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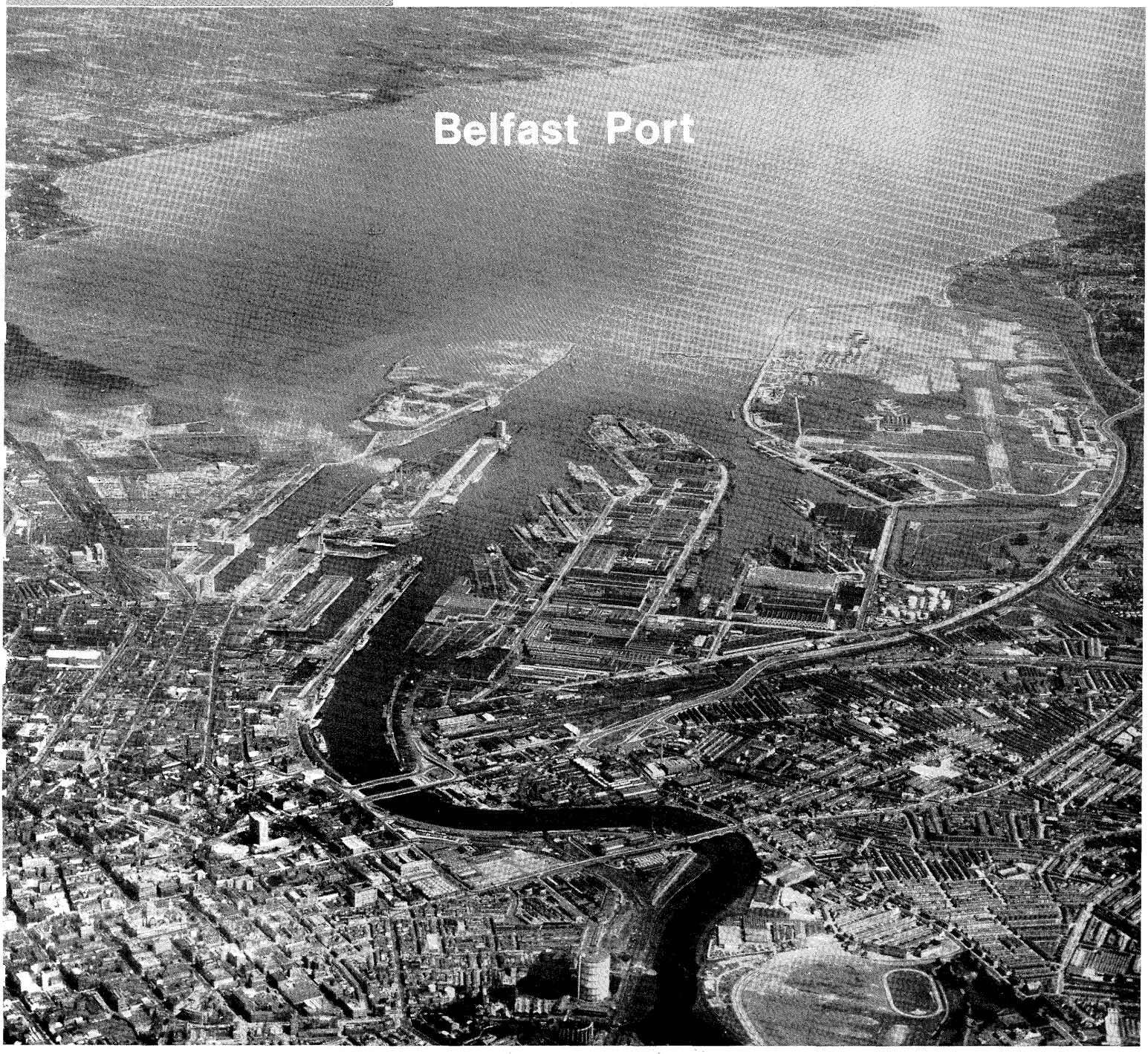
PORTS and HARBORS

February, 1970 Vol.15, No. 2



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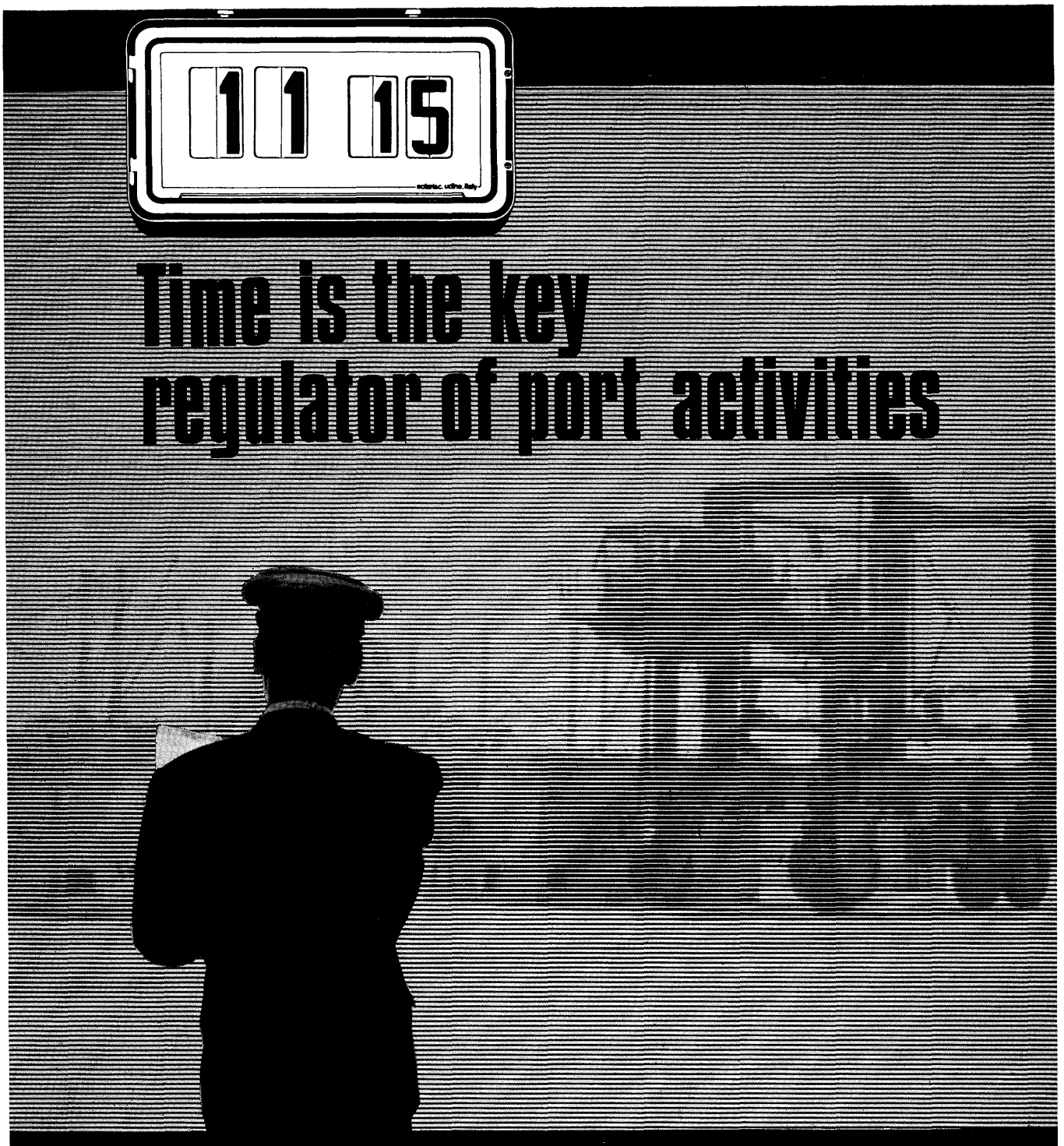

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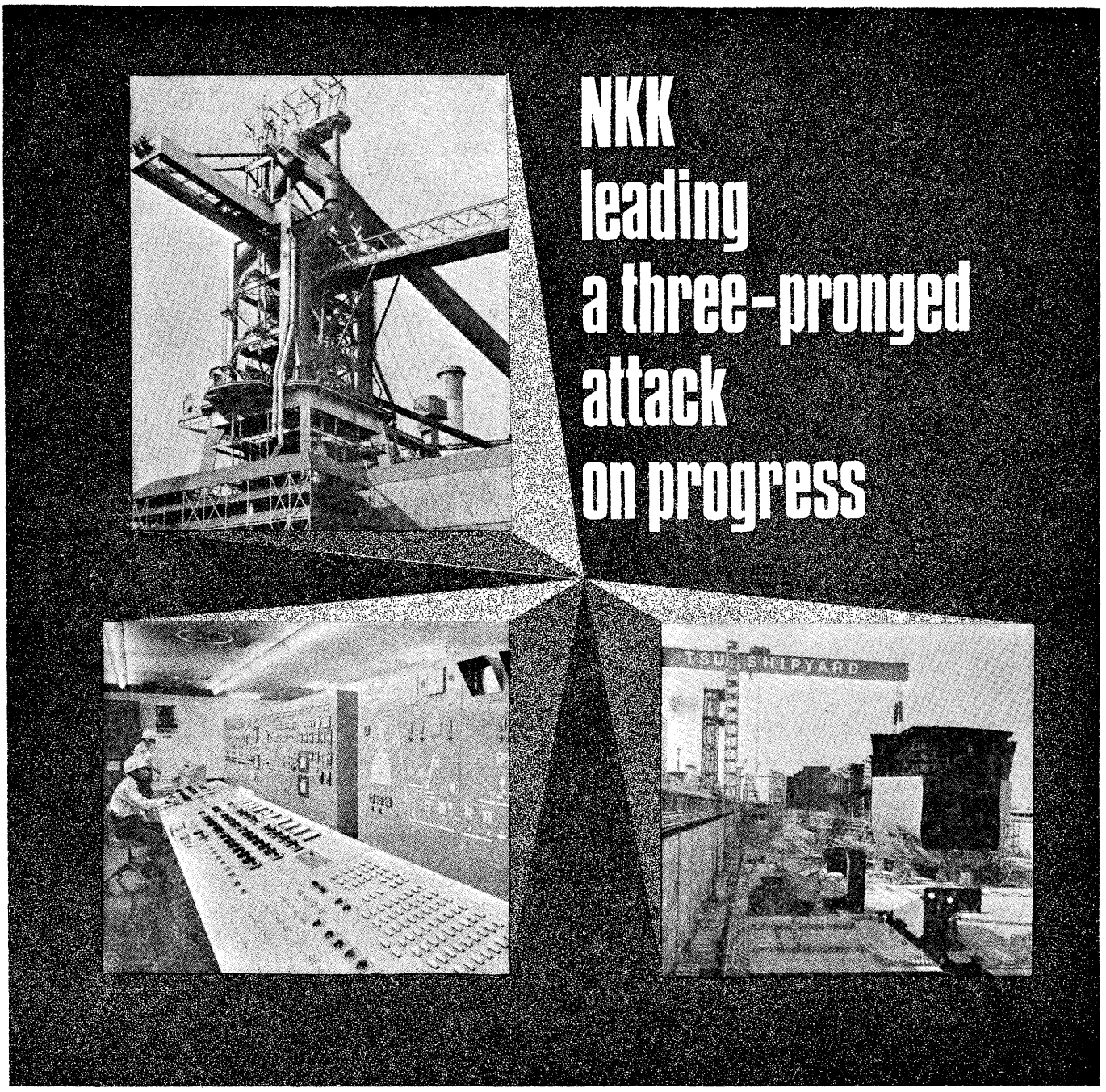

