participation in world trade by developing nations, as stipulated in its Constitution;

BE IT, THEREFORE RESOLVED, that the World Trade Centers Association urges all its members to make a special effort to provide data and technical knowledge to assist businessmen and trade groups from developing countries in seeking to increase the flow of international trade through these countries.

WHEREAS, it is the purpose of a world trade center to provide for its tenants and business visitors services tailored to their international business needs;

BE IT, THEREFORE RESOLVED, that all world trade centers should attempt to provide meeting facilities, consumer services, translation services, temporary offices, secretarial aid, graphic services and such other services appropriate to support the objectives and activities of world trade centers.

WHEREAS, world trade center clubs are important components of world trade centers in improving communication and understanding among international businessmen and others interested in foreign trade expansion;

BE IT, THEREFORE RESOLVED, that each member of the World Trade Centers Association should be encouraged to establish a world trade center club, according to guidelines developed by the Association and offering services on a reciprocal basis to members of other world trade center clubs affiliated with the Association.

**WTCA Members (as of 7/6/70)**

**Regular Membership**
- Maryland Port Authority
- World Trade Center Rotterdam
- Massachusetts Port Authority
- Port of Seattle
- WTC of France
- World Trade Center Amsterdam
- The International Center of New England, Inc.
- Port Autonome Du Havre
- International House, New Orleans
- The World Trade Center of Brussels
- The World Trade Center of Belgium
- The Port of New York Authority
- Toronto Harbour Commission
- World Trade Center of Japan
- Harris County Houston Ship Channel Navigation District
- Taylor Woodrow, London

**Associate Membership**
- New Zealand Display Center, Ltd.
- Cleveland Merchandise Mart
- Delaware River Port Authority

(Continued on Next Page Bottom)
Port Authority of Marseilles

No. 3 Tanker Berth Inaugurated
In Gulf of Fos

Port Authority of Marseilles

Marseilles, April 7:—For the first time in continental Europe, Fos now berths 250,000 tons fully loaded ships.

On April 7, 1970, at Fos, berth No. 3, capable of docking ships up to 250,000 dwt, third in a development program which envisages the construction of 5 berths, was put into operation. This new berth was inaugurated by the Liberian tanker Atlantic Prince of West Pacific Shipping, Ltd. (81,596 tons deadweight). Arriving from Forcados (Nigeria), the tanker discharged oil it was carrying for the Shell Co.

Main Features of Berth 3

Tanker berth 3, situated on the Western facade of the quay wall is 500 meters distant from tanker berth 2.

During the first stage, it can dock ships of 250,000 dwt and later, after the sea-bed has been deepened from -21.5 meters to -23 meters, it will be able to dock 300,000 dwt ships.

Tanker berths 2 and 3 are outwardly very similar, differing only in water depth. The alinement of berth 3 is the same as for berth 2, 90 meters from the center line of the quay wall.

It consists of:
—a 180 meter-long quay wall against which ships berth;
—2 mooring pillars on each side of the quay (Ducs d'Albe), one of which serves both berths.

The Quay

This consists of concrete pillars 10 meters in diameter and 0.40 meters in thickness, filled in with pebbles. These 25 meter-high pillars have foundations of -24 meters on a diver adjusted ballast platform.

They are composed of prestressed joints put into place from lighters. They are capped with concrete beams which face the docking area. Between the quay wall and the pier, there is a 120 meter × 100 meter pebbled surface area protected by stone bedding.

The pier has six 150 ton bolards (4 of 100 tons at berth 2) and a new type of docking protectors (made by MECA of Genoa, Italy). A protector consists of 4 sets, each with an axis of tires filled with rubberized canvas. This axis plays back the docking shock to trapezoidal rubber contacts which absorb the force.

There are 6 protectors alongside the pier. Each one can absorb a force of 210 tons × meters for a shock of 1000 tons, and each weighs 12 tons, including the sustaining wire ropes.

Mooring Pillars

Set back from the docking wall, 2 cylindrical concrete pillars connected to the ground by a footbridge, support a mooring system (for end moorings, consisting of 3 sets of 2 hooks, each weighing 100 tons).

Cross mooring is completed by sets of 2 hooks on the quay wall: one at the very foot of the footbridges and the other between the pillars and the ground surface area.

In 1969, the oil trade reached a record level of 56 million tons at Marseilles (51 million tons of crude oil received, and 5 million tons of refined products expedited). Berth 2 alone has, in a one year period, enabled reception of 14 million tons. Much higher tonnages are expected in 1970. Already, in January, 5,576,000 tons of crude were discharged at Lavéra-Fos port facilities—a monthly figure never before registered. Fos thus maintains its position of leadership for the reception of giant ships.
Rochdale Report

(Thamescope, The PLA Monthly June)

Perhaps the most significant event on the UK shipping scene in recent weeks—discounting all the shipyard crises—has been the publication of the long awaited Rochdale report on British shipping. The report, prepared by Lord Rochdale’s committee after more than three years of research, has no big shocks or surprises but includes plenty of recommendations (93 in all) for securing the “prosperous future” forecast for the industry.

Mergers

Further shipping line mergers come high on the list. “We think that there are still too many separate management units within the industry. We fully accept that there will remain a place for some smaller companies; . . . but we feel that further mergers are necessary”, says the report. “There can, however, be no set pattern for these; they must evolve from within the industry and must depend upon the nature of the activity and trade undertaken, as well as on the availability of adequate professional management for the resulting new large organisations”, it adds.

In the deep sea trades, further amalgamation of tramp operators is advised; this is to take advantage of the upsurge in ocean dry bulk traffic also foreseen in the report. The committee also suggests that large groups should be formed within the tanker trades to operate the new generation of giant tankers.

Containerisation

Dealing with containerisation, Rochdale has given a definite “thumbs down” to the long term maintenance of conventional services on established container routes. For example, to handle non-containerisable exports, OCL and ACT have been obliged under agreements concluded with the Australian government to run such a service with conventional ships plying already heavily containerised routes. “We do not consider that any such similar requirements should be imposed by the British government, given the circumstances of the UK’s different and far more widespread trade”, says the report. “Decisions whether to maintain particular services should normally be reached on commercial considerations. We fully recognise that this may mean that the service available to some UK shippers may deteriorate; not only are some freight rates for residual cargo likely to increase but frequency of service must decline and direct services to some ports may be discontinued entirely”, adds the committee.

Containerisation also forms the background to the report’s specific merger recommendation; a link between the fleets of British Rail and the National Freight Corporation under one independent management. Both these fleets are being increasingly equipped for unit load cargo in its various forms—a traffic for which a very bright future on the UK’s short sea routes is confirmed in the report.

Far less promising is the outlook for the other branches of the coastal shipping sector. Without major subsidies, it is thought unlikely that the coastal liner trade can recapture the traffic in manufactured goods already lost to the unit loaders. And with the major exception of oil traffic, the decline in coastwise shipments of bulk goods is also expected to continue. “We see little chance here of any major reversal of fortune, although the trade should continue to provide employment for a small fleet and some highly specialised or transhipment trades might be developed”, comments the report. But the broad hint that the conventional coaster has had its day is subsequently confirmed: “We conclude that the coastal trades should operate in fair competition with inland transport systems and without special assistance”.

Conference System

On the delicate issue of the conference system, the report has come down firmly in favour of its retention. Commenting on this part of the committee’s report, Lord Rochdale said, “A closed conference with fully rationalised sailings appeared to us the most likely to serve the best interests of ship-owners, shippers and the public”. An efficient liner service “cannot generally be provided satisfactorily under conditions of unfettered competition”. But the committee, while it approves of the basic system, feels that it is high time its PR was brought up to date, and suggests that a code of conduct should be drawn up to include published tariffs and more detailed information on conference activities.

However, the committee was evidently unimpressed with the overall profitability of the industry—particularly the sector applicable to conference operations. The report highlights the fact that during the period between 1958 and 1967, investment was greatest in types of ships which proved to be the least profitable. In those nine years, the industry put over 40% of its capital into cargo liner tonnage and gained an average return of only around 4%. But ore carriers—with only 4 1/2% of the investment cake—managed a return of more than 10%. Other types of bulk carriers and tankers also fared better than cargo liners.

Credit Curb

In the three years since the committee began its investigations, much has happened to change the above state of affairs, notably the tremendous growth of containerisation. A shipping and shipbuilding boom, world-wide, resulting in easier credit terms from a sympathetic government, has led to a major shopping spree by British shipowners. Currently they have new tonnage on order worth more than £800 million and it has to be remembered that much of this investment has gone into containership programmes that will ultimately bring far better returns than their cargo liner predecessors ever could.

However, the committee is con-
1 Million Ton Tanker
Eyed By Japanese

(from "Shipping and Trade News," Tokyo)

The question of tanker enlargement has come to the fore since Transport Minister Tomisaburo Hashimoto asked the Transport Technology Council (TTC) for a full-scale study on the technical feasibility of building a tanker in the one-million dw/t class on July 2.

Hashimoto made this request at the inaugural meeting of the TTC which is headed by Masao Yamagata, professor emeritus of Tokyo University.

The subject stated in this request is "A Comprehensive Plan to Explore the Techniques concerning a One-Million-dw/t Tankers."

According to Eiichi Tasaka, director of the ministry's Ship Bureau, the ministry hopes that the council will take as much time as necessary to make this study exhaustive by elaborating on all technical problems involved. There is no time-limit set for a TTC report on this study, he said.

Tasaka then made these points to clarify the background against which the need for such a study has arisen:

--Recently the trend toward tanker enlargement has become particularly marked because of the fast-expanding demand for crude oil the world over.

--Already an order from a British company is pending with a Japanese builder for a 477,000-dw/t tanker.

--In Britain and some other major Western shipbuilding countries, studies are under way on the technical feasibility of tankers in the one-million dw/t class.

With all these trends in view, he said, it is high time for Japan, too, to conduct a comprehensive study of various technical problems involved in the construction and operation of much larger super-tankers.

To be included in the study are not only problems related to hull-making techniques and facilities but also those concerning port and harbor facilities to ensure safe operation of such behemoths of the sea, he said.

"We are seeking solution of all these problems so as to set the right course toward our goal of bringing into reality tankers from 700,000 dw/t to one million dw/t," he said.

The 477,000-dw/t tanker mentioned above is on order from Glotkit Tankers of Britain to Ishikawajima Heavy Industries (IHI). IHI is expected to lay the keel for this ship at its Kure yard in February 1972 and complete it in the same month of the following year.

Upon completion, the tanker will be held under time charter by Tokyo Tanker and ply between Kure, Kagoshima Prefecture, and the Persian Gulf.

The Transport Ministry issued its permit on the 477,000-dw/t tanker on June 29 but not without a set of conditions including very high standards of quality control. It decided on these conditions after carefully going over such aspects of this newbuilding as building techniques and operational safety with governmental and industrial experts.

Naturally, the ministry cannot be overcautious since no seacraft of upwards of 400,000 dw/t has ever taken shape in the world.

Of course, a plethora of problems are inherent in a one-million dw/t tanker since it is more than twice as bulky as IHI's newbuilding.

Yet in terms of the basic dimensions, the differences between the 477,000-dw/t tanker and a one-million dw/t tanker are not as wide as are generally supposed.

In Tokyo Tanker's estimation, the larger tanker would be 492 meters in over-all length against 379 meters of the smaller one, 86 meters in breadth against 62 meters, 48 meters in depth against 36 meters, and 38 meters in draft against...
These figures show that the hull needs not be elongated by the same extent as it must be enlarged breadthwise or depthwise.

At any rate, however, a one-million dw/tonner is a ship of quite an extraordinary size by today's shipbuilding standards.

Judging from the fact that a new epoch has been marked once for every 10 years in the postwar trend toward tanker enlargement here, such a behemoth is still as remote a possibility as about 10 years from now.