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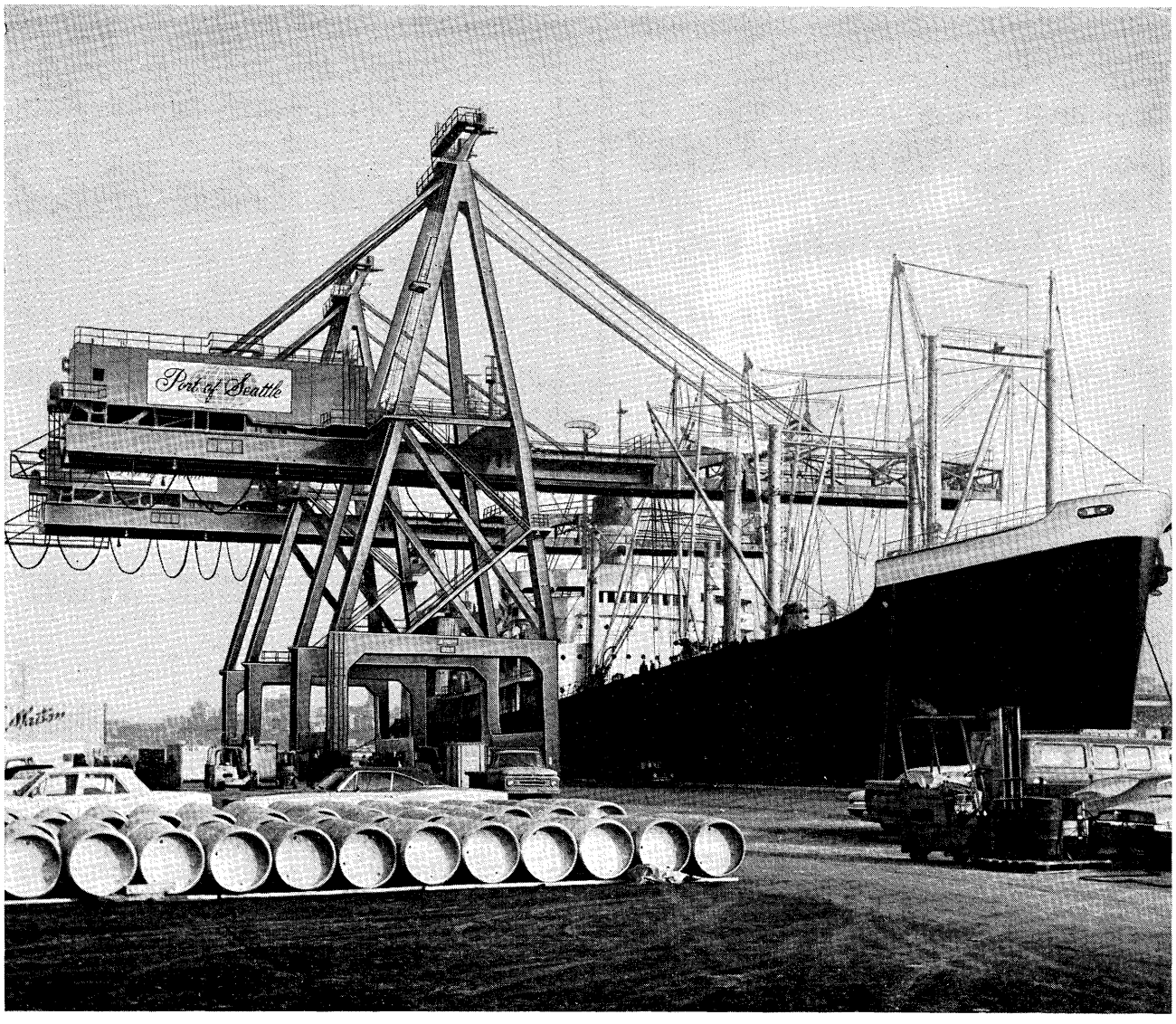

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February, 1970 Vol. 15, No. 2

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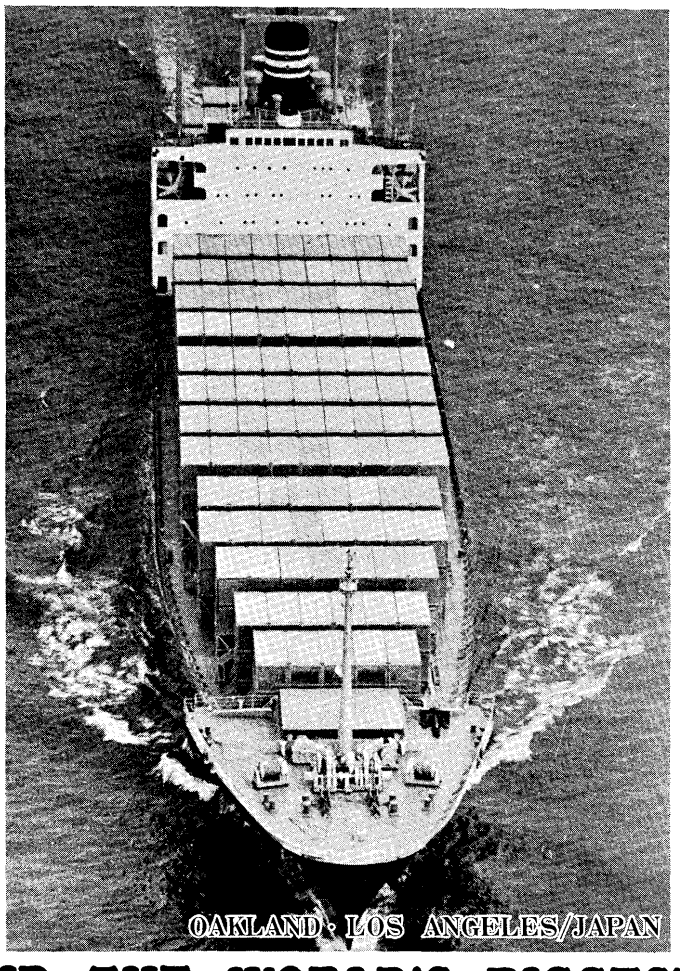
THE BIG, CONTAINERIZED OUTFIT THAT SAVES YOU MONEY !

N. Y. K. LINE



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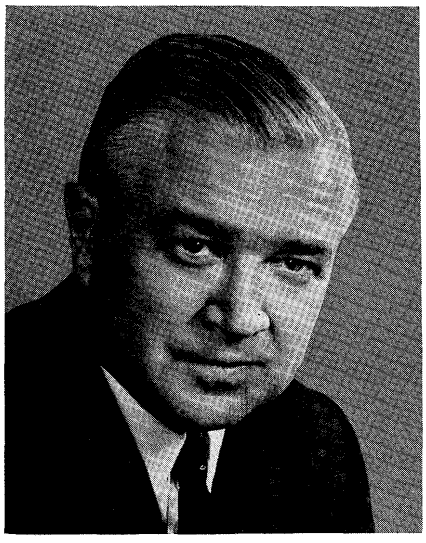


Mr. Austin J. Tobin

An Address by

Austin J. Tobin

Executive Director
The Port of New York Authority

on accepting the 1969 National Transportation Award before The National Defense Transportation Association Wednesday, September 24, 1969 Atlanta, Georgia

Thank you for this award. Those who have been honored to receive it —the inventors, manufacturers, operators and innovators of American and the world's transportation —are a most distinguished group. To take one's place among them is a high honor indeed.

As Executive Director of the Port of New York Authority, I am a public officer of the States of New York and New Jersey. I accept this award, therefore, as a recognition of the vision and the work of state and municipal leaders throughout the country who have developed and built and who operate the ports and airports, the highways, tunnels and bridges, the local mass transit systems and the public terminals that make up our vast national transportation complex.

The welfare of our country, its entire national economy, as well as our defense capacity, is based on this great infrastructure of transportation facilities. A nation that cannot move its people and its cargoes swiftly and efficiently—whether in times of peace or war—cannot long exist.

Under the American Federal System of government, our transportation services and facilities are in the main developed by our state, county, and municipal governments. They are financed—for the most part—through those state, county and municipal governments. They meet regional and local, as well as interregional transportation requirements. Yet the sum total of these parts is a vast national transportation network that is not only vital to each region of our country, but also to its whole economy, its defense, and its standing among nations.

The Port of New York typifies the dual stake which the people of the United States have in their transportation system. The primary purpose of the transportation facilities of the Port of New York is to meet the transportation needs of the civilian population during times of peace. At the same time, the existence of these facilities is an inherent part of our defense structure. And in time of war, their existence and operational efficiency is critical. During World War I, three-quarters of our overseas troop movements were through the Port of New York. And during World War II, one-half of all our armies overseas and one-third of all our material moved through New York.

In discussing the regional base of our national transportation system, based as it is upon the imagination and enterprise, the work and effort, and the tax dollars of state and local government, I hope you will forgive me if I talk mostly about our transportation complex at the Port of New York. It is, of course, the region I know best and it happens to be the largest complex of transportation facilities in the country. But our efforts to meet local and national transportation needs in the New York region are duplicated in the transportation systems built up by state and local governments throughout the country. What I say of New York then can be said of all the great regional transportation complexes that have been built up by and depend upon the work and efforts and financing of state and local government—the Atlantic and the Gulf ports, Great Bay Area of San Francisco and the other vital and dynamic port areas along the Pacific coast, and the transportation networks of the prolific industrial regions of the Midwest.

As is the case in all of these great regions of our country, the Port of New York is the hub of a far-reach-

ing complex of sea, air, highway and rail transportation and except for the great rail systems, these transportation and terminal facilities of the New York-New Jersey region have been provided by our two States and by our local governments.

Over 185 steamship lines connect the Port with all the world's trading regions, with 21,000 ship arrivals and departures each year. The piers and docks, the new containership terminals—all of which constitute the most modern shipping terminals to be found anywhere in the world, have been provided by state and local government. The Port Authority alone, an agency of the States of New York and New Jersey, has invested $350 million in these shipping facilities over the past twenty years. This money has been raised through the sale to the public of our own bonds. Our docks are operated on a completely self-supporting basis. We have no tax support, either state or local.

Air service from the port to all parts of the country and to all parts of the world are operated out of Kennedy, LaGuardia and Newark Airports. Originally built by the cities of New York and Newark, these three airports have been developed over the past twenty years and are operated today by the Port Authority, with an investment of our own of over $700 million. Federal Aid to these airports over the years has amounted to just four per cent of the total. I should note that this is a much smaller proportion of Federal Aid than has been the case in other parts of the country. It is estimated that the investment of the country's cities and local agencies in air carrier airports is about $5 billion, as compared to Federal Aid of about $1 billion.

An extensive network of high-speed expressways, such as the New Jersey Turnpike and the New York State Thruway, enable 10,000 trucks and buses a day to provide fast service between the Port of New York and other areas. Despite the Federal Highway Program, these expressways have principally been constructed by the two States with state money and through state tolls.

The transportation needs of the 13½ million people who live in the Port District are met by an intricate and well-balanced network of public transportation and highway facilities. This regional system has been developed to serve travel patterns between suburban and central business districts. The importance of mass transportation services is emphasized by the fact that ninety per cent of the 1,600,000 people who enter Manhattan's central business district during the peak period of a typical working day are served by public transportation.

The role of state and local governments as pioneers and as leaders in developing and encouraging technologies in transportation may be illustrated by the development of our containership terminals in New York. Fifteen years ago, before there were any containerships at all, we became convinced that this was going to be the future of ocean shipping, and in that conviction, and believing also that when the containerships came they would require a totally different type of terminal than the conventional piers and docks, we acquired 800 acres of tidal marsh land along Newark Bay and began the long and expensive task of building them up and stabilizing them. As I have said, there was no such thing as a containership when we began this work in 1956, and it was several years before we were visited by Malcolm McLean, who had been thinking along the same lines. Today, our Newark-Elizabeth Terminal, with forty-nine containership and bulk cargo berths, is the largest containership terminal in the world. It has been built by the Authority at a cost of over $200 million.

This is only what we are doing in the Port of New York. A 1967 survey of United States ports shows that without exception every major port in the country is planning one or more containership berths, and that many of them have already completed installation of container handling facilities.

Containerization of cargo will play an increasingly important role in the economics of world trade. It allows the movement of great tonnages in lower operating costs to the ship owner, as well as the terminal operator. Container terminals provide 20 times as much production capacity for loading and unloading vessels as does the conventional terminal. A well-planned container berth has the potential of loading and unloading a million tons of cargo annually with a ship occupying the berth only 4½ per cent of the time required at a conventional berth.

As you know very well, there has been a significant growth in the containerization of defense cargo. A comparison of the first quarters of 1968 and 1969 shows that on the North Atlantic trade route, containerized military cargo increased 88 per cent, and on the Pacific/Far East trade route 417 per cent.

The cost of providing all of these regional and local transportation facilities and services is enormous. The Port Authority, which is only one of many agencies responsible for transportation in the New York Port District, has invested more than $1.8 billion, and it expects to spend another $1.75 billion to meet the continuing needs of the region for public terminal and transportation facilities over the next seven years. Across the nation, local and state governments, during just the past decade, spent $15.5 billion for their local transportation facilities and services. This, I think, illustrates the willingness of local government to carry the responsibility for maintaining this nation's leadership in modern transportation development.