To be specific, the largest tanker of the year here jumped from the 16,600-dw/t Sebu Maru of Tokyo Tanker built in 1944 to the 45,000-dw/t Tina Onassis of the Onassis Group constructed in 1953. Then in about 10 years later in 1962, the 130,500-dw/t Nissho Maru of Idemitsu Tanker took shape. Finally, again in about 10 years' time, the 370,000-dw/t Nisiki Maru of Tokyo Tanker is expected to be completed next year.

Obviously, shipbuilding techniques are the kind of industrial skills which can be improved on the sole basis of accumulated experience. It is, therefore, inconceivable for any builder to acquire the capacity of doubling the size of its newbuildings overnight.

For another thing, there will be no order for a one-million dw/t tanker unless it is ascertained as economically payable as a commercial vessel even if any builder has found it well within technical feasibility.

Besides, the builder cannot hope to undertake such a huge job without first equipping itself with sufficiently large building facilities.

Tokyo Tanker, one of the boldest shipowners to operate supertankers here, believes in the economical merits of tanker enlargement.

In the words of Gengo Tsuboi, Tokyo Tanker vice-president, the trend toward larger tankers entails no economic sacrifice on the part of the owners.

He points out that in fact, one 500,000-dw/t tanker can be built at a much smaller cost than two 250,000-dw/t tankers and that to operate a 500,000-dw/tonner is no more costly than to operate a 250,000 dw/tonner in terms of seamen's payrolls.

Tokyo Tanker plans to enlarge the per-ship tonnage of its tanker fleet as much as possible by building or chartering vessels in the largest available class at a rate of one tanker per year.

And it is in line with this plan that the company will add to its fleet Globtik's 477,000-dw/tonner, Tsuboi says.

Incidentally, the All-Japan Seamen's Union (AJSU) is raising objections against the accelerated trend toward tanker enlargement.

Koji Murakami, a member of the AJSU Central Executive Committee, said the union is opposed to any attempt to accelerate this trend without due regard to safety.

Referring to the TTC's study requested by the Transport Minister, the AJSU takes the stand that it should be made broad enough to include safety aspects as well as technological problems, he said.

In view of the fast-increasing demand for oil imports and local shipowners' persistent pursuit of the optimum economic conditions for tanker operation, this trend is simply beyond control.

But the need for safe tanker operation as stressed by the AJSU is admittedly great and as such should not go unheeded by all concerned.

In this connection, due regard must be paid by the TTC in proceeding with its study on a one-million dw/t tanker to the results of the current probe into the causes of accidents involving huge vessels which broke out in recent years. In this probe coordinated by the Transport Ministry, hull weaknesses are suspected as a possible cause of these mishaps.

and the various experts available to the Committee. In it you can get the hard-won knowledge of an industry on questions involving most difficult area.

These questions generally relate to policies that port management should set for maintenance programs. They begin with the long-range approach to maintenance; that is, what quality of construction should be used to require what amount of maintenance cost after construction? Then there is the question of how much maintenance should be done; that is, how well should the port be kept—like new, in reasonable operating condition, or do no maintenance until something quits operating or no longer will fulfill its function? Should there be a preventive maintenance program and, if so, how elaborate should it be? Would it be cheaper to have no maintenance program and only fix things when they break down?

When policy has been made on these questions, then a maintenance program and organization can be set up. Then the question arises: Should the maintenance be done by the port's own forces or should it be done by outside contractors? And the question probably most often asked is, how much should the maintenance cost? This is generally in reference to a percent of investment.

In addition to answering above questions by examples of what various ports are doing and finding as successful methods, there are chapters on the detailed maintenance of various types of port facilities and equipment.

NEW BOOKS

'Port Maintenance'

A definitive manual for port maintenance. This manual is prepared mainly for management and staff, as well as for engineers, and is so written by the Committee.

PORTS and HARBORS
The American Association of Port Authorities, with direct participation by the following committee members:

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Cargo Containers

"Cargo Containers, Their Stowage, Handling and Movement", by Herman D. Tabak.

A comprehensive and detailed guide by a man fully versed in cargo container stowage, handling and movement techniques. This book is directed to all areas of the transportation industry, in one way or another, involved in the movement of cargo containers by land, sea and their eventual integration to air movement.

This is a practical book that covers all phases of containerization. Those in top management, as well as shipping clerks, sales directors, cargo mates, truck and rail terminal people, stevedores and longshoremen—in short, everyone concerned with or interested in the movement of goods by container—will find it a useful and valuable handbook on the subject.

The coverage here is international in scope, dealing with all areas in which containers are a fact of life or are about to become one. Under the following general headings the fully illustrated text covers:

- Documentation: Bills of Lading — Other Export & Import Documents — Banking, Insurance — Customs: Cargo Examination, Container Matriculation.
- Stowage: Container Stresses—Cargo —Packaging of Cargo for Containers—Loading the Containers: Distributing the Load; Securing Methods & Equipment—Stowage of Containers at Plants, at Consolidators, at Piers.
- Movement... By Truck in the U.S.A., & Abroad: Types of Equipment Inland and at Ports—Consolidation & Break-Bulk Depots — Highway Limitations — Regulations—Special Groups.
- Movement... By Rail in the U.S.A., and Abroad: Types of Equipment—Ease of Movement and Interchange — Rail Routes & Limitations — Regulations—Special Groups.
- Movement... By Vessel: Specialized Vessels, Roll-On/Roll-Off, Lift-On/Lift-Off—LASH Conversions—Land Bridge — Ports: Pier Handling-Marshalling Yards—Vessel Stowage and Handling—Vessel Turn-around — Regulations.
- Regulations and Sample Forms: Governmental — International—Trade Organizations & Associations, etc.

References—Glossary of Terms—Index

The Foreword to this book is comprised of Introductory Comments by Warren G. Magnuson, Chairman, United States Senate Committee on Commerce; C. E. Crippen, President, Chicago, Milwaukee, St. Paul and Pacific Railroad Company; Manuel Diaz, President, American Export Isbrandtsen Lines, Inc., and Lee R. Sollenbarger, President, Transcon Lines.


About the Author

H. D. Tabak is presently Vice-President and Director of World Wide Operations of United Cargo Corp., of New York, a Non-Vessel Operating Common Carrier in International Trade by Water. He is a member of International Cargo Handling Coordination Association and of the National Panel of American Arbitration Association. He has travelled extensively overseas in setting up new and reorganizing existing Consolidation and Break-Bulk Terminal programs, educating personnel of both United Cargo and subsidiary carriers in container techniques, arranging inception of services, rail and truck routings overseas and in the U.S., negotiating equipment utilization, rates, etc., with Transport Ministries, railroads, steamship lines and truckers.

Mr. Tabak has worked closely with government authorities, including Customs, in Europe and the U.S.A.; worked with the Port Authorities in Leghorn, Genoa, Rotterdam, London, etc.; designed Tariffs, bills of lading; set up Sales programs, Marketing approaches, Packaging procedures; has written articles for British and U.S. container publications and lectured before various Trade groups.

Previously, Mr. Tabak was
connected for almost twenty years with a steamship company operating Foreign Flag cargo vessels. Starting with the company’s inception, he set up different operating departments in office and on piers—worked with the Federal Maritime Commission—handled administration—surveyed new trade routes and undertook special assignments for vessel owners. The author has participated as consultant in design of specialized vessels and was honored by the Finnish government.

**Tanker**

"TANKER Performance and Cost" by Ernest Gannett.

TANKER PERFORMANCE AND COST, Measurement, Analysis and Management is written to help the tanker operator and manager, large or small, to arrive, from his own fleet operating statistics, at meaningful expressions of demand for his vessels, the supply of ships to meet this demand, the performance of vessels so employed, and the costs arising from these operations. Answers are now available to questions of tanker performance which have long lain dormant for lack of any adequate approach to their measurement. It now becomes possible and practical to measure performance of tankers in a standard term, to compare the performance of one tanker with that of another even under widely different circumstances and on different trade routes, to accumulate the performance of groups of tankers for expressions of fleet performance, and to measure tanker costs in a standard unit.

The Tanker Transportation Unit is introduced as a measurement of tanker demand, supply, performance and cost and provides the means of integration and ready relation of all of these factors.

Tanker Performance and Cost analyzes and puts a finger on the flaws inherent in tanker tonnage measurement methods in common usage and provides the basis for a step-by-step adoption of improved measurement and reporting techniques that any operator can put to immediate use.

Particular factors necessary to implement measurement techniques are identified, and means for the derivation of these from the raw material of any fleet are suggested. The approach to total performance measurement with the concept of Effective Deadweight is unique and yields performance (and cost) data truly significant over a wide range of vessel sizes, voyages, and operating conditions.

Ernest Gannett is well suited to write a book of the nature of Tanker Performance and Cost, for he has had a career of over twenty-five years in the tanker management field where his association with problems of the nature outlined and solved in this book was on a first-hand and day-to-day basis.

His fifteen years of actual sea experience preceding his tanker management career have given Mr. Gannett an appreciation of maritime activities and tanker operations from both the seafarer’s and the landsman’s viewpoint.

- 128 Pages, 6x9” Format, Indexed, $6.50. Cornell Maritime Press, Inc. (See above.)

**Reference Material**

Mr. Georges Charles Louis Maffait, IAPH Individual Supporting Member, wrote a book in French titled “notions d'exploitation des ports maritimes de commerce” (“some ideas about harbour management”). The French Director of Harbours has given an authorization for publishing it, according to the author. The book as offered now, however, is an abound bundle of 194 mimeographed pages of Gestetner type paper, with 27 blue-print pages of diagrams and illustrations inserted. It is likely that this is the format in which the buyer will get the book.

The author describes general port operations such as personnel, cargo handling, warehouses, sheds, harbour stations, customs, ships, port tariffs, budget problems, material cost and amortization, administrative problems, sanitary improvement of littoral zones, port installations, lighting, refrigeration, berthing, quay protection, buoys, antifire and anti-pollution measures, etc. The book has a special value as the author give reliable accounts out of his personal experience in ports of Africa, Mid-East, West Indies and Europe.

The price is US$12.00 including postage, to be paid directly to the author at the following address:

Subdivision Voies Navigables
67 Rue de Torcy
77 Vaires sur Marne
France.

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**Orbiter Probe**

**IAPH News:**

**Mr. Swanson Speaks In New Zealand**

Christchurch, N.Z., April 15: — It was too early to say how the shipping of cargo by containers had affected freight rates, because container companies had been beset by problems, mainly with labour, but the best that could be hoped for was that rates would be held stable, said Mr. V. G. Swanson in Christchurch last evening.

Next, it could be hoped that any increases in freight rates would not be as great as they would have been without container shipping, said Mr. Swanson, who is president of the International Association of Ports and Harbours and chairman of the Melbourne Harbour Trust

PORTS and HARBORS
1IAPH President Swanson in Melbourne had a visit from the Secretary General Mr. Akiyama on Wednesday July 1. Pictured above at luncheon that day are, from left: Commissioner J. P. Webb, O. B. E., Mr. Akiyama, and Mr. Swanson. (Photographer Brian Lloyd, Melbourne Harbor Trust Commissioners) Mr. Akiyama then flew to Canada to discuss the Montreal Conference preparations before returning to Japan July 19.

Commissioners.

Both offices entitle him to recognition as an authority on container shipping. The international association, formed in 1952 and now composed of 330 port authorities in 56 countries, has a special committee on containers collating information from throughout the world. Melbourne has had experience as a container port for coastal and overseas trade.

Mr. Swanson is convinced that the use of containers in shipping is the only way of holding freight costs at a reasonable level. He is not sure yet how the best use can be made of containers.

The cellular-type container ships envisaged for the New Zealand trade by British shipping lines might not be the best answer, he said. The roll-on ships which the Japanese had been using in their trade with Australia had been remarkably effective, and they could handle containers without costly port-side equipment needed for the cellular ships.