But past spending for transportation services and facilities is only a prologue to future needs. It is probable that transportation needs over the next decade will be at least double that of the past ten years, or more than $30 billion. The most vital, complex and difficult of the vast variety of transportation services and facilities to be planned, financed and built will be those required to serve the nation's urban centers. By 1985, half of this country's population will be living in 40 major urban areas, and by 1990, 80 per cent of our people will live in these areas. Highly developed transportation systems will be essential to the economic progress and the defense capability of these metropolitan regions.

It is obvious that the greatest

difficulty in meeting these needs will be money. Not only are the needs for transportation enormous, but transportation must compete fiercely with all the other great and urgent urban needs for the dollars available. In the past ten years, state and local expenditures rose from $44 billion in 1958 to $108 billion in 1968. The states alone in the past eight years have had to seek more than 200 tax increases. Local and state governments face the impossibility of paying for increasingly greater demands for general services out of fewer and fewer sources of revenue. The problem is simply one of too many demands for too few dollars.

Nevertheless, the determination of the states and cities to continue to meet our regional and national requirements is indicated by New York State's authorization of a $1.25 billion transportation bond issue for the construction and rehabilitation of rail services and airports, and the action of New Jersey in authorizing a $200 million issue to meet its mass transit demands.

This, then, is the record of our states and of local government in financing, building and operating the foundation blocks upon which our national transportation system is based. This is the record of their leadership and enterprise, and their determination, willingness and ability to raise the billions of dollars that have been and are required to finance our national transportation complex.

But that leadership and enterprise is about to be stifled, that determination, willingness and ability is about to be undermined. For now comes the Treasury Department and the House of Representatives with a sweeping attack on state and local financing that over the past month or more has crippled the ability of our states and cities to meet their capital requirements and which, if it is enacted into law, will have a devastating effect on the capability of the states and cities to meet their enormous and ever-increasing public responsibilities. Embedded in the Tax Reform Bill now being considered in the Senate are provisions which are not reform, but rather, for the first time, would tax municipal bonds. The removal of tax exemption of state and local bound interest would increase the cost of state and local financing by about forty per cent. In other words, the purchasers of municipal bonds, in effect, pay a tax equivalent to about forty per cent of the interest rate directly to the states and cities.

This staggering increase in the cost of local financing could only be met by a corresponding increase in state and local real estate taxes or sales taxes throughout the country. In the past ten years alone, nearly $106 billion of these state and municipal bonds have been issued to finance not only this nation's public transportation system, but also our schools, sewers, hospitals, housing, water systems, and other municipal services.

The immediate effect of taxing municipal bonds will be to increase enormously the cost of these municipal projects and services. For example, in 1968, $2.8 billion of state and local bonds were issued for transportation purposes alone. If a similar amount were to be issued next year, the additional interest cost over the life of such bonds without their traditional tax exemption could be as much as $784 million.

Assuming the 1968 level of spending for transportation over the next ten years—assuming realistically a two per cent increase in the interest rate on municipal bonds under the new tax proposals—the additional interest cost would amount to nearly $8 billion. That is equivalent to the capital requirements for rapid transit systems in Chicago, Boston, Philadelphia, San Francisco, Washington, D.C. and Atlanta.

As discouraging as it is to contemplate these staggering figures of additional cost for construction of basic public transportation facilities the additional cost to the whole spectrum of municipal services is shocking. Last year state and local governments issued a little more than $16 billion of municipal bonds. Assuming the same volume is issued next year, the increased interest cost over the life of those bonds, with tax exemption lost, would amount to almost $4.5 billion, enough money to provide for 75,000 badly needed hospital beds. If local and state governments continue to spend during the next ten years at just the 1968 level, the increased cost of financing will amount to $45 billion, enough money to build more than two and a quarter million new housing units for nine million of our people. Or enough money to build 11,000 new schools for 16 million students.

To put this increased cost in terms closer to home, the debt service on a $4 million junior high school would cost an additional $1.1 million. If your community cannot meet this increased cost—and it can do so only by raising property taxes—then it would have to reduce the size of the school by 15 per cent.

The present minimum tax and allocation of deductions tax proposals in the new tax bill have been estimated to erode the benefits of tax exemption by adding at least a full 1% in interest cost—and once the wall of tax exemption is breached, the full impact of the complete removal of tax exemption will follow inevitably.

I am not talking just hypothetically. Even the threat of impairment of tax exemption of municipal bonds contained in the House tax reform bill and in the Treasury Department proposals have had serious consequences in the municipal bond market in recent weeks and has driven interest rates to unprecedented heights. Because of this—this mere **threat**—a sewer system to be built out of proceeds of bonds issued a few weeks ago will cost Seattle taxpayers an extra $12 million in interest charges. Newark, New Jersey had to accept a rate of 7.68 per cent on a $12 million offering for new schools and $4.9 million for urban renewal.

More serious than just the increased costs to Seattle and Newark was the effect upon other cities and states. Within the past few weeks, Jacksonville, Florida couldn't sell a $22 million issue at all. Hawaii got no bids on a $30 million issue offered at 6 per cent. Neither did Chicago on $25.5 million of its bonds. Houston failed to attract any bids for $24 million of bonds for its water system and Jefferson Parish,

Louisiana also drew no bids for $10 million of school bonds.

It is ironic that the Federal government on the one hand proposes to share Federal revenues with the states to encourage local assumption of responsibilities as the Administration's "New Federalism" suggests, and on the other hand proposes in this tax bill to strengthen Federal control over state and local government and impose tremendous financial liabilities upon them by taxing municipal bonds.

The proposals to tax municipal bonds are an outgrowth of efforts to prevent tax avoidance by the wealthy. The fact is, however, that about 70 per cent of municipal bonds are held by public and institutional investors and only a fraction of the municipals held by individuals are in the hands of the very wealthy. But to tax municipal bonds, in order to insure payment of taxes by a wealthy few, will place a grievous burden upon local government whose major source of revenue is the property tax, levied wholly without regard to the principal of taxing according to ability to pay.

Even more important than the crippling impact of this proposal on the capital programs of our states and cities, is the fact that it is an attack on the very structure of our government. When a similar proposal was advanced many years ago, Senator William E. Borah said that it would "wrench the Constitution from its harmonious proportions." Without any question, if the central government has the power to tax the financial operations of the states, it has the power to control every exercise of the governmental powers that were expressly reserved to the states under the Constitution.

We who are gathered here today can be justly proud of the nation's transportation facilities. We can be proud of the role which our states and cities have played in building that system. But our contribution to our nation's strength grows solely from the ability to initiate, to develop, to build the public works required for the well-being of our local economies and so for the well-being of the nation. Unless this attack on state and municipal financing is turned back, that contribution will be gravely diminished; that strength will be drained; and indeed, the future form of the American government will be radically changed.

Port of Copenhagen

History

When Bishop Absalon built his castle in 1167 at the entrance to the harbour (in Danish "havn", hence "Kobenhavn", Copenhagen, i.e. merchant's port), as a fortification against the marauders of the Baltic, sailors had for several centuries been grateful for the ample protection offered by the narrow Sound between the islands of Zealand and Amager, forming a natural harbour. An urban community gradually developed along the harbour during the Middle Ages. The Port of Copenhagen acquired the status of an international port during the first half of the 17th century as a result of the efforts of King Christian IV, who had the foresight to initiate extension and improvement projects on a scale equalled only by the tremendous developments of the past 75 years; he also eicouraged the establishing of commercial and industrial enterprises.

Towards the end of the 18tn century, during the European wars, the port experienced a golden age of trade. Copenhagen's enterprising Merchants took advantage of Denmark's neutrality, and gained for Copenhagen a reputation as a major traffic and trade centre in Northern Europe.

In 1894 the Free Port of Copenhagen was opened, and since then total sailings and goods turnover have shown a continuous increase, apart from the effects of the two world wars; international economic crises have had but a very slight adverse effect.

The Port Today

Since the end of World War II the port has undergone radical modernization and extensions. The rapid development of new forms of marine and land transport has provided the stimulus for major harbour projects during these years. So far 19 roll-on/roll-off terminals have been completed at various points in the port and a lift-on/lift-off container terminal is under construction in the port's northern section, due for completion early 1970. Efficient, rapid handling of goods, making full use of mechanization and rationalized work-methods, adds to the existing facilities the Port of Copenhagen can provide for both importers and exporters.

Administration

For several centuries after the death of Bishop Absalon the city remained under the jurisdiction of the bishopric of Roskilde, until the King took-up residence in Copenhagen, thus making it the capital of Denmark. The City Council was mainly responsible for the successful running of the port, but with direct responsibility to the absolute monarch.

By Act of Parliament, passed in 1858, the port was allowed a certain degree of autonomy and this was confirmed and extended by another Act in 1913, which stated that "the trading Port of Copenhagen is a self-owning institution managed by a Harbour Board", with the City Prefect of Copenhagen as chairman.

The Board consists of 16 other members, two elected by the Government, four by the Parliament two by the Municipal Authorities, two by the City Council two by the Copenhagen Chamber of Commerce, two for the Shipowners' Associations and two by the Federation of Danish Industries. The members of the Harbour Board are elected for a period of six years.

A General Manager, appointed by the Minister of Public Works, upon nomination by the Harbour Board, is in charge of the port's administration.

The Free Port Area,

the Focal Point for overseas goods, a duty-free Foreign Trade Zone and a Foreign Production Zone inside the Port of Copenhagen, offers great advantages to international commerce. Danish and foreign firms

use the Free Port as an emporium for their international trade.

Customers are served by a staff of trained specialists using the most modern handling equipment to ensure smooth and rapid goods handling.

Maximum efficiency has been obtained by revised operational procedures, and major new installations have been added, the most important being a Container Quay of 1,640 running feet, representing the first stage of a projected 65,000 feet stretch. This first section is expected to be ready for use early 1970, and will be provided with the latest crane gear and handling material as well as an open container area of provisionally 25 acres.

Another remarkable feature is the erection of a 160,000 sq. ft. modern transit shed on the former "Kulkaj".

This comprehensive modernization programme in the Free Port leads to vast improvements in efficient goods handling, especially in the field of containerized and palletized goods, thus resulting in sensible advantages for international shipping and trade.

Stevedoring and warehousing in the Free Port are performed by the Copenhagen Free Port Co. Ltd. which have their own administration, but the Port of Copenhagen Authority are sole shareholders.

Port of Copenhagen

Ideally situated

Modern.

Full facilities.

140 direct regular lines link the Port of Copenhagen to all the world's major ports.

Firmly established Roll-on/Roll off centre for 30 ports in Belgium, Denmark, England, Finland, Holland, Norway, Sweden and Germany.

The ideal Distribution and Transit Centre for Northern and Central Europe.

Free Port.

Rapid Handling.

Reasonable Charges.

Excellent Navigation conditions the whole year round.

No Tides.

Most suitable Transit Centre in the Baltic area.

Quays

In addition to ample lengths of quay for conventional ships the port has 19 roll-on/roll-off terminals which serve 20 shipping lines sailing on 30 destinations. A 1,640 feet long lift-on/lift-off container quay has been built and is expected to be fully operative early 1970.

Area

The land area amounts to 910 acres and the water area is 3,000 acres. Of the land area 63 acres have been laid out for container handling, apart from large areas for unroofed storage of other goods.

Warehousing

An area of 5,200,000 sq. feet of warehouse space is available for all sorts of goods.

Cold Storage

Floor area of 140,000 sq. feet is available for storage of refrigerated goods.

Fruit Storage

Floor area of 430,000 sq. feet heated or heatable, is equipped with full facilities for storage of fruit.

Oil Storage

The total tank capacity for oil amounts to 240 million imp. gallons.

Grain Storage

The capacity of silos for grain is 130,000 tons.

Grain Discharge

The silos are served by 14 suction units varying in capacity from 80 to 200 tons per hour.

Cranes

1 Floating Crane—180 tons.
1 Container Crane—32 tons (in operation in 1970).
140 General Cargo Cranes—1½-50 tons.
48 Bulk Cargo Cranes.

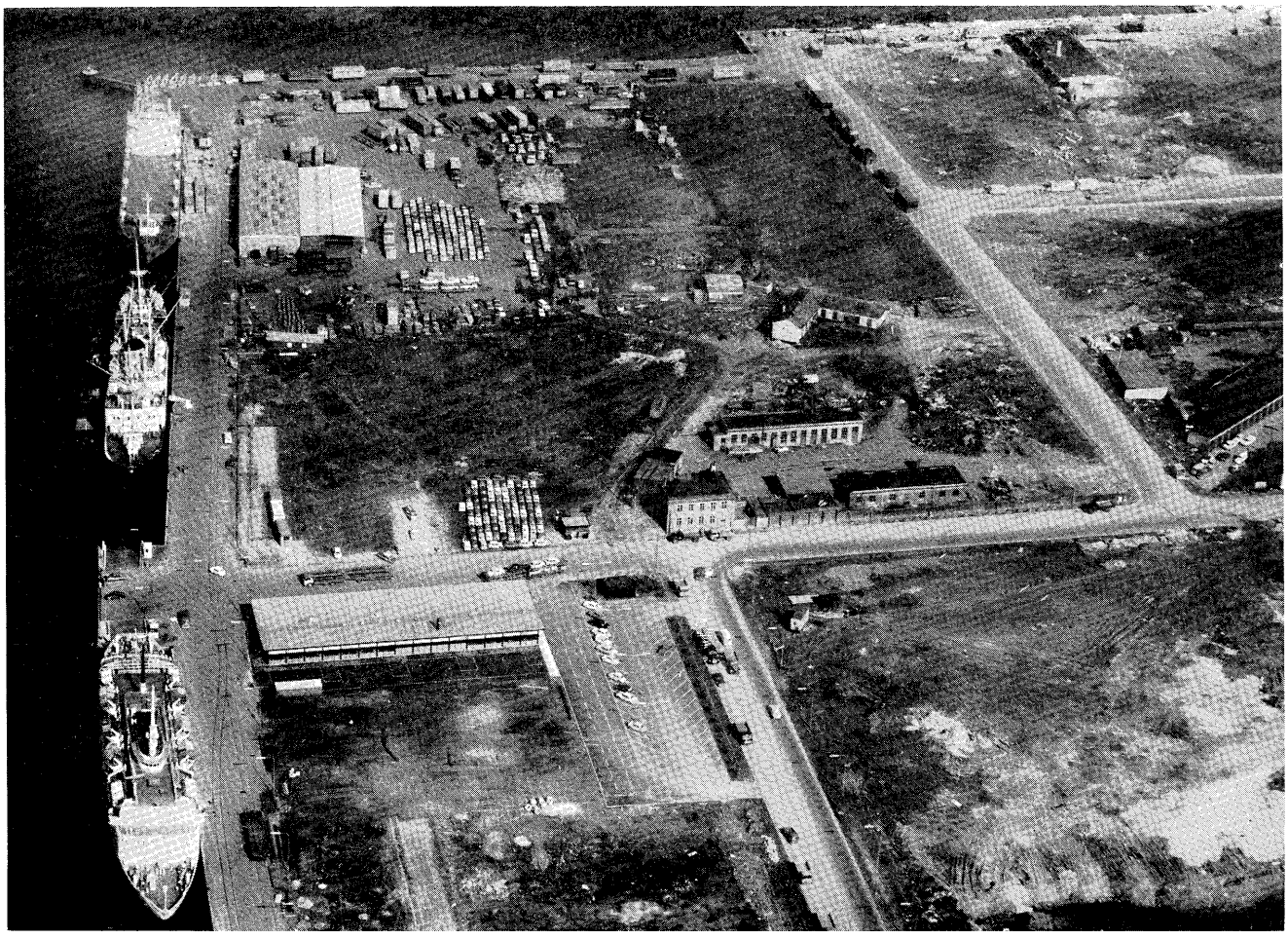
Dry Docks

The Port has 3 dry docks, of 787', 713' and 478' length, and one floating dock for vessels of up to 7,000 tons.

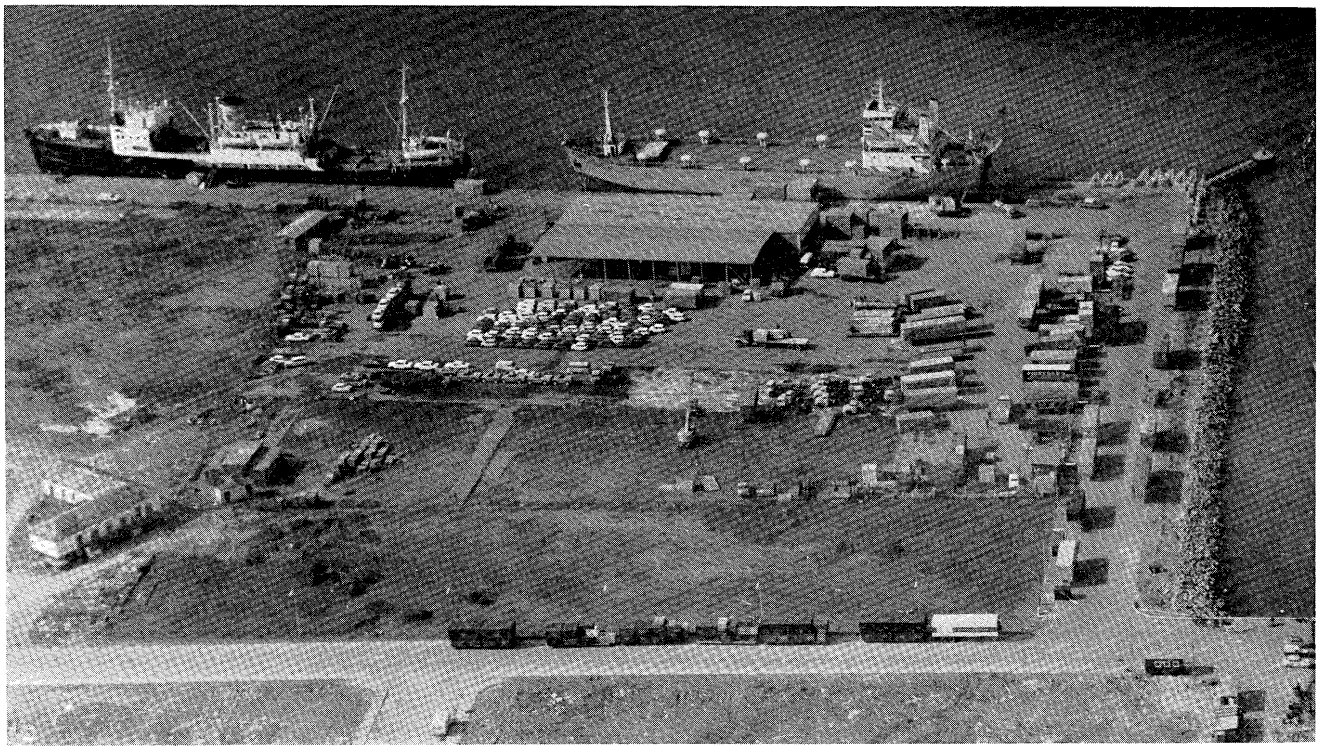
There are also slipways varying in length from 121' to 279'.

Bird's-eye view of the inner and outer harbour — photo courtesy Port of Copenhagen.

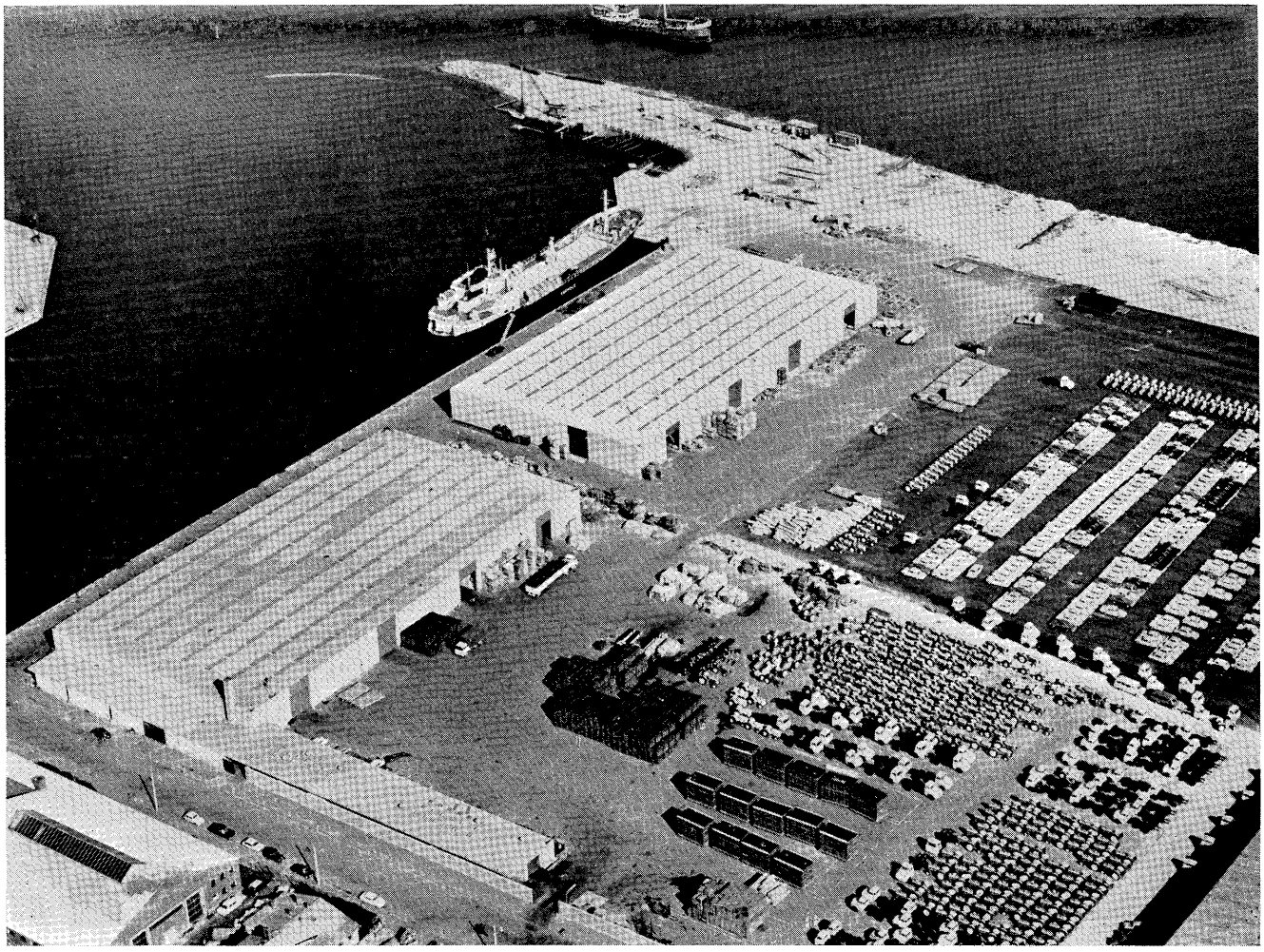
The Oil harbour—Courtesy the Port of Copenhagen.



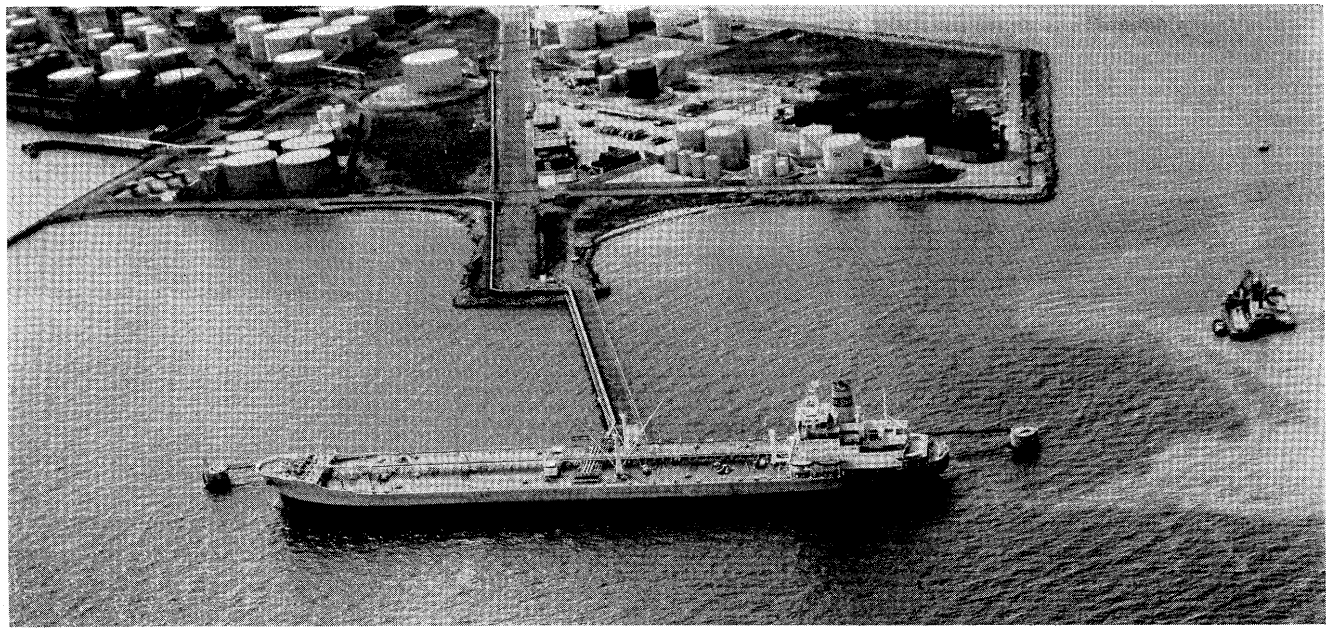
Roll-on/off and container terminal in the North Harbour—Courtesy the Port of Copenhagen.