The best answer might be the quarter-ramp type of container ship, Mr. Swanson said. All this required was the strengthening of about 200 ft of deck and machines could run on with the cargo in containers.

Mr. Swanson said the container shipping lines tried to keep to a schedule, but they were plagued by labour problems. “You can’t set your watch by them,” he said, “but you can use the calendar.” To prove his point that efficiency has been improved he mentioned that five round trips to Britain had been made by a container ship in a year. “And that’s not bad,” he added.

Mr. Swanson, who is visiting Christchurch for the annual conference of the New Zealand Harbours Association, said that the whole problem of shipping revolved around the cost of labour. Machines must replace men if costs were to be held so that there could be overseas trade without freight rates becoming a predominant part of the cost to the consumer.

Explaining the work of the international association. Mr. Swan-

son said it provided an opportunity of an interchange of views on common port problems. These included the improvement in the turnaround of ships, the most efficient types of port handling facilities and the needs of ports on channel depths and administration.

Conferences were held every two years, but there were three standing committees working between conferences. One dealt with assistance to under-developed countries improving their ports, another with the problems arising from the appearance on the shipping scene of large bulk carriers, and the other with container cargo shipping. (“The Press” Newspaper, Christchurch)

Many IAPH Members

The occasion was the WTCA Japan General Assembly 1970, July 1-6. The WTCA stands for the World Trade Centers Association. The place was the Tokyo World Trade Center Building, 38th floor.

On the first day (July 1) of the Assembly, the participants were told that Mr. Guy F. Tozzoli, Director, World Trade Department, Port of New York Authority, had been elected President that morning. Mr. Austin J. Tobin, Executive Director, P.N.Y.A., was conspicuously present. It was soon found that delegates from New York came out in force ten strong including Mr. William C. Gibson, Far East Director.

New Orleans was also prominently represented again with ten delegates, including Mr. Allen Junkin, Far East Director, Port of New Orleans. From Delaware River Port Authority was Gen. Thomas H. Lipscomb, Executive Director, accompanied by several delegates including Mr. George A. Rose, Assistant Director, World Trade Div., Int’l Trade Development Dept., and Mr. Charles Herman Dickey, Managing Director, Far East.

Mr. Yasunori Herman Matsui, Far East Manager, Massachusetts Port Authority, looked after Boston delegates. Mr. Kazuhiko Asa-
About American Seaports

By Paul A. Amundsen
Executive Director

The American Association of Port Authorities
(Official Organ of the Association)

Washington, D.C.:—Many of our ports are busting at the seams. They are encountering difficulties trying to find waterfront land to meet port and industrial purpose for today and tomorrow. At the same time, Government officials are stressing that port authorities must develop long term land-use plans to determine where future expansion and development will take place and the character of new deep draft terminals.

It is felt that Federal, State and local interests should hear our voice louder and clearer in such areas as land requirements for additional terminals and provision for waterfront industrial and commercial sites. They also should know our thoughts about our pollution abatement program, methods of improving the quality of water and other esthetic aims.

At recent discussions with Federal agencies the need for port planners to participate in planning processes has been emphasized. They stressed that if we are to contribute to meeting the needs of the future, ports should investigate current waterfront land utilization and at the same time estimate the future social and economic factors that would arise, point out the optional uses of these lands, and to synthesize the two. Such planning would, in their opinion, provide sound development procedures, criteria and guides to port communities and Federal agencies for use in connection with channel projects, coastal programs, and urban planning.

In Phase II of AAPA's National Channel Capability Study, each port is assessing its capability to accommodate... in terms of channel depths, widths, lengths, turns and other dimensional characteristics... the significant vessels of the future described in Phase I. The land-use planning will come into play to a certain extent in Phase III as each port focuses on the major problem areas and formulates recommendations as to the acceptable solutions to the local situation.

The problem of water rights is a grave and serious concern and will be more so in the immediate future. A high ranking federal official said that the ports will have to get their areas set out in Land-Use plans in the near future. If not, he warned that the States and the Federal Government would have to act without the use of sound plans available to them.

Under current thinking, the Federal Government will be contributing to the States to establish land use plans. Several Bills before Congress spell this out. Therefore it would be well for the ports to participate in such planning early, particularly at the State level so that the future needs and interests of the ports are protected.

Ports have an aesthetic attraction and are of tremendous economic value to the community. This unique advantage should be capitalized as much as possible in the days ahead.

Port Manager

Ottawa:—George I. Brennan of Halifax has been appointed Port Manager at Churchill, Manitoba, the National Harbours Board announced June 9, 1970.

Ottawa.—George I. Brennan of Halifax has been appointed Port Manager at Churchill, Manitoba, the National Harbours Board announced June 9, 1970.

Coal to Japan

Vancouver:—After months of effort and millions of dollars in construction expenses, the new outerport development at Roberts Bank is scheduled to begin operation.

Vast strip mining operations in the East Kootenays of B.C. have been established by Kaiser Resources Ltd. and unit trains developed for the CPR stand ready to trans-
port thousands of tons of coking coal coastward every day.

At Roberts Bank, where National Harbours Board developed a 50-acre loading terminal linked to shore by a three-mile causeway, another Kaiser subsidiary, Westshore Terminals Ltd., have established $15 million in high-speed loading facilities ready to transfer the coal from train to ships bound for Japan.

Kaiser received first coal at the site in late March. This coal, not of export quality, forms the base of twin storage piles which will have capacity of over 350,000 tons between them.

Unit trains, arriving early in April, left coal for first shipment due in early May.

Existing contracts between Canadian suppliers and the Japanese Steel industry total about $1 billion in value and will see some 8.5 million tons of coal shipped per year for the next 15 years.

First coal shipments to the Japanese steel industry through Neptune Terminals Ltd. in North Vancouver are scheduled to begin early in May.

To date, more than 10,000 tons of coking coal from two Alberta mines have been deposited at the bulk loading site with more carloads arriving daily to fill twin storage areas, each with capacity of some 200,000 tons.

Neptune Terminals has been operating since late 1968 on some 75 acres of reclaimed land at the foot of Chesterfield, North Vancouver, handling outbound shipments of potash and inbound shipments of phosphate rock and rock salt. (News from the Port of Vancouver)

Howard Mann Resigns

Vancouver—Howard A. Mann, National Harbours Board member since 1960, and chairman of the Board since 1961 has resigned his post effective June 15, to enter private business.

Born in Europe, Mr. Mann, 46, graduated with honors in economic and political science from the University of Toronto in 1947. Before his NHB appointment he had been executive manager of the Maritimes Transportation Commission covering the four Atlantic provinces and was also a member of the McPherson Royal Commission on Transportation. (News from the Port of Vancouver)

Stanton Going Strong

Baltimore, Md.:—February of 1970 saw honors accorded to two outstanding members of the Baltimore maritime community for their various services to the port.

On February 10, the Traffic Club of Baltimore—Maryland’s largest club—presented its annual award for outstanding contribution by an individual to transportation in the port to Joseph L. Stanton, executive director of the Maryland Port Authority since its creation in November, 1956.

The award was in the form of an engraved plaque, and the accompanying citation took note of Mr. Stanton’s many years of devoted service to the port and the people who make it run.

Mr. Stanton’s continuing interests in Baltimore’s great seaport began before World War II, when he “covered the waterfront for the Baltimore Evening Sun.” World War II took him to sea duty with the United States Coast Guard all over the world.

A native of Ohio, Mr. Stanton chose to return to Baltimore with the coming of peace. Here he joined the then Association of Commerce as transportation officer and later as director of its Export and Import Bureau, at the time the port’s principal promotional agency.

It was from this position that he resigned to become assistant to the chief and, later, chief of the Public Relations Department of the Baltimore & Ohio Railroad.

He was serving in this post when he was selected to become executive director of the newly created Port Authority. Mr. Stanton’s award was made at a formal dinner at the Lord Baltimore Hotel, with some 450 Traffic Club members on hand for the occasion.

Honored by the Steamship Trade Association of Baltimore on February 5, was Maurice E. Curlee, at a luncheon at the Statler Hilton Hotel. Mr. Curlee, who is an executive of the Lavino Shipping Company, was commended for his long service as a member and holder of various offices within the Steamship Trade Association, as well as for his many activities in behalf of the port’s welfare.

As the retiring president of the Association, Mr. Curlee was presented a silver tray by his colleagues, nearly 100 of whom were in attendance. (Port of Baltimore Bulletin, April)

COFC Fast Transfer

Baltimore, Md.:—The three major railroads serving the Port of Baltimore have all reinforced their COFC (Container-On-Flat-Car) and TOFC (Trailer-On-Flat-Car) services in Baltimore. Of the three, the Western Maryland Railroad, while demonstrating their new equipment, transferred loaded containers, from their delivery position to the railroad container flat car, in 48 seconds, an indication of the speed of handling that shippers benefit from in the Port of Baltimore.

When considered with the fact that inland freight rates for container users are lower than any other major U.S. ports having container services, the significance to shippers and shipowners is more than doubly important.

As to inland freight rates for containers, the great majority of all containers are shipped under variations of tariff Plan 2, most of which is based on mileage. Because of this fact, inland freight costs for containers via Baltimore are significantly cheaper than in any other U.S. port, East, South or West. A totally integrated container port, plus such innovations as the new side-loaders as well as Baltimore’s being in the exact center and closest to these great inland markets, is possibly the reason for its heavily increasing cargo traffic, in the opinion of the concerned officials. “The net result is greatly reduced expense for both shipper and shipowner”, they stated.

It is a well known fact that railroads, anywhere in the world, cannot switch or transfer railway cars...
New Waterfront Park, L.A.

A new waterfront park along the Main Channel at the Port of Los Angeles is one of the attractions in the harbor area’s Beacon Street redevelopment project. Plans call for open space for strolling, pedestrian walkways and viewing areas to watch passing ships and port operations. The project is scheduled for completion in 1977.

efficiently, an inherent problem in railroad operations. In order to help conquer this problem, the Western Maryland Railroad and the other Baltimore railroads are completely modernizing freight transfer facilities.

The side-loader has a lifting capacity of 90,000 lbs. 40 foot containers are handled with ease. The Western Maryland announced that similar equipment has been put into operation in Chicago and intermediate freight centers so that shippers can take advantage of the reduced costs.

Steamship companies also benefit greatly since they no longer must arrange to supply or purchase trailers or chassis for containers, one of the great expenses of containerization. This includes the steamship company problem of having to keep records of where all this ancillary equipment is, day to day.

It was further noted that the new machines were designed particularly for containers and container chassis. Without moving the new machines, they can shift the containers 5.5 feet from side to side, or use this same distance to balance the container load while lifting. A strong additional benefit is that the machine does not have to tilt or slant the containers. Both of these features greatly reduce damage to the cargo. It is also highly flexible because without any delay for adjustment it can both lift the containers from the top, or lift the container on trailers from the bottom. There is no danger then of dropping any cargo while being loaded to WM’s special TTAX flat cars. The new machine by itself weighs 75 tons. (Port of Baltimore News Release)

Container Terminal

Los Angeles, Calif., July 1:—A multi-million dollar expansion of the East-West Container Terminal at the Port of Los Angeles was announced today (Wednesday, July 1) by the Los Angeles Board of Harbor Commissioners.

Bernard J. Caughlin, Harbor Department general manager, said current cargo movement through the terminal is at least 100 per cent more than was originally expected, when the East-West facility began operations nearly two years ago.

“According to reports from representatives of the Japanese shipping firms using the terminal, container shipments are going to increase still more,” Caughlin said.