Roll-on/off and container terminal in the North Harbour—
Courtesy the Port of Copenhagen, 1968.



Roll-on/off and container terminal in the South Harbour—Courtesy Port of Copenhagen.



The Oil Harbour Jetty which can take fully loaded tankers of up to 50,000 tons dw.—Courtesy the Port of Copenhagen, 1968.

Arctic Marine Operators Operating from Seattle

From Port of Seattle Reporter September 1, 1969

One of the most stirring and almost-incredible feats in marine transportation is being accomplished at Prudhoe Bay, keystone of the great Alaskan oil rush.

There on the fabulously oil-rich North Slope, men are fighting against time to unload more than 72,000 tons of supplies and oil-drilling equipment, and 18,000 tons of bulk petroleum. (At this writing, the immense operation was moving along smoothly, and the entire venture seemed assured of success.)

The "shipping" season in this rugged Arctic region for waterborne craft is a maximum of six weeks, usually starting in early August and ending around mid-September. But it could be much shorter than that.

The strategy is to get the cargo from Seattle to Point Barrow, the holding area for the barges at the very northernmost tip of Alaska, no later than July 25, and to wait there until the ice moves offshore around Point Barrow. Then make the dash to Prudhoe Bay, which is about 160 miles southeast of Barrow, unload the supplies and get out before the ice closes in again for another year.

It's a terrific gamble. The ice could move offshore late or close in early. The barges could be trapped and damaged, and the oil companies would be unable to use the much-needed materials and equipment.

A lot of risk, however, has been taken out of the operation because of thorough preparation and abundance of know-how.

Arctic Marine Freighters

The gigantic sealift is being handled by Arctic Marine Freighters, a Seattle-based outfit, which is an old pro in Arctic shipping.

AMF is a joint venture of Puget Sound Tug & Barge Co. and Alaska Barge & Transport Co. It is the only marine transportation firm hauling cargo for oil companies from the West Coast to North Slope.

Actually, this firm, operating under the name of APUTCO (comprised of Alaska Barge & Transport, Puget Sound Tug & Barge and United Transportation Co.) has had 10 years of experience in Far North shipping.

It has transported military supplies from Seattle for the DEW Line on the Arctic since 1958. During that time, APUTCO successfully carried over 70,000 tons of dry cargo and over 800,000 tons of bulk petroleum.

In 1968, AMF demonstrated its capability by hauling 6,000 tons of general cargo for two oil companies to Foggy Island, east of Prudhoe Bay. It was the first movement of commercial cargo east of Point Barrow.

Economic Impact

"This is a very rough operation, but I am confident we can lick all problems and carry it out to the satisfaction of all concerned," said Leo Collar, president of Puget Sound Tug & Barge and general manager of Arctic Marine Freighters.

"We have a lot of experience going for us, plus tug and shoreside personnel second to none in competence."

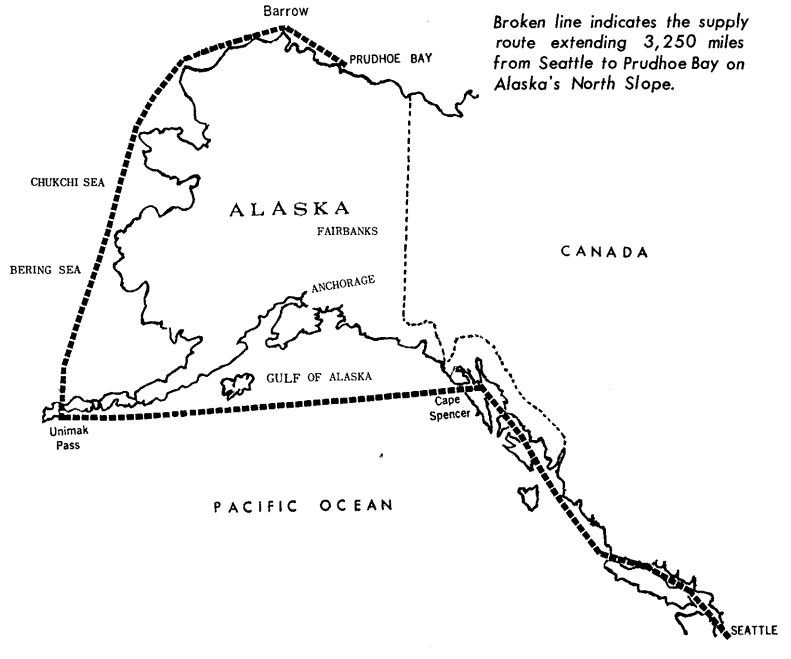
Collar stressed the tremendous impact the North Slope oil boom is having on Seattle and Puget Sound. "The whole project is Seattle-oriented. It is headquartered here. Most of the money for loading, repairs to equipment and manning is being spent right here. It is a massive boom to Seattle's economy."

Oil Reserves

The vast North Slope, stretching some 77,000 square miles, is the scene of the most frenzied activity in the history of the oil industry.

It is a stark and forbidding plain that slopes from Brooks Range into the Arctic Ocean. In winter, the thermometer dips to 70 degrees below zero. But beneath this cold and desolate land lies millions of dollars worth of Black Gold.

For years oil companies had been probing the North Slope in a costly and unproductive search for the oil. Then in the winter of 1967, the Atlantic-Richfield/Humble Oil consortium struck oil in an almost-desperation well put down at Prudhoe Bay. That touched off the greatest



oil rush in modern times. Today at least two dozen oil firms are in the field, and more are expected when the State of Alaska leases more North Slope territory this fall.

Geological experts believe the North Slope oil field may be the biggest ever discovered in North America. And if the oil reserves range from 20 to 40 billion barrels, as some authorities figure, they would be the largest in the world.

1969 Cargo

The 72,000 tons of construction supplies transported this year included, for the most part, casings, drilling mud cement, chemicals, lumber and poles. Plus housing and feeding facilities for AMF crews, light plants and tools. In addition, thousands of tons of bulk liquids, such as heating oil, diesel oil and aviation fuel, were shipped in bulk-oil barges.

For the 1969 operation, AMF had to hustle and build or acquire a large number of pieces of equipment, including ocean-going tugs and barges, and shallow-draft lighterage barges and tugs, trucks, trailers, tractors, fork trucks and cranes.

A total of 38 barges and 18 tugs were involved in the movement of cargo from Seattle to Point Barrow. The freight barges ranged from 2,500-ton to 7,000-ton capacity.

From the beginning of the year, supplies and equipment flowed in a steady stream by rail and truck from various parts of the country to AMF staging areas in Seattle.

The loading of barges began in mid-April, mostly at Port of Seattle Terminal 18 on Harbor Island and at Terminal 105 on the Duwamish Waterway.

After the barges were loaded, they were lashed expertly and tied up at various storage docks. Then, in the last week of June, two or three barges at a time, about every other day, departed for the 3,250-mile journey to Barrow.

The route taken by the tows was direct north through the Inland Passage, then out at Cape Spencer and across the Gulf of Alaska, through Unimak Pass in the Aleutians and then north through the Bering Sea and Chukchi Sea to Point Barrow.

At Barrow, the barges were held until the ice moved from the shore. The movement of ice was the crux of the entire operations. AMF had two aircraft on reconnaissance flights to check ice conditions and to direct the route of the tows from Barrow to Prudhoe.

Operations at Prudhoe

The loading of freight at modern, spacious terminals in Seattle was child's play compared to the delivery of the cargo at improvised facilities at Prudhoe Bay.

The long, shelving beach along the Arctic Coast makes it impossible for self-propelled, deep-draft craft to operate near the beach. The ocean-going tugs and barges were not able to go closer than six miles from shore. The water is only 4.5 feet deep in Prudhoe Bay.

This necessitated the use of lightering equipment, consisting of six shallow-draft barges and four pusher tugs, to transport the cargo to a specially built "dock," a product of AMF ingenuity.

The "dock" was made up of four barges, each 180 by 50 feet, lashed together and "sunk" on the bottom by ballasting the center tanks. The dock has two cranes. It is located at the end of a 1,100-foot causeway made of dredged river gravel.

As soon as the barges arrived at Prudhoe, hardy, experienced AMF unloading crews which had been flown in from Seattle, Anchorage and Fairbanks, immediately began discharging the cargo. Every hour of good weather was utilized to unload and stage the supplies on the beach.

After the unloading is completed, the lightering equipment will be put away in a lagoon in the Prudhoe Bay area and winterized for re-use in 1970.

Port Officials Impressed

Port of Seattle officials, among the first visitors to the unloading site, were tremendously impressed with the speed and dispatch with which cargo came ashore. (The officials were Commissioner Merle D. Adlum; Richard A. Berg, Port Alaska representative, and Robert H. Fletcher, director of public relations.)

In a movement rivaling the logistics of a full-scale military invasion, Arctic Marine Freighters personnel were making every minute of every 24-hour day count as they ped thousands of tons of oil-field material from the barges to large, graveled storage areas on the beaches.

AMF officials pointed, with justified pride, to the more-than 5,000 tons of general cargo off-loaded the previous day.

Of equal pride to men like Don McLean, project manager, and Al Watkins, assistant project manager, was the virtually damages-free condition of the cargo as it hit the Arctic shore.

The painstaking care with which the barges had been stowed paid off as the armada made it through high seas, storms and rugged ice fields unscathed.

1970 Movement

"If you think this year is big, you haven't seen anything yet," said Carl A. Weber, AMF traffic manager. "The 1970 tonnage is expected to be substantially greater than 1969. In addition to general cargo approximately 100,000 tons of pipe will move. The pipe will be for the first portion of the 800-mile oil pipeline which will stretch from Prudhoe to Fairbanks and then to Valdez on the upper rim of the Gulf of Alaska. Over 500,000 tons of pipe will be used for the pipeline. Each pipe section will be 60 feet long and 4 feet in diameter and weight 7.5 tons."

The pipeline will be capable of carrying 500,000 to 2,000,000 barrels of oil a day to Valdez. There it will be picked up by tankers and delivered to West Coast refineries.

Gigantic barges are being specially constructed to haul the pipe. Puget Sound Tug & Barge is building six. Four of them will be 400 feet long and 100 feet wide, and two will be 400 feet by 76 feet. Each will be able to carry about 12,000 tons.

Collar said that Puget Sound Tug has about $20 million in new equipment under construction. In addition to the barges, Puget Sound is building four new 7,000-horsepower tugs.

Alaska Barge & Transport Co. likewise is building six large barges, measuring 340 by 98 feet, capable of carrying 12,000 tons each and other marine equipment.

The Port of Seattle will give a further assist to AMF in cargo staging and loading for future shipments to the North Slope. The Port Commission recently authorized construc-

(Continued on Next Page Bottom)

Japan's First Nuclear Ship Being Constructed

(IHI Bulletin, October, 1969)

tion of an $8-million facility at Terminal 115 on the Duwamish Waterway. It will have a 1,760-foot apron structure and will encompass 50 acres.

* *

Thus, in what was once a virtual no-man's land, men and machines are writing a thrilling saga unparalleled in maritime transportation.

Equipped with hard-won know-how, courage and gambling instinct, this Seattle-based joint venture is winning a well-calculated battle against the ice and cold and navigational obstacles of the Far North.

Construction of Japan's first nuclear powered ship is now making good progress at IHI Tokyo Shipyard. The ship was ordered by the Japan Nuclear Ship Development Agency on November 16, 1967, to be built as an experimental ship to apply atomic power for marine propulsion for the purpose of obtaining basic data to advance building technology and to accumulate operating experience.