Harbor Department plans for the facility call for the addition of 120 acres of backland and another 1,700 feet of wharf to the terminal’s present 35 acres and 2,600 feet of wharf. When completed, the facility will be able to accommodate five ships simultaneously and will occupy Berths 121 through 131. Total cost of the expansion is estimated at from $8 million to $10 million with completion scheduled in mid-1973.

The East-West Container Terminal was built at a cost of $6 million for four Japanese shipping firms, who headquarter their containerized cargo operations in
Southern California at the facility. The lines are: Japan Line, Ltd.; Kawasaki Kisen Kaisha, Ltd.; Mitsui O.S.K. Lines, Ltd.; and Yamashita-Shinnihon Steamship Co., Ltd. (Port of Los Angeles)

Office in Panama

New Orleans, La., July 1:—The Port of New Orleans has opened a new trade development office in Panama. Ulysses J. de St. Germain, managing director of Latin American trade development, will head the new operation.

The port at one time manned an office in Lima, Peru, but in recent years, coverage of Latin American commerce has been handled by the New Orleans staff.

De St. Germain will promote trade for the port in Central and South America and the Caribbean. Panama was chosen as his headquarters because of its ready accessibility to the entire area, which is the port's principal trade market.

In 1969, 55% of the port's import tonnage and 35% of import dollars were from Latin America. Exports to Latin America accounted for 14% of total tonnage and 26% of total dollars. Principal imports are coffee, sugar and bananas. Principal exports are grain and machinery.

Thirty steamship lines make regular calls between New Orleans and more than 80 Latin American ports.

The opening of the Panama office is part of the port's expansion program in conjunction with its long-range CENTROPORT USA development plan. A Brussels and an Australian office were recently opened, and a second agent has been added to the Far East Office in Tokyo. New Orleans already operates two-men offices in New York, Chicago, and St. Louis. All of these offices are under the direction of James W. Martin, deputy port director for trade development.

The trade development agents distribute current information about the port's services, facilities and routing advantages and help shippers direct new or special cargoes thru the port.

Address of the Panama office is Edificio Tapia 3-02, Calle 31 y Avenida Justo Arosemena, Panama 3, Republic of Panama. (Port of New Orleans)

Barkerding Quits

New Orleans, La., July 1:—Robert R. Barkerding, Sr., has resigned as executive port director and general manager of the Port of New Orleans. He resigned in order to assume the presidency of Texas Transport & Terminal, Inc., steamship agents with whom he was affiliated before accepting leadership of the port on October 1, 1969.

Dr. Joseph S. D'Antoni, president of the Board, said, "We regret that Bob Barkerding has resigned. We appreciate his many contributions to the development of this port, first as commissioner, then as president of the Dock Board, and as port director. His resignation will have no material effect on the long-range plans to build the port into one of the greatest in the world."

Associate port directors William H. Lewis and Edward S. Reed have been named acting port directors until the Board selects a permanent director. This is the same arrangement under which the port operated for more than a year between the death of the late port manager W. J. Amoss, Sr. and the selection of Barkerding.

"The cooperation which the Commissioners, and all the Dock Board staff, have extended is unequalled in my experience, and deeply appreciated. This Board is a winning team, which I am confident will go on to one success after another," said Barkerding. (Port of New Orleans)

Port of Call

Oakland, Calif., July 2:—United States Lines has selected the Port of Oakland as port of call on the West Coast for a new container service between the West Coast and the Orient, Ben E. Nutter, Executive Director of the Port of Oakland announced today.

U.S. Lines will base its operation at the Port's Seventh Street Terminal and will begin service September 1, 1970, Nutter said.

The steamship line has contracted with Marine Terminals Corporation, which operates Berths H and Berths I and J, presently under construction, at the mammoth 140-acre complex. Berth I will be completed in time for the first ship.

U.S. will offer weekly trans-Pacific service with eight new, fast Lancer-class container ships. The line will also offer direct service to the East Coast with the same ships and to Europe.

By the end of 1971, U.S. Lines expects to move to a new, larger location on the Oakland waterfront. A terminal site is currently under negotiation, Nutter said.

At its regular meeting today, the Oakland Board of Port Commissioners took steps to facilitate the handling of the increased number of containers with the authorization to negotiate the purchase of an additional container crane for the terminal.

Port President William Walters said it was possible to purchase by direct negotiation another Paceco low-profile portainer container crane for not more than $1,090,000 and have it installed and in operation by February 15, 1971.

The crane will be similar to two low-profile portainers already at the terminal serving Berths G and H and the new Berth I. It will be the tenth container crane in service at the Port of Oakland and fifth at the Seventh Street Terminal. This total of ten is greater than at any other port in the world aside from New York.

The need for the additional crane is even more intense, Walters said, with the new container service of East Asiatic Company and Blue Star Line expected to begin at the same terminal in mid-1971.

The three steamship lines bring to 13 the number of container lines serving the Port of Oakland.

More than three million tons of containerized cargo moved through Oakland last year, and figures for this year are approximately 25 percent ahead of last year's pace, Walters said. (Port of Oakland)
Off the Tax Roll

San Diego, Calif., July 2—The Board of Port Commissioners of the Port of San Diego this week approved a budget ordinance which will allow the Port District to continue its remaining off the tax rolls for at least a second successive year.

The San Diego Unified Port District was able to remove itself from the tax rolls for Fiscal Year 1969~1970 and once again no tax revenues will be required to operate the port's facilities for the ongoing fiscal accounting period.

The budget, as presented by Port Director Don L. Nay and approved by the Commission shows a total operating requirement of $9,365,563 which compares to the operating requirement set in last year's budget of $8,252,808, an increase of 13 percent. However, estimated revenues for FY 69-70 will move nearly approximate $7,430,000 dollars, according to the Port Director's analysis.

Operating revenues are expected to total $7,392,000, a figure comparable to the sum of $6,330,000 for the previous budget.

Included in the total requirement figure is $5,060,310 for operations, including District force capitalized work and a total of $1,311,000 for annual capital outlay.

Late changes in the budget included deletion of a $25,000 Port maintenance barge and the addition of mobile fire extinguishers for use on the Port's marine terminals.

Lorenz H. Ruehle of National City, California, Chairman of the Board stated that the budget presentation reflected the fiscal stability of the Port District and that it met with the unanimous approval of the Board of Port Commissioners.

The Commission members expressed some concern over the decline of unencumbered reserves since 1960. Ruehle noted that the drop in reserve figures is partly accounted for by the debt requirement which the District has now assumed, commenting that a change as a non-user of tax revenues meets with my approbation and that of every member of the Commission. In my view it is a direct result of sound fiscal planning and management.” Ruehle also cautioned that “while every effort will be made to maintain this situation of no tax burden, that rising costs of construction and maintenance of planned and existing facilities may dictate re-evaluation of the “no-tax” posture at some point of time in the future.”

The Board chief further stated that although there have been indications of a cooling off in the economy that projections for Port revenue for the ensuing year remain bright.

“Passenger travel through Lindbergh Field has fallen slightly during the past two months which reflects a tightening of the economy and probably a slowdown in tourism. However, our maritime cargo tonnage is up again this year although not as dramatically as the rise in 1969,” Ruehle went on to note in comments made following budget affirmation at the final meeting of the Commission for the fiscal period which ended on June 30. (Port of San Diego News Release)

Agent in Seoul

San Francisco, Calif., July 20—The Port of San Francisco has further beefed up its overseas sales force with the appointment of a part-time representative in Korea.

Port Director Miriam E. Wolff announced the selection of Aloysius W. Choi of (P.O. Box 244, Kwanghwamoon), Seoul, Korea.

Choi, 37, who holds a master's degree in international relations and foreign languages from the California State College, Los Angeles, also has a substantial maritime background.

Following teaching assignments
at the University of Maryland and East Los Angeles College, Choi worked as traffic manager and district freight agent for the Waterman Steamship Corp. in Los Angeles from 1960–63. For the next five years he moved from sales manager for the Fred F. Noonan Co., steamship agents, to vice president, Far East operations, also in Los Angeles.

From 1963 to date he has been resident U.S. Plywood buyer’s representative in Korea.

Although a native of Seoul, Choi now is a U.S. citizen. He is a member of the American Academy of Political and Social Sciences, American Management Group, and the American Chamber of Commerce in Korea, among other groups.

Choi holds a certificate of merit from the Republic of Korea government and a certificate of appreciation from the American-Korean Businessmen’s Association, both for promotion of U.S.-Korea Trade. (Port of San Francisco)

Agent in New York

Savannah, Ga.: — J. D. Holt, Executive Director of the Georgia Ports Authority, announces the appointment of Neil Rullo as Eastern Traffic Representative. Mr. Rullo will join G.P.A. Traffic Representative Walter Hauser in the operation of the Authority’s New York office.

Commenting on the appointment, Holt stated: “The Authority’s worldwide sales offices located in New York, Chicago, Atlanta, Bonn and Tokyo are a vital facet in the growth and progress of Georgia’s extensive port development program, and we are, indeed, delighted to have a man of Mr. Rullo’s extensive transportation experience join the Authority’s sales organization.”

Mr. Rullo began his career in foreign commerce in 1955, when he joined the N.Y.K. Line as Assistant Traffic Manager and Sales Representative. In 1958 Mr. Rullo left N.Y.K. to assume the duties of Manager of the Virginia State Ports Authority’s New York sales office.

For the past five years, Mr. Rullo has been associated with the San Francisco Port Commission as Eastern Regional Manager in New York, maintaining an extensive sales program in the northeastern and midwestern areas of the United States.

Mr. Rullo is a member of the Downtown Athletic Club, Wilmington, Delaware Traffic Club, World Trade Club of St. Louis, World Trade Club of Minneapolis, and the International Commerce Club of Chicago. (Georgia Ports Authority)

To All Shipping Agents:

Aden Port Trust
18th May, 1970

Cleaning Deepening and Extension of the Port of Aden

I have the pleasure to inform you that the Aden Port Trust has made arrangements for dredging the Port of Aden. The operation which has commenced on 9th April, 1970, will consist of the following:

(1) Cleaning of the main channels and the Inner Harbour to reinstate the advertised depths.

(2) Deepening of the Inner Harbour as follows:

(a) Deepening the entrance channel to the Inner Harbour and the 36 ft. deep area together with the dolphins to 40 ft. The 41 ft. deep anchorage area will be deepened to 43 ft.

(b) The 18 ft. area will be partially dredged to 26 ft. This includes the approach channel to the Home Trade Quay at Maalla wharf and the turning basin which will also be extended in length to 1,000 ft. and in breadth to 1,000 ft. while the approach channel will be widened to 350 ft.

(c) A 20 ft. deep channel will be dredged to the Trading Estate and the existing channel of 9 ft. depth will be dredged to 20 ft. The area adjoining the Trading Estate will be deepened to 20 ft. also.

I should be grateful if you would inform your Principals of the new project outlined above and which we expect will be finished by the end of 1970 since the operation is being carried out by two dredgers simultaneously. I take this opportunity also to assure you that the Aden Port Trust will continue to develop the Port of Aden with a view to rendering the best service to all ships that call at the Port.

Yours faithfully,
General Manager
Aden Port Trust

SUMMARY

Inner Harbour:

(a) Cleaning to regain declared depths as follows:

<table>
<thead>
<tr>
<th>Channel</th>
<th>Depth</th>
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</thead>
<tbody>
<tr>
<td>Entrance Channel</td>
<td>36 ft</td>
</tr>
<tr>
<td>Berthing Area</td>
<td>36 ft</td>
</tr>
<tr>
<td>2 Dolphin Berths</td>
<td>39 ft</td>
</tr>
<tr>
<td>One Deep Anchorage</td>
<td>41 ft</td>
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<tr>
<td>Berth</td>
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<tr>
<td>30 ft. deep area</td>
<td>30 ft</td>
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<td>18 ft. deep area</td>
<td>18 ft</td>
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<tr>
<td>Approach Channel</td>
<td></td>
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<tr>
<td>Home Trade Quay and</td>
<td></td>
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<tr>
<td>turning area</td>
<td>18 ft</td>
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</table>

(b) Deepening of advertised depths as follows:

<table>
<thead>
<tr>
<th>Channel</th>
<th>Depth</th>
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<tbody>
<tr>
<td>Entrance Channel</td>
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<td>43 ft</td>
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<td>Berth</td>
<td></td>
</tr>
<tr>
<td>30 ft. deep area</td>
<td>30 ft</td>
</tr>
<tr>
<td>18 ft. deep area</td>
<td>26 ft</td>
</tr>
</tbody>
</table>

Approach Channel to
Home Trade Quay and turning area : 26 ft.

(c) Extension and further deepening as follows:
- Breadth of approach channel to Home Trade Quay to increase from 200 ft. to 350 ft.
- Length and breadth of turning basin at Home Trade Quay which is 500 ft. long and 500 ft. wide respectively to be increased to 1,000 ft. in each dimension.

A new 20 ft. deep channel will be dredged from the present 18 ft. deep approach channel leading to the Home Trade Quay to the 9 ft. deep area at the Trading Estate.

In addition, the existing channel between the 18 ft. deep approach channel and the 9 ft. deep area at the Trading Estate will also be deepened to 20 ft.

The 9 ft. area at Trading Estate will be dredged to 20 ft.

Passenger Terminal

Adelaide, S.A., 13th July:—A start is to be made almost immediately on the construction of a modern two-storey passenger terminal at Outer Harbor, the Minister of Marine, Mr. J. D. Corcoran, said today.

The terminal will be erected on the site of the present No. 2 cargo shed.

Mr. Corcoran said that Cabinet had approved the expenditure of an estimated $1.2 million on the project.

The terminal would be glass fronted, steel framed and either brick or exposed aggregate exterior. It would be 380' long and 100' wide.

Its construction would be virtually the final step in the upgrading of Outer Harbor facilities begun several years ago.

Already $400,000 had been spent in the past four years by the Department of Marine and Harbors on ancillary works leading up to the construction of the terminal proper.

Mr. Corcoran said the wharf itself had been largely reconstructed, an up to date restaurant built, new access roads completed, modern street lighting installed, redundant railway tracks removed and many trees and shrubs planted.

First task in construction of the terminal will be demolition of the major portion of No. 2 cargo shed. The small section now housing H.M. Customs will be retained until the modern facilities are available in the new building.

Mr. Corcoran said the Marine and Harbors Department would carry out the fabrication and erection of the steel framework of the building and while this was being done, tenders would be prepared for the final stage, the cladding, decor and furnishings.

The whole job would take about two years.

The new terminal will incorporate a ground floor cargo and baggage shed.

On the first floor there will be ample space for passenger needs and Customs procedures. This will be at gangway level with liners moored at the wharfside. Escalators and lifts will run between the ground and first floors.

Mr. Corcoran said the addition of the terminal would bring Outer Harbor into line with other major Australian ports.

"I will go further", he added, "it will put us ahead. Outer harbor has been much criticised and too often unfairly criticised.

"When Outer Harbor has this long-needed cover from the weather for passengers, it will more than hold its own with any passenger port in Australia.

"We alone of the major ports have room to spread ourselves and, if necessary, expand.

"Work over recent years has provided the harborside with a well planned backdrop that is both attractive and utilitarian."

The Minister concluded: "Outer Harbor has convenient transport provisions. Embarking passengers from regular scheduled voyages and from the increasing cruise traffic will have choice of trains, buses, taxis or private cars to the city. All are handy to the terminal site." (South Australia Minister of Marine, Adelaide)

Development Projects

Melbourne:—The transformation of the land area behind the east side of Swanson Dock and Appleton Dock is now taking shape as several development projects, undertaken by Port Authority engineers, and contractors working for private cargo handling organisations at a total cost of nine million dollars, are nearing the final stages of completion.

The development projects—most of which are scheduled to be in operation by November — include wharf and land development and the provision of a twin lift container crane by the Port Authority at a total cost of $5½ million; terminal and depot extensions and the provision of additional equipment by Liner Services Pty. Ltd. amounting to $2½ million; and initial depot extensions and consolidation and additional equipment by Freightbases Pty. Ltd. amounting to $1 million.

An artist's impression of how the area will look can be seen on the next page.

The Melbourne Harbor Trust Commissioners have been fortunate in having a land area amounting to 530 acres in and around the Swanson Dock-Appleton Dock berths, which over the years has always been earmarked for future port development.

Land and water areas in the Port of Melbourne have been vested in the Commissioners since the Port Authority was established in 1877, and most of the land now under development was former swamp land which has been reclaimed.

From a financial point of view such reclamation of what was considered largely useless swamp area could only have been undertaken economically by an instrumentality such as a Port Authority which has at its disposal large quantities of material resulting from an integral and extensive dredging operation. It is generally considered that the costs involved in reclamation and in the much heavier foundations necessary was generally uneconomic
This is an artist's impression of how the area behind the Swanson Dock-Appleton Dock berths will look when completed. Most of the development with the exception of Berth No. 2 East will be completed about November. (Melbourne H.T. Port Gazette, June, 1970)

for most individual commercial and industrial undertakings.

All of the $9 million development projects are associated with the provision of berths and cargo handling facilities for container and unit load operations.

Work done by the Melbourne Harbor Trust Commissioners consists of the completion by November of Berth No. 1 East Swanson Dock, and continuation of work on Berth No. 2 East Swanson Dock.

The various components of the twin lift container crane currently under construction by Deer Park Engineering Company Pty. Ltd. of Melbourne at a total cost of $800,000 including spare parts, are due to arrive at the berth shortly for final assembly.

Final surfacing of a nine acre common user container stacking area will also begin shortly as filling and grading work nears completion. This area will be worked in conjunction with the two berths which will also be operated on a common user basis by the Port Authority.

Road construction of Swanson Dock Road along the rear of the berths and McKay Road, an access road adjoining the common user container area, is also under way.

The greater part of the development projects by private cargo operators in the area at this stage is the work being done by the company in extending its depot and terminal facilities from the existing six acres over the entire 28 acres which is under lease from the Port Authority.

The company has already spent $1/2 million in developing the present facilities, which have been in operation for 18 months.

The company at present operates terminal and depot for ships and cargo of Scandinavian shipowners trading to Europe, the Swedish Australia West Pacific Line trading to Japan, and the American Farrell Line trading to the United States, which will introduce their first all-container ship early in 1971.

The development work consists of:
- The extension into the terminal-depot of rail facilities from Appleton Dock — expected to be completed by August.
- The provision of a new cargo shed catering entirely for import cargo, which is considered to be of a revolutionary design covering an area of 156,000 square feet, and measuring 650 ft. long and 240 ft. wide. The shed is divided lengthwise into three 80 ft. wide areas, the two on the sides catering for cargo unloaded from containers with the centre area giving access for transport to pick up cargo consignments.
- The provision of a new cargo stacker-unloader costing $450,000 — two of which will have twin-lift capacity for the transport of 20 ft. containers between the terminal stack and the ship, and two with single container capacity to service road and rail transport, as well as feeding to and from the ship’s side if required.
- The company is also completely re-designing its cargo flow and transit stacking pattern, and the existing cargo shed measuring 650 ft. long and 120 ft. wide will be changed to handle only export cargo which has to be containerised and unised.
- This company is currently operating a container cargo depot on a 20 acre site leased from the Port Authority.

The company is at present providing depot facilities for the cargo handled by the container ships of A.C.T. and the Australian National Line trading to the United Kingdom, the N.Y.K. and Yamashita Lines to Japan, and the container and unit load ships of the Eastern Seaboard Service also oper-
atiting to Japan.

The company will shortly handle cargo from the East Coast North America service, and for Seabridge, the European container consortium, whose five ships will begin to arrive at the end of this year.

The company at present is operating with a 55,000 sq. ft. cargo shed and a container stacking, loading and discharge area. By the end of this month a second 30,000 square foot cargo shed is expected to be completed to cater principally for the Japanese services, while a third 32,500 sq. ft. shed is expected to be completed by the end of September to cater for cargo in the Seabridge and the E.C.N.A. services.

The company is also redesigning its container stacking and transit area, as well as the cargo flow in and out of the depot, which is already fitted with rail facilities.

It is intended to stack empty containers three high according to company marking and types of containers, while full containers will be stacked two high on the 1221 principle.

To cater for the changed container handling, new equipment to be provided includes a side loader for 40 ft. containers which will be added to the company's existing fleet of equipment (Melbourne Harbor Trust Port Gazette, June)

**Dumped Wool**

Melbourne:—The largest single shipment of high density dumped wool left the Port of Melbourne in April in the Soviet Union’s 6,731 g.t. freighter “Novoaltaisk”, destined for ports of Leningrad and Riga.

The ship, one of the Baltic Steamship Company’s fleet sailing in the Australia to Europe Conference, lifted 11,082 bales of high density dumped wool out of Melbourne, as well as 3,060 bales of scoured wool and 941 bales of greasy wool. The “Novoaltaisk” also lifted 200 tons of dried fruit, scheelrite, sausage casings, sheepskins and outboard motors out of Melbourne for Hamburg. All wool for the U.S.S.R. destinations is now being high density dumped wherever possible depending on dumping capacity available in Australia.

The ship also loaded wool and other general cargo at Brisbane, Sydney, Adelaide and Fremantle.

In Melbourne, wool is high density dumped in the Swanson Dock, Appleton Dock area of the port by Wooldumpers (Vic.) Pty. Ltd., and the company's average size bale for high density dumped wool is 9-10 cubic feet, with medium density measuring an average of 12 cubic feet. The normal standard dump is about 18-20 cubic feet but the machines at Wooldumpers average about 15 cubic feet for a standard dump bale.

At this stage, Soviet ships load wool in the conventional manner, because the high density dumped wool takes up considerably less space in the ships, allowing a greater quantity of general cargo to be lifted.

However, a large quantity of wool is now leaving Melbourne for other destinations in containers, and again the high density dumped wool allows about 95 bales in a standard 20 ft. container, compared with about 75 of medium density and about 63 of standard dumped bales.

Wooldumpers Pty. Ltd. operate in a ten-acre area, and their present shed measuring 300 ft. by 370 ft. houses four high-density wool dumping machines, which have a capacity to dump 2,000 bales per day. The company has a further five machines on order to bring the number of machines to nine, and extensions are underway to increase the size of the shed by a further 200 feet.

Bales of dumped wool are loaded into containers, which are handled at one end of the shed by a bridge crane, which handles the containers on and off road transports, and also stacks them two high for temporary storage and loading. The crane handles 20 ft. as well as 40 ft. containers, which are now passing through the port in increasing numbers. (Melbourne Harbor Trust Port Gazette, May)

**Record Trade**

Sydney, 20th July:—The total trade handled by the Ports of New South Wales during the year ended 30th June, 1970, exceeded 50 million tons for the first time.

This was announced in Sydney today by the President of the Maritime Services Board, Mr. W.H. Brotherson, who said that individual records have been established in the Ports of Sydney, Newcastle and Port Kembla whilst the trade of Botany Bay and the smaller ports of the State had decreased slightly when compared with last year.

Mr. Brotherson said the trade of the Port of Sydney totalled 16.9 million tons, this being an increase of 1 1/2 million tons over last year's record.

The tonnage through Newcastle and Port Kembla was 15 1/5 million and 12 million tons respectively. This represented an improvement of approximately 1 1/2 million tons over the previous years record figures at Newcastle and 1 million tons at Port Kembla.

The trade of the port of Botany Bay reduced from 7.2 million tons last year to 7 million tons during 1969/70.

The aggregate trade of the outports of the State was 200,000 tons compared with 265,000 during 1968/69.