The ship named "Mutsu" was launched on June 17, 1969, as already reported, in a ceremony attended by Their Highnesses Crown Prince Akihito and Princess Michiko, as well as other prominent persons including Prime Minister Eisaku Sato and several Cabinet members.

The "Mutsu" is scheduled to be delivered to the agency in mid-1970 upon completion of sea trials with steam power from the ship's auxiliary oil-fired boiler and final completion with installation of the nuclear reactor is expected in early 1972.

Principal Particulars

The principal particulars of this vessel are as follows:

Overall length: 130 m
Breadth mld.: 19 m
Depth: 13.2 m
Designed full load draft: 6.9 m
Gross tonnage: 8,350 t
Trial speed: 17 knots
Speed with auxiliary power: 10 knots
Complement: Total 79

Reactor:

Type: Indirect cycle light water reactor × 1 set
Thermal output: 36 MW

Reactor containment vessel:

Type: Vertical cylinder type × 1 set
Inside diameter: 10 m
Inside height: 10.6 m

Main engine:

Type: IHI cross-compound double cylinder saturated steam turbine with 2-stage gear × 1 set
Output × rpm
Maximum continuous: 10,000 PS × 200 rpm
Normal: 9,000 PS × 193 rpm

Generating plant:

Main generators: Steam turbine-driven, 800 kW × 2 sets
Auxiliary generators: Diesel engine-driven, 720 kW × 2 sets
Emergency generator: Diesel engine-driven, 240 kW × 1 set
Generators for instrumentation: Electromotive, 30 kW × 2 sets

Auxiliary boiler:

Type: Double drum water tube heavy oil burning type × 1 set
Evaporation: 18 t/h at 30 kg/cm²g

The general arrangement of this ship is shown in Fig. 1. The reactor room, arranged amidships slightly toward the stern, is enclosed with bulkheads containing heavy concrete as secondary shielding. Ahead

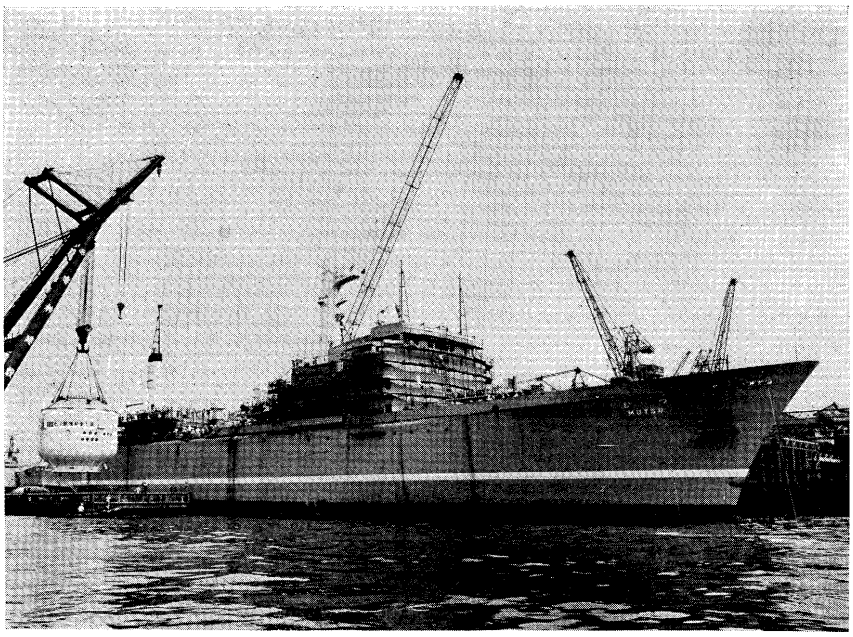
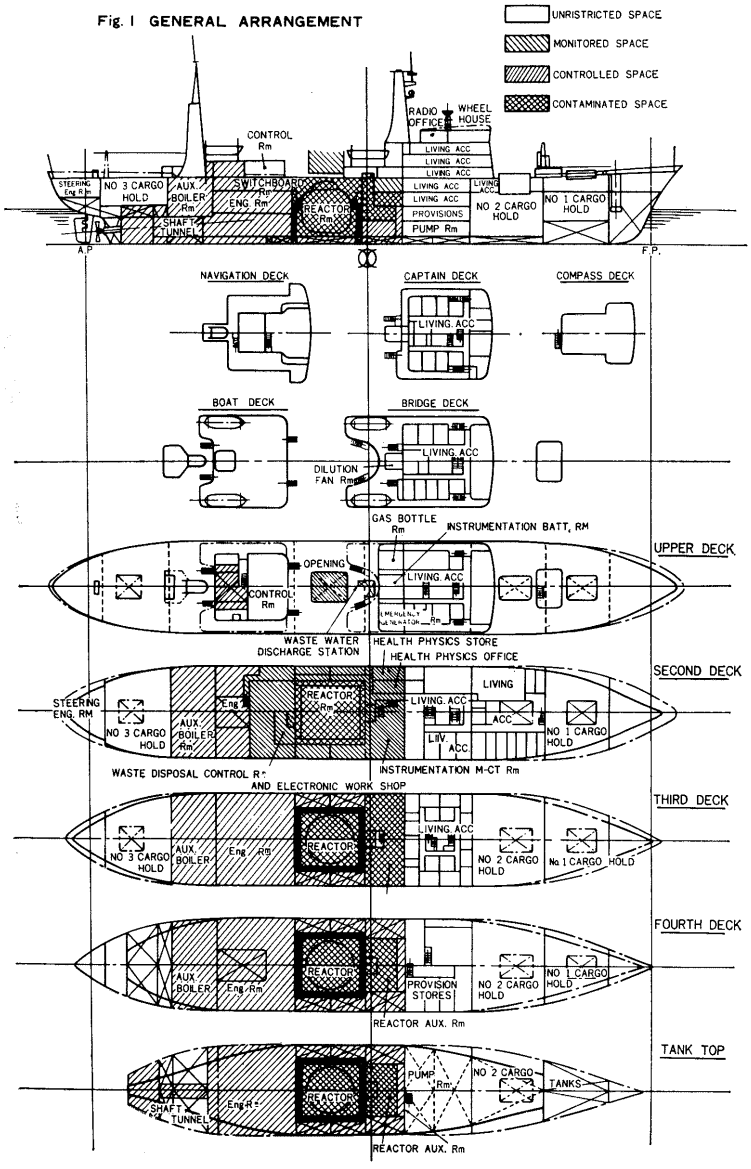


Fig. 1 GENERAL ARRANGEMENT



of the reactor room is a room for reactor auxiliaries. On both sides of these two rooms, as shown in Fig. 2, protective structures against collision are arranged to keep the reactor and its auxiliaries safe.

The engine room, located behind the reactor room, houses the main engine, main generators and other important machinery. The auxiliary boiler and auxiliary generators are installed in the boiler room behind the engine room.

The living quarters are situated amidships slightly toward the bow and the cargo holds are located near the bow and stern as illustrated.

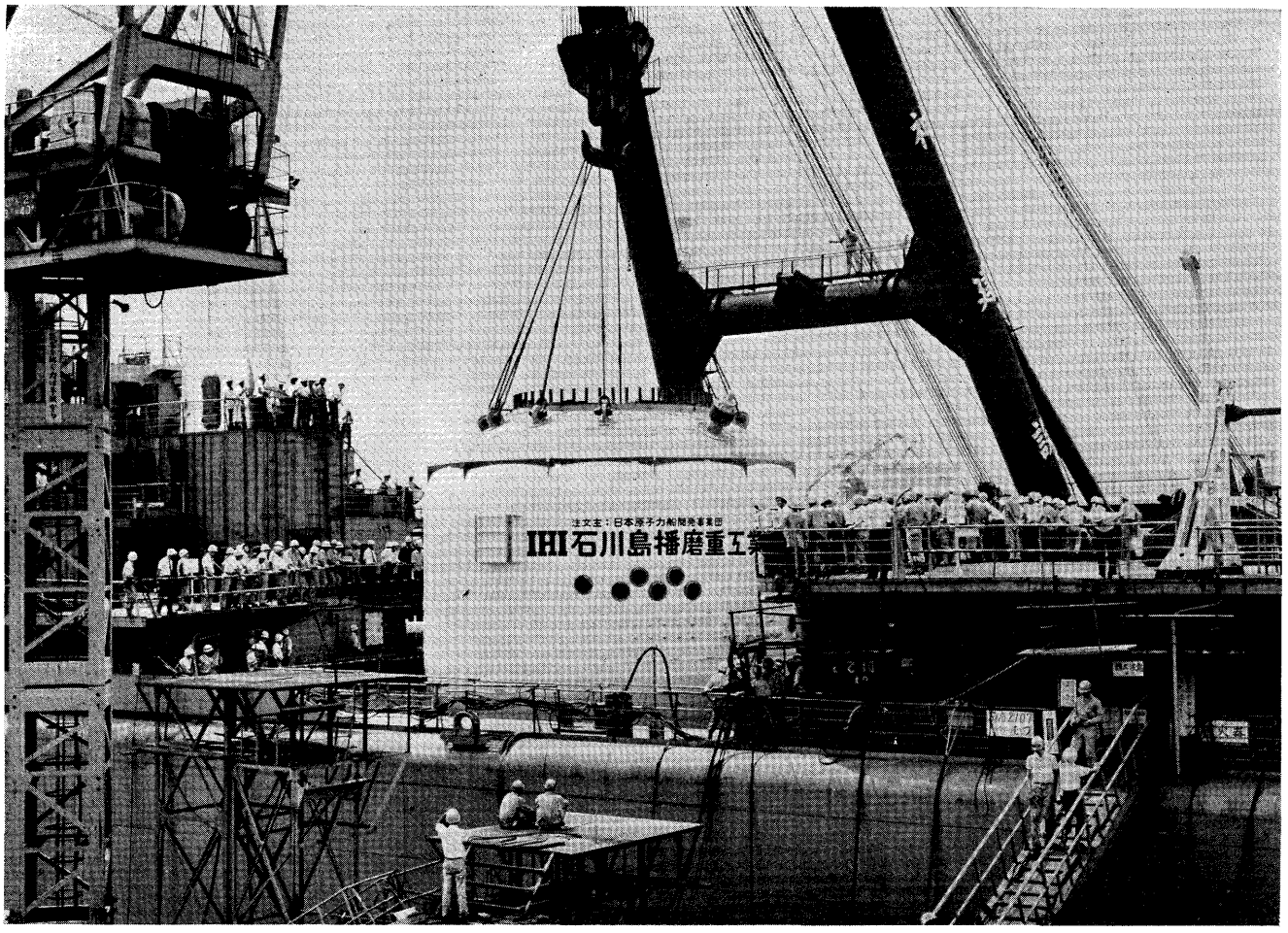
The radar mast, located amidships, also serves as exhaust stack for the mechanical ventilation system for the control area, and the exhaust of the auxiliary boiler and diesel engines for the auxiliary generators is discharged through the aft stack.

The propulsion plant of this ship mainly consists of a marine steam turbine fed with steam from the steam generators of the reactor, an oil-burning auxiliary boiler which also can supply steam to the propulsion plant if necessary and other auxiliary machinery. For electric power generation, as already listed, a total of 7 generators are provided for regular and back-up uses.

The secondary steam, generated by the main steam generators of the reactor bed to the main turbine and turbo generators, is condensed by the main and auxiliary condensers. It is then heated to 160°C in three stages by the combined feed water heated, de-aerator and high-pressure feed water heater, and again fed back to the main steam generators.

When the reactor is started, stopped or scrummed, the auxiliary boiler, in place of the main steam generators, supplies the steam needed. Especially in case of scrum the auxiliary boiler can start to supply steam within 5 minutes after the reactor is scrummed.

The reactor and engine room machinery of this vessel is remote-controlled and watched from the control room located on the upper deck slightly toward the stern. The radiation detectors installed in various places on the ship can also be observed from this control room. The main propulsion plant can also be observed from this control room.



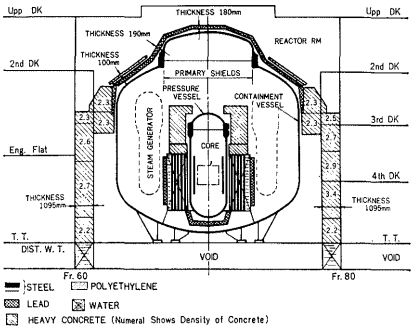
The main propulsion plant can also be remote-controlled from the wheelhouse.