**Sydney**

Commenting on the increase in trade in Sydney, Mr. Brotherson said that a remarkable feature was the very great increase in the volume of general cargo handled.

He described general cargo as goods, such as consumer items, which are normally processed through a cargo shed.

He said the usual annual increase in general cargo is of the order of 6% to 8% but during the 1969/70 financial year it increased by almost 1 million tons to 5.9 million tons, representing an increase of slightly more than 19%.

Mr. Brotherson said that a significant feature was that more than 1 million tons of the general cargo of the port moved in containers, this
being the first full year during which containers have been handled in numbers in the port.

He said the introduction of container ships operating a regular interstate service also contributed greatly to the increase of 39% in the volume of interstate general cargo handled through the port during the year.

Newcastle

Although imports and exports handled through the Port of Newcastle both increased in total, Mr. Brotherson said the factor contributing mainly to the record volume of trade was the increase of almost 1.2 million tons to 6.5 million tons in coal exports.

He added, however, that wheat exports had also increased and that substantial rises in the tonnages of petroleum products, ironstone and other raw materials imported into Newcastle reflected the continued industrial growth of the district.

Port Kembla

Although fractional decreases were recorded in the tonnage of imports into Port Kembla in both the overseas and coastal trades, exports increased substantially.

Mr. Brotherson said the main contributing factor to the record volume of cargo handled at Port Kembla was the coal trade.

He said that coal exports increased by 1.2 million tons during 1969/70 to reach the new record level of 3.1 million tons. (The Maritime Services Board of N.S.W.)

Tower at Millers Point

Sydney:—The Maritime Services Board will build a 200' high tower at Millers Point.

This was announced in Sydney today by Mr. W.H. Brotherson, President of the Maritime Services Board, who said that approval in principle had been given to the proposal by the City Council.

The tower, which will be located in Dibbs Street, Millers Point, will be used by the Maritime Services Board in connection with its Port Operations and Information Service.

Mr. Brotherson said that, with the increasing size of ships using the harbour, the Board introduced a system some time ago to provide inter-communication by wireless between ships moving in the harbour and its Port Operations and Information Service.

He said that the staff of Master Mariners manning the Port Operations Service were at present located in the Board's Head Office at Circular Quay but they will be moved to the tower when it comes into service.

This will provide a greater degree of visibility and will facilitate the inter-communications system.

Mr. Brotherson said that, in accordance with present requirements, ships must be given a clearance by the Port Operations Officer before entering the harbour or before leaving a berth to proceed to sea.

During their passage through the harbour, ships are obliged to call on a frequency available to all other ships in the port and give details of their positions at certain stated points.

In this way, all ships in motion on the harbour are aware of the position of the others.

Mr. Brotherson said the tower which should be in operation within about 12 months will cost approximately $300,000. He said it
Asia-Oceania

will become a landmark so far as ships are concerned and will be up to world standards as a safety measure for the large number of commercial vessels using the port.

The Port Operations and Information Service operates 24 hours a day for 7 days per week (The Maritime Services Board of N.S.W.)

Dredge of Iron Cove

Sydney, 26th June:—A unique agreement had been reached between the Ashfield Municipal Council, the Drummoyne Municipal Council, the Metropolitan Water Sewerage & Drainage Board and the Maritime Services Board which will allow of the dredging of Iron Cove, a large bay fronting the residential districts of the Municipalities, to a depth of 2 ft. below low water. The estimated cost of the project approaches $12 million.

This was announced in Sydney today by Mr. W.H. Brotherson, President of the Maritime Services Board, who said that siltation had occurred in the Bay over many years and that, apart from the aesthetics and annoyance created by the odour emanating from the mud flat, it was necessary to undertake dredging to permit the stormwater channels emptying into the bay to operate effectively.

Mr. Brotherson pointed out that the Board had commissioned an hydraulics study to ascertain the origin of the siltation and the investigations carried out confirmed that the major siltation had come from land sources and entered the bay by way of the stormwater channels draining the foreshore districts of surface rainwater and emptying into it.

On this basis, the local councils had agreed to share one-third of the cost of the dredging, whilst the Water Board and Maritime Services Board will each bear one-third, thereby allowing the work to be put in hand.

The agreement, which is the first of its type to provide for such a sharing of the cost of removing siltation from the head of a large bay in Sydney Harbour, was facilitated by the recognition that the siltation was not due to tidal effects but was caused principally by run-off from harbour-front municipalities in the area. As a consequence, those concerned have accepted their share of responsibility in the matter, and the Maritime Services Board will now arrange for the letting of the necessary contract for the work which will also involve the use of certain units of the Board's floating plant. (The Maritime Services Board of N.S.W.)

2nd LASH Ship

Tokyo, July 22:—Sumitomo Shipbuilding & Machinery Co., Ltd. delivered the second 43,541 dwt LASH ship, m.v. "ATLANTIC FOREST", at our Uraga Shipbuilding Yard in Yokosuka, for A/S Moslash Shipping Company, Norway, on July 21, 1970.

This is the second LASH ship following the world's first LASH ship "ACADIA FOREST" completed last September. As well as the first LASH ship, she will be operated under charter party with Central Gulf Steamship Corporation of the United States on a long-term charter basis, and will sail between U.S. and Europe. The two vessels will serve the prompt door to door sea-transportation.

Main Particulars

Owner
A/S Moslash Shipping Company
Gross Tonnage: 36,870 T
Deadweight: 43,541' LT
Length (b.p.): 234.00 m
Breadth (moulded): 32.50 m
Depth (moulded): 18.29 m
Draft (moulded): 11.28 m
Main Engine
Sumitomo-Sulzer Diesel Engine
9RND90 MCR 26,000 PS × 122 rpm 1 set
Speed
Service: 19.47 Knots
Trial: 20.55 Knots
Cargo Handling Equipment
510-short ton LASH Lighter
Gantry Crane 1 set
No. of Lighters on Board: 73
Max. Cargo: 370 T
Classification: NV
Date of Construction
Keel-laying—November 24, 1969
Launching—March 9, 1970
Delivery—July 21, 1970
Hull No.: 928

Outline of LASH System

LASH system is a patent developed by LASH Systems Inc. of U.S., and is consisted of the ship component, the massive gantry crane component and the series of lighters. Briefly, the system may be said to be similar to containerization system, for the lighters with
Kobe Port Island, 1st Container Berth

At the recently completed first container berth on the Port Island of Kobe, Sea-Land's full-container ship "Panama", the first ship to berth there, is seen above loading containers on July 10, 1970. (Photo Kobe City)

cargoes can be loaded and unloaded as they are. It may be called "door to door" transportation system that can send cargoes from the shipper's wharf to the consignee's without any transshipment.

The Outstanding Features of LASH System
1) Cargo handling operation can be done irrespective of the depth of the water & congestion of the port.
2) Realization of door to door delivery.
3) Reduction of the cargo handling time.
4) Mixed cargoes can also be handled at the same time in the cargo work.
5) Saving of cargo handling cost.

People, Not Computers
Whangarei: — The solution to New Zealand's container problem calls for the exercise of common sense, says the Northland Harbour Board in its submission to the New Zealand Ports Authority. It says that mathematics alone will not find a wise solution.

"If New Zealand consisted solely of computers, a precise mathematical answer could, indeed, be given," states the report. "However, as it consists of people, only an answer based on social and economic considerations, as well as on mathematics, can really prove satisfactory."

The Board adds: "It is not common sense, in a country the size of New Zealand, to take any step that accentuates further concentration of industry and population in the two existing metropolitan areas at the expense of 12 provincial ports." (Points North)
The 29,000 GT M.V. “Orsova”, a P&O luxury cruise ships (above photo) which visits Japan twice a year, is scheduled to anchor at the Osambashi Pier in the Port of Yokohama August 6, 3 p.m., with 1300 passengers from Australia, New Zealand and the U.S.A. The ship will set sail on August 8 and, after taking cruises around Hawaii, the U.S. West Coast, Australia and South Africa, will return to Southampton, U.K. on October 18. (P&O information service, Swire MacKinnon)

**Inspection Cruise**

Karachi:—One of the meetings of the Board of Trustees of the Port of Karachi is traditionally held every year on board a K.P.T. floating craft, and after the Board meeting the Trustees proceed on a cruise of the harbour to inspect the Port condition, operations and development works in progress. This year, such a meeting of the Board and Inspection tour of the Port by the Trustees was held on 15th April, 1970, on board K.P.T.’s motor tug Firdousi. For the occasion, M.T. Firdousi, fully dressed up, awaited the members of the Board and the K.P.T.’s Heads of Departments at Berth No. 3, East Wharves. The Chairman, Trustees and K.P.T.’s Heads of Departments boarded the tug at 11.00 a.m., whereafter the Board Meeting was held. After the Board Meeting, the Engineer-in-Chief, K.P.T., gave a briefing on the port development programme and explained the progress made through charts and plans. (K.P.T. News Bulletin, May 1)

**Greater Port Antwerp**

Antwerp:—The Six Year Scheme 1970~1975 includes following credits for the extension of the port of Antwerp:

**Right Bank:**
- junction 5th Harbour Basin/Amerika-dock, building of Boerinne-lock, building of 8th and 9th Harbour Basins, roads, etc.: 62,500,000 US $=25,000,000 £

**Left bank:**
- Baalhoek scheme (work to be done on Netherlands territory, i.e. lock and junction canal): 90,000,000 US $=36,000,000 £
- Work to be done on Belgian territory (lock at Kallo, Canal-basin, inset-docks, roads): 120,000,000 US $=48,000,000 £

**River Scheldt:**
- making short cut of the Bath bend (Verschave scheme): 60,000,000 US $=24,000,000 £
- deepening of navigable channel (chiefly to raise the depth of ‘Scheur’ to—34’6”):
  - 11,000,000 US $=4,500,000 £
  - work of maintenance (dredging): 30,000,000 US $=12,000,000 £
- Scheldt/Rhine connection:
  - work on Netherlands territory: 90,000,000 US $=36,000,000 £
  - work on Belgian territory: 14,000,000 US $=5,500,000 £

For the sake of completeness, we have also to quote the building of a storm weir in the River: 50,000,000 US $=20,000,000 £ and the digging of the by-pass canal for inland navigation Oelegem-Zandvliet, i.e. a new junction between the Antwerp docks and Albert Canal: 40,000,000 US $=16,500,000 £

In connection with work on the River Scheldt, the preliminary study of the Verschave-scheme was meanwhile completed at the Hydraulic Laboratory. The planning provides for work being started upon in 1971, to be completed 1974.

As to the Baalhoek-scheme, negotiations between Belgium and The Netherlands are evolving favourably. The technical committees are now dealing with the specific problems, such as measures to fight air pollution as might result from industrial settlements along the left bank.

A start has been made on the expropriation of a first zone of 3,250 acres along the left bank (Royal Decree of 30th January 1970), to be followed soon by a second zone comprising 3,750/5,000 acres.

Tenders will be invited September 1970 for the building of the Kallo-lock (for vessels up to about 80,000 dwt). Meanwhile, the level of the first industrial sites, south of Kallo, is being raised by means of dredgings from the river.

On the right bank, work on the junction America-dock/5th Harbour basin, also on the Scheldt/Rhine junction, is being pursued. (Antwerp Port News)
The Greater Port of Antwerp

Container Engineering

Antwerp:—With a capital of 4 Million BF the firms Hessenatie-Neptunus S.A. and Henschel Engineering S.A. have founded the Antwerp Container Engineering (A.C.E.). Aim of the firm: Maintenance and repair of containers and chassis, including washing, sandblasting, cleaning, testing etc. Normal repairs are carried out at Nr. 368 of the docks, whereas special repairs are done at Antwerp-Wilrijk. (Assiport 18/6/1970)

Strike Ended

London:—Union delegates representing 47,000 striking longshoremen voted July 29 to end a two-week-old ports shutdown that has cost this island country millions of dollars of lost trade.

They voted 51-31 to accept a peace package offered by a Government-appointed court of inquiry that would give them an additional £5,500,000 (13,200,000) a year in pay, overtime and bonuses. (Japan Times)

Retiring

Edinburgh, 16th June:—At the June meeting of the Board of the Forth Ports Authority, Mr. A. Balfour Kinnear, J.P., M. Inst. T., Solicitor, Chief Executive, intimated his desire to retire from the service of the Authority to take effect from September. The Board acceded to this request with regret.

Seaforth Dock

Liverpool, 22nd June:—Yet another important stage has been reached in the construction of the
massive docks expansion scheme at Seaforth, Liverpool, with the award of a contract worth more than £2 million to Tarmac Construction Limited, of Ettingshall, Wolverhampton.

The contract is for the surfacing of a major part of the land areas of the new docks and involves the whole of the West side which is more than 2,400 feet long and the North side where the four container berths are being built.

The surfacing of the North side entails the paving of a strip 625 feet wide and stretching the whole length of the quay which is 2,600 feet long.

The work will include the provision of underground services and drainage.

Seaforth which is in the Borough of Crosby the largest dock development scheme at present in progress in Britain and will provide at least ten new deep-water berths for container, bulk and general cargo carriers. It is costing about £35 million.

Devlin Teach-Ins

London:—The approaching implementation of Devlin Phase II will affect not only the man at the quayside but also the men who supervise the smooth running of the docks. They too will have to adjust to a system of two shift working and the abolition of piecework may call for a different method of supervision and control. For these reasons, and in order to bring administrative staff up-to-date with current developments, Mr. R. H. Butler, Co-ordinator of Operations at the Port of London Authority, is holding a series of teach-ins. It is intended that every traffic officer in the Port will attend one of these, when he will be given the opportunity to discuss the effects of Devlin Phase II and to make any suggestions or criticisms that he feels are justified. Thus, when the implementation of Devlin Phase II takes place, there will be nobody working in the Authority’s docks who is not fully aware of how this new system affects him and his work. (The PLA Monthly, June)

Change of Name

London:—As announced in our last issue the title of the official magazine of the Port of London Authority is to change from July 1, when The PLA Monthly becomes Port of London. Readers and advertisers may like to have this reminder of the change.

Curiously enough, although it appears from report that no-one was ever particularly enamoured of the name The PLA Monthly, this title has remained ever since the magazine was first issued in November, 1925. In his foreword to that first number Lord Ritchie of Dundee, the PLA’s Chairman at the time, wrote, “... it is my belief that such a publication should serve a beneficial purpose in extending a knowledge of the many-sided activities of the Port of London Authority. It is perhaps not too much to hope that it may also assist in securing the goodwill and sympathy of the large business community which is so closely connected with the working of the Port and so vitally interested in its welfare.”

In this last issue of the magazine under its old title it is perhaps useful to recall those hopes of 45 years ago. On how far the magazine has been successful in realising the aims expressed by Lord Ritchie it is hardly proper for the magazine itself to comment. As another famous PLA Chairman once commented on an advert shown to him for his approval, “... this smacks of vulgar boasting...” But that was some little while ago; present-day judgements on advertising ploys would be different.

At any rate the magazine’s early editors must have achieved a successful recipe for the editorial mix, judging from the innumerable letters of appreciation which readers from all over the world have continued sending for 45 years. The most recent is a picture postcard from a reader in Windsor, Ontario, who comments “Your new format is excellent! We enjoy the editorial and features especially.”

Speaking as a comparative newcomer (for eight years is but a trivial space of time in the history of the Port of London) we are not sorry to see the end of the letters “PLA” which used to be mistaken for passengers’ luggage in advance in the days when one could rely on that happening, and are now sometimes taken to refer to the People’s Liberation Army (of China). Port of London has, perhaps, a more unique durability. More to the point, we hope that the magazine under this new title will continue to earn the appreciation of its readers. If not, we hope that they will write just the same, telling us why they do not like it any more. With such useful information as that we shall be able to do something about it. (The PLA Monthly, June)

Reshuffle at Southampton

London, 23 July.—A new and strengthened management structure for the Port of Southampton is announced today by the British Transport Docks Board. It is being introduced to take account of the rapid expansion and development of the port and the wider role assumed by the Board as the Port Authority under the Southampton Harbour Reorganisation Scheme 1968.

As a result of the reorganisation Mr. Donald Stringer will take over executive control of the port. He will be based at Southampton and continue as Chairman of the Southampton Cargo Handling Co. Limited.

As Chief Docks Manager, Southampton, from 1964 to 1967, he was largely responsible for initiating and implementing the Western Docks Extension Project and other major development works. His appointment as Deputy Managing Director of the Docks Board in 1967 carried with it the special responsibility for the overall development of the port, a duty he will be better able to discharge under the new structure.

Mr. W.D. Noddings, at present Assistant Chief Docks Manager at Southampton, has been appointed Docks Manager. He will be responsible for the day-to-day running of the
the docks, including the co-ordination of the Board’s operational services. Mr. Nodelings was Operations Manager at Southampton from 1966 until 1968 when he was appointed to his present position. (British Transport Docks Board)

**Port Talbot**

London, 15 July:—More than 1½ million tons of iron ore were received at Port Talbot during the first half of this year, say the British Transport Docks Board. This is 31 per cent higher than in the first six months of 1969, and is in line with the port’s target of 3½ million tons for the year.

A Docks Board spokesman said today that since the Board’s new harbour became operational in March it had handled 685,910 tons of ore compared with 918,742 tons through the old docks during the six months.

“This is a creditable performance by all concerned during the working-up period,” he said. “We have discharged 16 ships in the new harbour and are regularly receiving shipments of 50,000 tons. We now expect to start moving up towards the 100,000-ton range for which the harbour was built. The largest single consignment we have scheduled at the moment is a 71,000-ton cargo due from Australia towards the end of the month.”

The target figure of 3½ million tons set for the port in 1970 is nearly double the tonnage handled in 1969, a bad year owing to the prolonged strike at the Abbey Steelworks, and half a million tons more than the 1967 and 1968 figures. It represents about 20 per cent of the U.K.’s 17½ million-ton iron ore imports in 1969.

**Mr. Barrillon Resigns**

Marseilles: — The Council of Ministers held on April 1, 1970, approved a proposal made by the Minister of Equipment and Housing concerning the nomination of Mr. Yves Boissereing to the post of Director of the Autonomous Port of Marseilles, replacing Mr. Charles Barrillon, Engineer General of the Ponts et Chaussées (Bridges and Roads). The Journal Officiel (Official Gazette) has published the decree naming Mr. Boissereing to this post.

Mr. Boissereing was born in Marseilles. A graduate of the Ecole Polytechnique, he is an alumnus of the 1947 class of the Ecole des Ponts et Chaussées. He joined the Port of Marseilles ten years ago and has held the posts of Director of New Works and Director of Development Works (Exploitation). He is Chief Engineer of the Ponts et Chaussées.

Mr. Charles Barrillon was born in 1910. After graduating from the Ecole Polytechnique he continued his studies at the Ecole Nationale des Ponts et Chaussées from which he graduated in 1933. After 3 years in the Service Ordinaire (Mess Service) of the Pas-de-Calais prefecture, he was posted on March 1, 1939, to the Maritime Service of the Bouches-de-Rhône prefecture. During the war, from 1939-40, he was awarded the Croix de Guerre with palms for meritorious service on the Alsatian front. In 1942 he was transferred to the Port of Rouen (Maritime Service of the Seine Maritime—3rd Section). In 1947, temporarily attached to the Chamber of Commerce and Industry of Marseilles as Deputy Director General of Grant Services (Service Concédés), he took an active part in the planning of the Port of Lavéra and the airport of Marignan. Nominated Chief Engineer in 1951, he participated in several study missions abroad. He was named Director of the Port of Marseilles and Annexes in 1961 and later became Director of the Autonomous Port of Marseilles when that establishment was created on April 1, 1966. He was named Engineer General of the Ponts et Chaussées on October 1, 1969, having been accorded the rank and prerogatives of that title since October 1966. Mr. Barrillon is an officer of the Legion of Honor. (Marseilles Port Authority)

**Port of Rouen 1969**

1. The Port of Rouen’s maritime traffic figures for the year 1969 compare as follows with those 1968:

<table>
<thead>
<tr>
<th>Category</th>
<th>1968</th>
<th>1969</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inbound vessels</td>
<td>4,603</td>
<td>4,603</td>
<td>0</td>
</tr>
<tr>
<td>Net registered tonnage</td>
<td>10,000,000</td>
<td>10,000,000</td>
<td>0</td>
</tr>
<tr>
<td>Average net registered tonnage</td>
<td>1,500,000</td>
<td>1,500,000</td>
<td>0</td>
</tr>
<tr>
<td>Goods imported</td>
<td>5,609,591 tons</td>
<td>5,609,591 tons</td>
<td>0</td>
</tr>
<tr>
<td>Minerals</td>
<td>3,600 tons</td>
<td>3,600 tons</td>
<td>0</td>
</tr>
<tr>
<td>Foodstuffs</td>
<td>22,500</td>
<td>22,500</td>
<td>0</td>
</tr>
<tr>
<td>Other commodities</td>
<td>85,000</td>
<td>85,000</td>
<td>0</td>
</tr>
<tr>
<td>Overall decrease in coals</td>
<td>17,7%</td>
<td>17,7%</td>
<td>0</td>
</tr>
<tr>
<td>Overall decrease in steel</td>
<td>17,3%</td>
<td>17,3%</td>
<td>0</td>
</tr>
</tbody>
</table>

2. Statistics of imported goods show a decrease in coals, especially industrial, (-109,000 tons or -10,1%); of minerals (-3,600 tons or -17,6%); of wood pulp (-48,200 tons or -16,7%); of metals (-3,800 tons or -6,4%); and animal foodstuffs (-22,500 or -17,4%).

The decrease ascertained on other commodities (-85,000 tons or -17,4%) is explained by the almost total disappearance of imported hard wheat by sea; a bad season of fresh vegetables and perishable cargoes from the Mediterranean markets; and an important decline in the importations of basic chemical products, carbochemicals, fertilizers and molasses.

The traffics to note which, in comparison with 1968, remained constant throughout 1969 are:

- Phosphates (1,030,000 tons); minerals (362,000 tons), of which sulphur, China clay and such commodities are in prominence. These two commodities are expected to progress during 1970 into the category of thriving traffics; this is further borne-out by the extensions of chemical factories installed within the port confines and the beginning of importations of foreign materials or of marine origin, the effects of which will shortly be apparent.

Prominent among the thriving traffics are: hydrocarbons (+203,000 tons or +14,8%) including more specially heavy fuels and non-energetic petroleum derivatives. Timber and exotic woods (+38,400 tons or +71,9%); paperc pulp wood (+108,600 tons or +67,3%); paper (+11,700 tons or +3,3%); bananas (+5,700 tons or +4,5%); and wines (+20,000 tons or +17,8%).

With regard to industrial coals and wines, short term prospects are...
satisfactory.

3. Outbound, the traffic of fertilizers (~42 300 tons or -43,3%) and sugar (~26 000 tons or -50,6%) as well as soft woods (~1 500 tons or -16,6%), experienced a substantial decline.

Among stable traffics, hydrocarbons remain at roughly 3 100 000 tons and flour (139 000 tons).