To house the essential components of the reactor, the containment vessel is provided in the reactor room. This vessel, whose principal particulars have already been given, consists of high-tension steel plates meeting Nippon Kaiji Kyokai's Category II Class D standard (having a tensile strength of 60-72 kg/cm^2 at normal temperature) and IHI-IF-80 forged steel (having a tensile strength of 60-73 kg/cm^2 at normal temperature).

This containment vessel is installed on the double bottom of the ship with its double circular skirt-shaped base, and has four keys at its shoulder for upward support. While the base and the keys bear the load of the containment vessel and its contents in various directors, they are so designed as not to restrict the expansive or contractive deformations in the radial or vertical directions of the vessel caused by temperature variations.

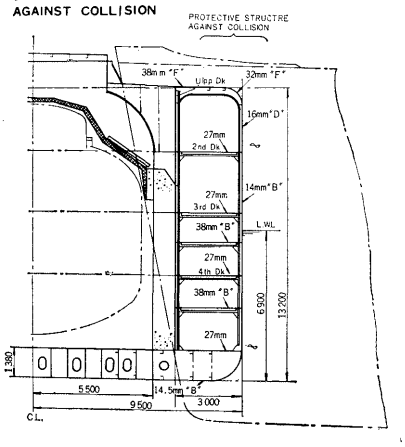
The containment vessel has, in addition to the penetrations for various piping and wiring and manholes for personnel entrance and exit, two pressure balancing valves at its bottom part, which permit flooding of sea water to prevent the vessel from collapsing in case the ship should sink.

Fig.5 SHIELDING ARRANGEMENT



The reactor and other units are provided with antiradiation shields. Heat insulators and primary shields are installed around the pressure vessel of the reactor as illustrated. Outside the containment vessel, secondary shields consisting of lead and polyethylene are arranged at the top, and those of heavy concrete, around the reactor room as illustrated. Thus the radiation reaching any part of the vessel is kept below the prescribed level so that the crew and equipment can be protected from its effects.

Fig.2 SECTION OF LEACTOR ROOM SHOWING PROTECTIVE STRUCTURE AGAINST COLLISION



Besides all that have been described, the greatest emphasis in the designing of this ship was placed on

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An Interview with the General Manager

"Port of Aden"

Annual Report, Accounts, and Review for the Year 1969–70

The Aden Port Trust, which manages the affairs of one of the busiest ports of the world, has been the subject of an influx of misconceptions and controversy as to its status, finance, field of activity and future plans. Not only does the Port of Aden enjoy a most auspicious geographical position at a cross-route between east and west, but its favourable status as a free port in the newly independent People's Republic of Southern Yemen reflects an era of greater prosperity for the new republic. To all intents and purposes the Port of Aden contributes to the overall national development plan in the republic, and to world trade at large.

The editor of the "Port of Aden Annual," in an attempt to clarify some of the misconceptions as to the status, finance and future plans of the Aden Port Trust, interviewed Mr. Shakeeb Mahfood Khalifa, the General Manager, in March 1968 and he candidly answered the questions put to him on the following lines. The editor wishes to express his gratitude for the useful information so given.

Question: The Aden Port Trust raises many a question as to its status. Could you please define this government-owned enterprises?

Answer: The Aden Port Trust is an autonomous public body established by, and run in accordance with, the Port Trust Ordinance. It is therefore neither a private enterprise nor a government department. The policy-making body is the Board of Trustees, whose members are appointed by His Excellency the President of the Republic.

Question: If such is the status of the Aden Port Trust, can you tell us how this establishment is controlled, your financial record and other matters related thereto?

Answer: The Aden Port Trust is a self-financing establishment, and due to the absence of any government subsidies our innate drive is orientated towards profit-making. As to the financial record of the Aden Port Trust, there has been a surplus for the past ten years, except for the year 1956-7. Such surplus is normally spent on equipping the port with tugs and cranes, the erection of sheds and buildings, the construction of wharves and quays, and the dredging of the harbour. The closure of the Suez Canal, however, has unfortunately marked a deficit of £1,000,000 in revenue during 1967-8, and this is expected to continue until the canal reopens. The deficit is covered from the surplus of previous years amounting to £2,000,000. Thus it is quite imperative to cut down on spending, including the freezing of all capital projects and employment. As for control, we are directly responsible to His Excellency the President. As I have said, when there is a surplus in the budget this is spent on projects that are destined to develop and improve the port facilities. These projects are approved by the Board of Trustees, and are subject to final approval by His Excellency the President.

Question: Are you contemplating any increase in the fees you collect from ships that enter the port and the cargo handled in your wharves at present?

Answer: In all our policies we strive to increase our competitiveness vis-a-vis other ports. Hence any increase in the fees will be decided upon after studying the market conditions, because we must always attempt to cater for customers through the provision of efficient service, quick turn-round and lower prices. We must never abandon or lose sight of the commercial enterprising spirit which must pervade our business operations.

Question: Do you expect an increase in the number of ships using the port in the future?

Answer: Before the closure of the canal the average number of ships entering the port was 500 each month. This has now decreased to 100 ships monthly because of the closure. However, considering the difficulties that the Port Trust faced after independence, one cannot help feeling proud that the same efficient twenty-four-hour service as in the past is being offered to all ships that call at our port. This fact, coupled with the urge to develop our facilities through the provision of additional berths and further dredging to attract bigger ships, leads one to anticipate that we shall, when the Suez Canal reopens, at least resume our previous role as a leading port. We are naturally equipped to play such a role because we are on the main trading and shipping lines and we possess a large natural harbour, as long as we endeavour to supply efficient services at attractive rates.

Question: Do you consider that the Port of Aden will have any share in the container boom?

Answer: Basically, container traffic depends on goods being sent in such containers from terminal points to other ports, where it is expected that the containers will be used again and filled with export goods to the countries from which they originated. Although we in the People's Republic of Southern Yemen are not looking for such type of trade we are quite enthusiastic to become a transit port for containers arriving from all parts of the world with goods to nearby ports in the Red Sea, the Arabian Gulf and East these containers will be sent to the respective ports by coasters.

We are sure that the long tradi-

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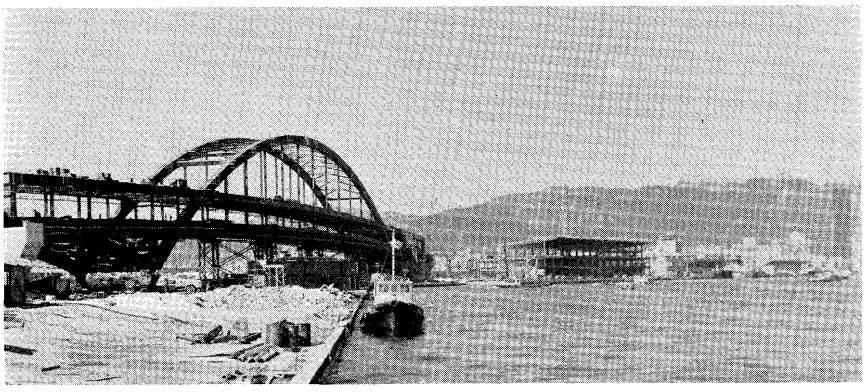
safety, and various safety devices are provided as required. Moreover, the highest safety standards were applied to the hull structure, the design of which satisfies all the legal requirements on stability, subdivision and firepreventive structure.

Kobe Ohashi Bridge

(Ohashi means "Big Bridge")

Port and Harbor Bureau
Kobe City



Outline of the Construction of the KOBE OHASHI BRIDGE.

1. Introduction

With the rapid growth of the economy of Japan, the volume of cargo handled by Kobe Port has kept increasing from year to year to the extent that it reached 24,482,-000 tons in 1968. It is anticipated that this figure will rise to 38,000,-000 tons in 1975.

Under such circumstances, it has become imperative that the port and harbor facilities of Kobe should undergo vital renovations. With this aim in view, a gigantic construction project known as "Port Island" is now under way with the goal set for 1975. With a total area of 4,364,000 square meters, the Port Island will be equipped with nine container berths and 21 berths for regular liners, as shown in Fig. 1, which enable the future marine city to handle 10 million tons of cargo, or more than a quarter of the total cargo handled in Kobe. In fact, part of the container berth facility will be put into use in 1970.

Located in the heart of the Port of Kobe, it is now under construction off the Breakwater Nos. 2 and 3. Under the plan, some 50,000 motor-driven vehicles will ply between the island and the shore via the "Kobe Ohashi Bridge" linking the Shinko Pier No. 4 and the marine city and the road to be built (see Fig. 2) to connect the littoral section and the urban area. The Port Island will also be linked functionally with the hinterland through the expressway.

The "Kobe Ohashi Bridge" is the first double-decked, three-span continuous arch bridge in Japan and the 217-meter center span is the longest of its kind in the country. It is under construction by the hand of Port and Harbor Bureau, Kobe City with March, 1970 as the target. The name was picked from among those given by citizens. The vermillion bridge, which will figure against the background of the verdant Rokko Range and the blue sea, is certain to make another symbol of the Port of Kobe.

2. Outline of the Project

The bridge spans over the 200-meter channel from across the Port Island and the edge of the old Pier No. 4 which is extended 200 meters into the ocean. In selecting its type, the following conditions were taken into consideration.

(1) For the safe navigation of small vessels numbering some 2,700/day which sail through the channel, no pier shall be built in the channel.

(2) In order not to interfere with the towing activity during typhoons, the bridge girder space shall be more than KP 160 m in the 160-meter stretch in the central part of the channel.

(3) The eight lanes to be built for the disposition of some 50,000 vehicles a day anticipated to run into and out of the Port Island after the completion of the artificial island shall have such a structure that does not hamper the function of the Pier No. 4 when they pass through the pier.

After studying the above circumstances, it was decided that the bridge should have a structure featuring four lanes, 14.0 meters wide, and double-decks and three-span continuous arch (51.0 m+ 217.0 m + 51.0 m = 319.0 m). The bridge is so designed as to have 3-meter footways on both sides of the roadway on the lower deck, with water and gas pipes plus electric and telephone wires running under the bridge girder.

The bridge, which is double-decked, will have one-way traffic system. In other words, the lower deck is for the vehicles incoming from the Pier No. 4 and the upper deck for shore-bound vehicles. At both terminals of the bridge, roads will be built, one on the Port Island side and the other on the Pier No. 4 side.

The road on the Pier No. 4 side is designed to function fully, linking the littoral section of Kobe Port and the urban area. The plan calls for at the time of the completion in March, 1970 of the main bridge part that connections be made with the ramp provided for on the Pier No. 4 and the extension of the road and the main line part are still under contemplation.

The road on the Pier No. 4 is not only connected with this bridge but also with the "Port Terminal" (the Passenger Ship Terminal that appeared on P. 20, Vol. 14, No. 12, the December, 1969 issue of this publication) now under construction at the base of the Kobe Ohashi Bridge, and under the main track

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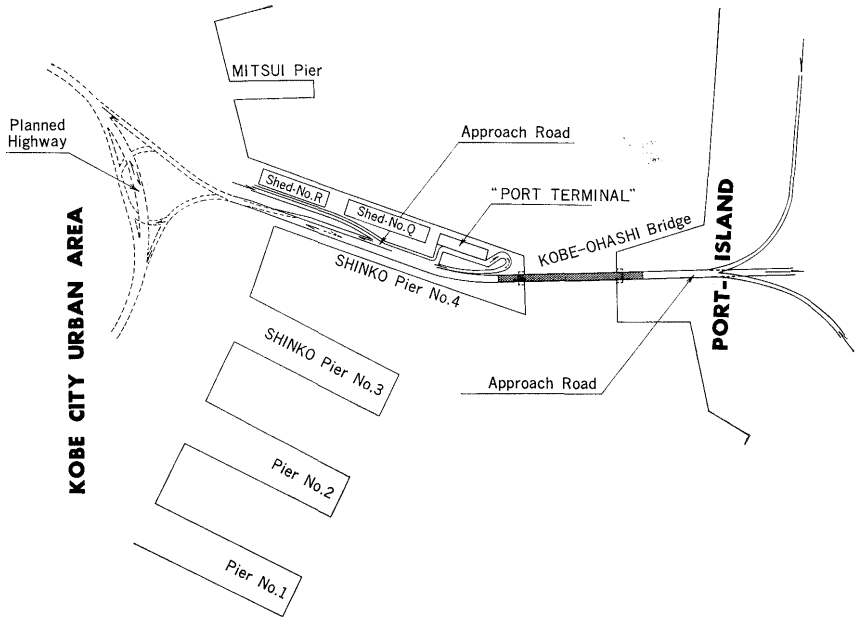
tion of the Port of Aden and its wide experience, together with its strategic position, will help in making this proposal a success, and we have already started taking steps to find out how this can be brought about by making contacts with the various companies interested in this type of trade as soon as the Suez Canal reopens.



of the road is to be constructed a shed.