Commodities on the increase are: cereals (+205 000 tons or +13,59%); gypsum (+53 000 tons or +18,8%); motorcars (+4 000 tons or +7,4%); and general merchandise. (Rouen Port News, 17 February)

More Container Trade

Bremen: — Bremen/Bremerhaven port-group container-handling increased from 46,873 containers (with 465,000 tons) in 1968, with a 77 percent tonnage boost, in 1969 to 73,334 containers of the 20, 35 and 40-foot variety (equivalent to 118,001 20-foot units) carrying 822,129 tons — and made further swift strides in 1970. The increase rate in the first quarter of 1970 was 83% (in numbers) and 113% tonnage-wise over that of the first quarter in 1969, so that, at an estimate, one can reckon with 1.7 million tons of containerised goods in 1970. Participating in this boom were, above all, the following full-container shipping lines trading continuously to Bremen/Bremerhaven: — SEALAND SERVICE INC., AMERICAN EXPORT ISBRANDTSEN LINES (CONTAINER MARINE LINES DIVISION), ATLANTIC CONTAINER LINE, HAPAG—LLOYD CONTAINER LINES, MOORE-MCCORMACK LINES INC., SEATRAIN LINES INC., together with lines running semi-container ships, as well as container transportation on conventional vessels. As from autumn 1970 the AUSTRALIAN EUROPE CONTAINER SERVICE (AECs) will be added, with a regular full-container liner service from Bremerhaven. The proportion of goods carried in containers, to the total general-cargo, has meantime increased to 9 percent. The Hamburg container turnover for 1969 was 43,484 containers with 451,355t (proportion to general-cargo: —3,4%).

Again in 1970, the main investment in the Bremen/Bremerhaven port-group is being made in extending the large Bremerhaven container-terminal. The westside of the Nordhafen has been completed with 400 metres of quayage, two container-bridges and a general-cargo shed for the stuffing and unstuffing of containers. The third bridge will become operative in the Summer of 1970. On the eastside of the Nordhafen the extension of the eastquay to a length of 330 metres and the construction of a new athwartspier, together with yet another container bridge, will all be completed by the Summer of 1970, so that as from July 1970 the above all combined Roll-on/Roll-off and container ships can be handled there. The loading of cargoships (Bremen/Bremerhaven is by far and away the leading port in Europe for the car exports of the German car industry) will then be effected in Bremerhaven at the new athwartspier.

The lion’s-share of port-investment in Bremerhaven will go to the new SEA-TERMINAL situated direct on the outer-Weser, being utilised for a 700-metre long quay, equipped with four container-bridges and a container marshalling-area of, initially, 300,000 sq. metres. Included additionally will be an office and dispatch building, a repair and service-hall for the container handling equipment, a total number of 20 van carriers and the same number of tractors and chassis. The first berth on the SEA-TERMINAL will become operational at the 1970/1971 turn of the year, the second in the Autumn of 1971. (Bremen Air Mail, July)

Bremen in Japan

Bremen, 11th May:—'Exemplary' was the term used by the President of the Senate of the Free—Hanseatic City of Bremen, Burgomaster Koschnik, upon his return from a Far-East visit in April 1970, when referring to the Japanese teamwork between State and Economy, as well as to the division of labour and the co-operation exhibited in the Japanese shipyard industry. During consultations with authoritative representatives of the Japanese economy, Koschnick had the opportunity to draw attention to the leading role of the Bremen/Bremerhaven group of ports within Europe, relative to the intercontinental container trade. The Bremen delegation accompanying the Burgomaster paid visits, in addition to Tokyo, to the World-fair in Osaka, the thousandyear emperor-town of Kyoto and Nagoya.

Japan is currently already participating in German-Japanese cargo handled by the Bremen ports to the tune of several hundred millions of DMarks. Japan is rated, among all the flags of overseas countries flown in the Bremen/Bremerhaven port-group, in 3rd place.

The German Ambassador to Tokyo, Franz Krapf, will on May 12th 1970, open the German Trade and Publicity Week in Osaka, which will then be followed by similar events in Kyoto and Kobe. Ship and airplane models from the Bremen shipyard and aircraft industries, together with works of art from the Bremen Focke-Museum and 143 sq. metres of display-wall bearing pictures of the Bremen ports and historic buildings of the Hanseatic city, having an aggregate weight of 4.5 tons, were despatched to Japan in a container for these specific events. It is hoped that a similarly large interest will be aroused, as was the case with the 'Japan-Day' held in Bremen in April 1970, when several hundred representatives from the spheres of politics, diplomacy, industry and trade attended. (Bremen Air Mail)

Another B.V. Car Carrier

Hamburg, June 23:—On July 4, 1970 at 6 p.m. Mrs. Sarita Ugland will give the name of "SAVONITA" to a further Special Car Transporter. Thus Blohm + Voss are going to deliver the third new building of a series of roll-on roll-off ships for Uglands Rederi, Grimstad.

At present, "Savonita" and her
sissterships “Laurita” and “Torinita” are the largest units of this type. The three ships will primarily be employed in the transportation of FIAT cars between Savona (Italy) and the U.S.A. The carrying capacity of each ship is 3,100 FIAT 850 type cars. Loading and discharging takes place through either of two ports on port and starboard side that lead to No. 6 or No. 5 deck respectively. From there the cars reach the other decks over ramps. Altogether 10 decks are available. The very important matter of ventilation is solved by 22 ventilators ensuring 20 air changes per hour in each cargo hold.

To make the ship's operation as flexible as possible some decks are also rated for stowage of containers or general cargo. By hoisting No. 5 deck, for instance, about 84 containers can be stowed on No. 6 deck, and disassembly of No. 9 deck allows 30 20' containers to be additionally carried on the double bottom.

Crew’s accommodation, domestic spaces and stores are arranged on the 80 m long upper deck. On principle single-berth cabins are provided. The Accommodation System M 1000, developed by Blohm + Voss, was used throughout.

With a propulsion plant of 2 FIAT engines, developing 7,200 HP each, the “Savonita” will run 21 knots. Her manoeuvrability was improved by installation of a bow-thruster in addition to the Ka Me Wa controllable pitch propeller.

Delivery of this newbuilding to the owners is scheduled for December 1970. (Blohm + Voss)

Transport Integration

Hamburg:—“Even the jungle of existing European traffic and transport regulations can not conceal the fact that to all intents and purposes there is no common European transport policy.” With these words the Central Federation of German Seaport Operators in Hamburg in their annual report for 1969 recently published condemned the “deplorably slow progress in European transport integration”. More and more voices are, therefore, being heard that relying on Brussels should at last be finished with, and the imminent traffic problems be taken in hand in the individual countries.

The Federation, it is true, emphasizes that the German seaports have taken part in the general economic growth in post-war Europe, but at the same time points out that it is not the actual rates of increase that can show the real position, but only a comparison with other changed rates. Many problems of the German port economy could be got rid of the very moment the primacy of equal starting conditions was imprinted on the flags of all member states of the Common Market. Today as before, the competitive position in shipping and the seaport economy was marked by a number of factors which have an adverse effect on the German North Sea ports.

The German seaport operators are energetically pursuing the demand that at last all transport between ports and the hinterland should be dealt with on uniform lines. In the Federation’s opinion the present situation, which has worked out to the benefit of the Benelux ports, apparently could only be brought to an end by means of national measures which, however, must be in line with the EEC regulations. The German ports, it is said, are in no way afraid of tough competition through which, in fact, they have achieved their range of activities and importance. But this competition should be played off from fair starting bases.

Nevertheless, the Federation states with satisfaction that in 1969, a year marked by a world-
Following the decision by the N.S.W. State Government to develop the northern foreshore of Botany Bay as a port/industrial estate, the Maritime Services Board is finalising plans for the commencement of the first stage of the four-stage development. While the first stage will be heavily orientated towards the accommodation of deep-draught vessels, port facilities to serve any trade will be constructed as demand dictates.

Cargo Turnover in West German Seaports (in mill. tons)

<table>
<thead>
<tr>
<th></th>
<th>1967</th>
<th>1968</th>
<th>1969</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamburg</td>
<td>35.5</td>
<td>38.1</td>
<td>40.9</td>
</tr>
<tr>
<td>Wilhelmshaven</td>
<td>19.9</td>
<td>20.8</td>
<td>21.1</td>
</tr>
<tr>
<td>Bremen and Bremerhaven</td>
<td>17.4</td>
<td>19.0</td>
<td>20.7</td>
</tr>
<tr>
<td>Emden</td>
<td>10.3</td>
<td>12.3</td>
<td>13.9</td>
</tr>
<tr>
<td>Lübeck</td>
<td>5.2</td>
<td>5.5</td>
<td>5.8</td>
</tr>
<tr>
<td>Nordenham</td>
<td>2.7</td>
<td>3.8</td>
<td>4.0</td>
</tr>
<tr>
<td>Brunsbüttelkoog</td>
<td>3.3</td>
<td>3.2</td>
<td>3.5</td>
</tr>
<tr>
<td>Brake</td>
<td>2.4</td>
<td>2.5</td>
<td>3.4</td>
</tr>
<tr>
<td>Kiel</td>
<td>0.9</td>
<td>1.1</td>
<td>1.6</td>
</tr>
<tr>
<td>Flensburg</td>
<td>0.5</td>
<td>0.5</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Referring to the share of the Federal Republic in world trade, the Federation arrives at the following figures: In 1958 at DM 68,000 million it was around 7 per cent, in 1967 almost 9 per cent, and in 1969 at almost DM 212,000 million, a 9.6 per cent. share in world trade is expected. The extent to which the interlacement of West Germany with foreign countries has grown is demonstrated by the fact that, for instance, 24 different countries have sent their motor trucks to Germany, and vessels of 75 nations were dispatched in its ports.

As before, the report continues, the German seaports are supporting strongly the targets of the European transport policy: free choice for the shipper; equal treatment for all transport carriers; profitability of the transport enterprises; traffic and transport based on free market principles.

However, the politicians should also consider that the Continental seaports are the centres of crystallization of Europe’s economic processes and the bridgeheads of foreign trade of a Continent which has in its hands a substantial part of the total sea-borne world trade. The overall picture of these ports could be regarded with favour in view of the prospective development of world trade; the same should apply to the prospects of a common European traffic and transport policy. Seaport policy as an important instrument to influence the future of Europe should not be lightly gambled away. (Ship via Hamburg, April)
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A Developing Harbour

This means the Port of Helsingborg, and there’s substantial foundation for the claim, which is often made in speech and in print.

THE SKANE TERMINAL

—in other words, rewarding cooperation in a new method of handling—dealing with containers and other big unit loads—which is currently evolving at an incredible speed in transoceanic shipping — progress in which the Port of Helsingborg with the Skane Terminal as a pioneer in the field is a factor to be taken into serious consideration.

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THE FIRST REGULAR CONTAINER LINE with specially-built ships was opened by Svea Line in October 1968—a weekly service with a ship on the Helsingborg-Felixstowe (England) route — and was doubled to two connections per week with two vessels on the same route in February 1969. In August of the same year the service was increased to a triangular one: Helsingborg—Felixstowe—Rotterdam. This extension enabled link-ups to be made to practically all transoceanic container lines. A feeder service was established in 1970 with the “Seatrain” to New Jersey in the United States.

EXPECTED DEVELOPMENT

According to the forecasts, about 80% of general cargoes will go by container or be palletized within ten years. The port of Helsingborg will be a great transshipment harbour with a substantially enlarged hinterland. When the Port of Helsingborg broke through the “Atlantic Wall” for container transport with the “Seatrain” to New Jersey, the cooperating American shipping company, SEATRAIN Inc., was confident that Helsingborg’s extraordinary and well-situated container harbour, serving a population area of 2.6 million people within a radius of 150 kilometres, would play a significant part in the advent of this new route across the North Atlantic, which will be of great importance for Swedish and Scandinavian overseas trade.

THE BROCHURE with fine illustrations, brief captions and a useful harbour-guide will, we hope, lend a little colour to the restrained account of what we have tried to tell you above. We hope also that the brochure will serve as a guide for present and future transport-users in making freighting arrangements. (The Port of Helsingborg)
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