The on-ramp is to be linked with the lower lanes of the main road in front of the passenger terminal in a 5% inclination from the road in the port at the base of the Pier No. 4, and is so designed as to be connected with the entrance of the passenger terminal.

The in-bound route from the passenger terminal is connected with the upper lane on the main track with a loop ramp provided for on the south side to be led into the off-ramp.

The ramp attached to the passenger terminal is of double-deck structure which makes it possible to be connected with the ancillary motor pool in addition to the in-bound ramp.

The main track on the road in front of the passenger terminal has bus-stops. On one side of the on-ramp is built a footway 4.25 meters wide that is connected with the bridge via the port terminal.

The off-ramp with a 7% inclination runs into the intersection at the base of the Pier No. 4, where it leads into the lower lanes of the main track of the road whereby to provide the flat road on the pier with ample width.

The lower lanes of the road on the Port Island side, which has a 5% inclination, is connected straight with the trunk road in the Port Island, while the four upper lanes branch off in two lanes in the form of Y, on the trunk road. The lower lane of the road on the Port Island side will be completed in March, 1970 to be open immediately.

The upper lanes of the road on the Port Island side will continue to be constructed. Up until they are completed, there will temporarily be facing traffic on the lower lanes alone to connect with the Port Island.

WTCA JAPAN GENERAL ASSEMBLY

WORLD TRADE CENTERS ASSOCIATION

TOKYO-YOKOHAMA-KOBE, JULY 1-6,1970

Japan Awaits...You,

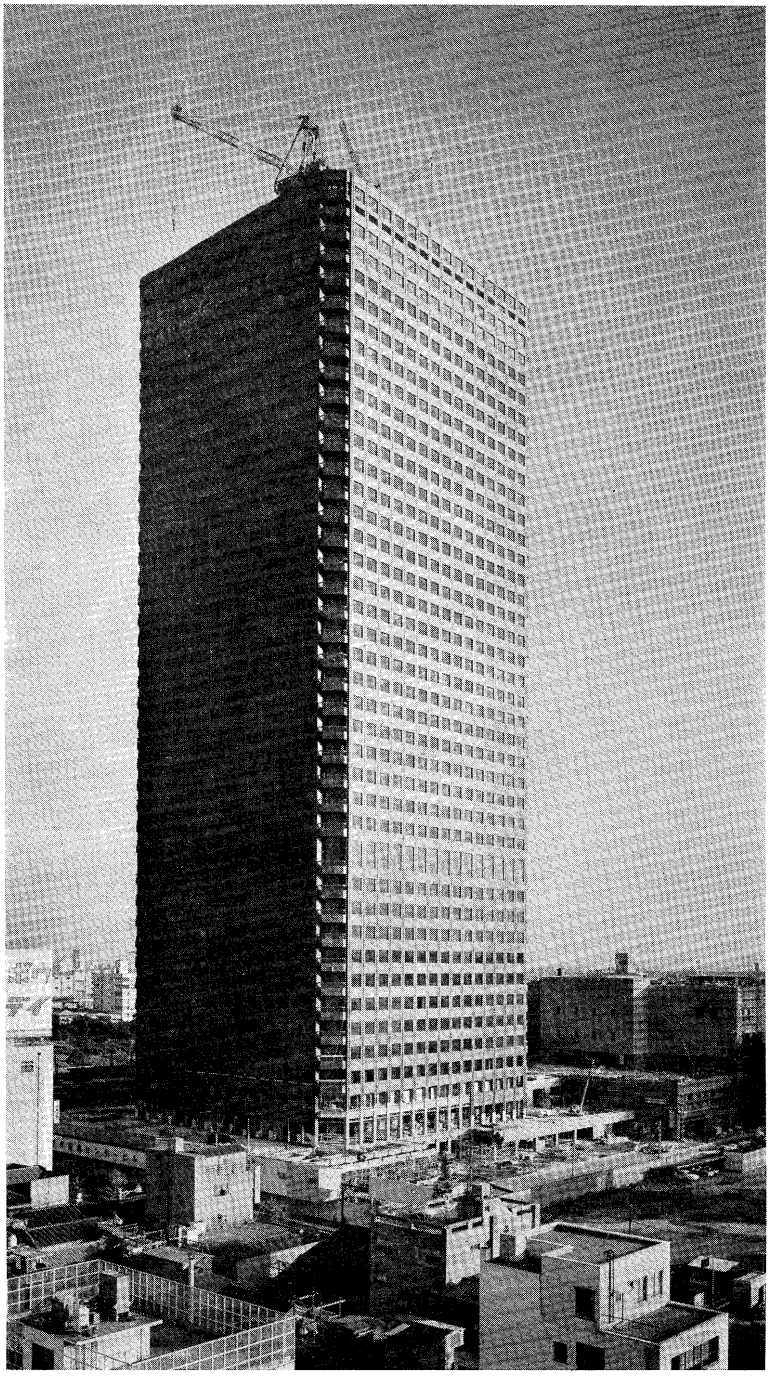
So You Need To Make Up Mind Today!

JULY 1 (Wed.) Tokyo
Registration
Opening Ceremony
JULY 2 (Thurs.) Tokyo
First Day Proceedings
10 minutes speech
Working Session I, II
JULY 3 (Fri.) Tokyo
Second Day Proceedings
10 minutes speech
Working Session III, IV
JULY 4 (Sat.) Hakone
Tour to Hakone via Yokohama
JULY 5 (Sun.) Kobe
From Hakone to Kobe by New Tokaido Line
JULY 6 (Mon.) Kobe
Third Day Proceedings
Working Session V
Closing Ceremony

Special Programs will also be arranged for ladies.

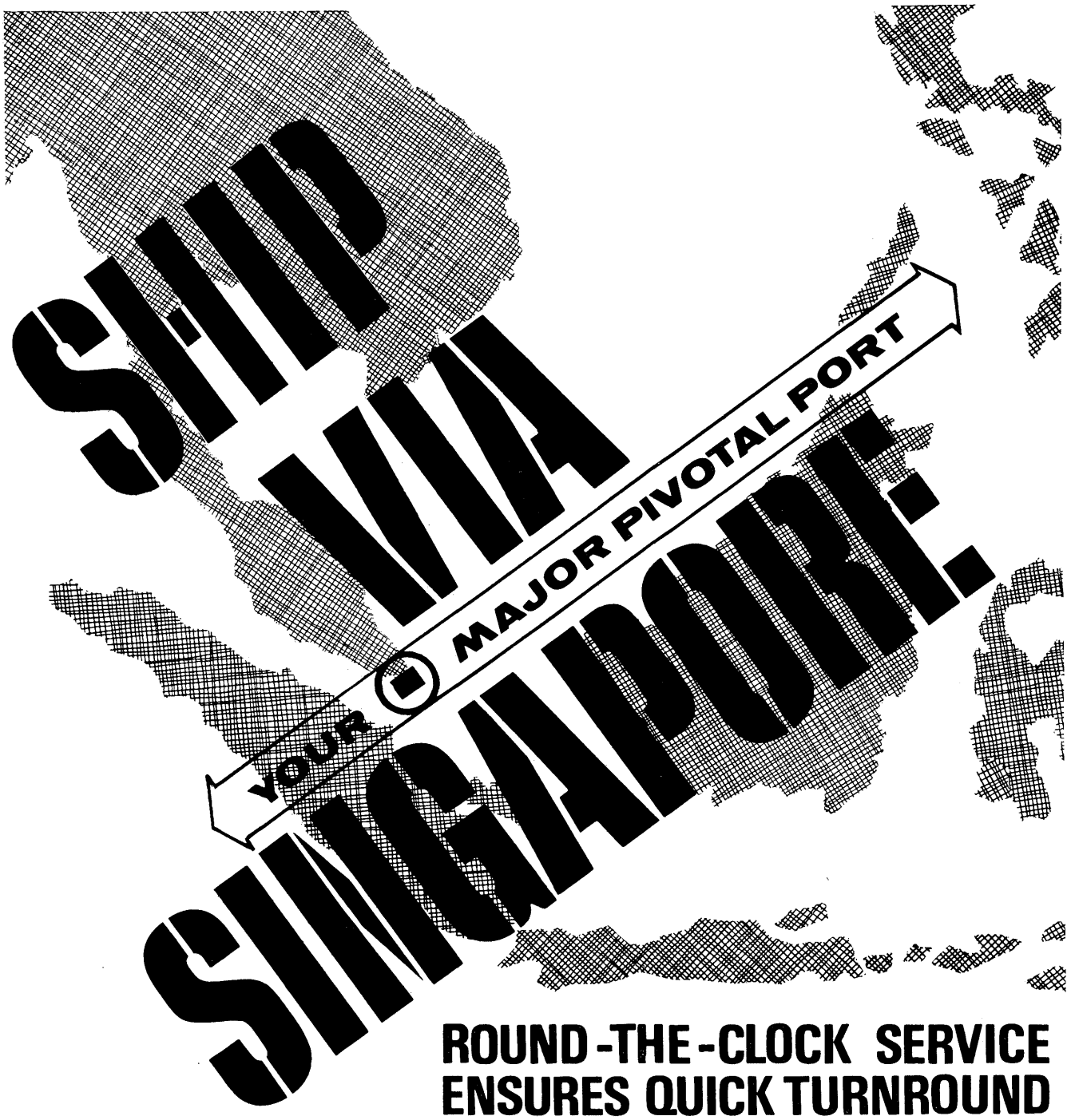
THE WORLD TRADE CENTER OF JAPAN INC.
WTCA JAPAN GENERAL ASSEMBLY ORGANIZING COMMITTEE
Hoko Bldg., 8-19, Ginza 1-chome, Chuo-ku, Tokyo 104, Japan
Telephone: Tokyo 567—6561
Cable Address: PEATRAINT TOKYO

As of March 1, 1970, our new address will be: c/o World Trade Center Bldg. (37th floor), Shiba-Hamamatsu-cho, Minato-ku, Tokyo
Telephone: Tokyo 435—5651



TOKYO WTC BUILDING NEARING COMPLETION

Registration fee: Delegate $125.00 Accompanying Lady $50.00



ROUND-THE-CLOCK SERVICE ENSURES QUICK TURNROUND

SINGAPORE'S CONTAINER PORT, now under construction, will comprise 2,250 ft. marginal wharves (41 ft. LWOST) for container vessels, a 700 ft. cross-berth (34 ft. LWOST) for feeder service vessels and a 100 acre back-up area.

SOON — YOUR CONTAINER LINK FOR THE REGION!

THE PORT OF SINGAPORE AUTHORITY
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Orbiter Probe

IAPH News:

Singapore Is Site of Executive Committee Meeting

The inter-conference meeting of the IAPH Executive Committee Meeting is going to be held Tuesday February 10 through Thursday February 12 in the Goodwood Park Hotel, Scott Road, Singapore. This action is being taken in conformity with ARTICLE III—EXECUTIVE COMMITTEE, Sec. 16 (Meetings of the Executive Committee) of the IAPH By-Laws.

Invitations were sent by President Swanson to the Committee members (eleven of them), Special Committee Chairmen (three of them) and Mr. J. Kerwin Rooney (Legal Counselor). Acceptances are coming in at Mr. Swanson's office. Mr. G. Edney, Committee member from Port of Bristol Authority, wrote to say that he would be accompanied by Sir Kenneth Brown, Chairman of the Bristol Port Authority and President of the U. K. Dock and Harbour Authorities' Association.

Mr. Swanson will be accompanied by his personal secretary Mr. N. L. Fidge. Dr. Chujiro Haraguchi will take three aides with him, and Mr. Toru Akiyama, Secretary General, will be assisted by Messrs. Shigehiro Kusu and Takuji Nakanii. Approximately twenty persons including a few ladies will be visiting Singapore during the period. You will read more about this meeting, especially in regard to the particulars of the June 1971 Montreal Conference to be set down in Singapore.

Loans to African Ports

Washington, D.C. — The World Bank has made a loan equivalent to $35 million for the expansion and modernization of the two chief ports serving the East African Community, Das es Salaam in Tanzania and Mombasa in Kenya. Increased capacity and more efficient operations are urgently needed to avoid growing congestion at the ports and to provide for the continuing economic development of the member states of the Community, Kenya, Tanzania and Uganda, and neighboring landlocked countries.

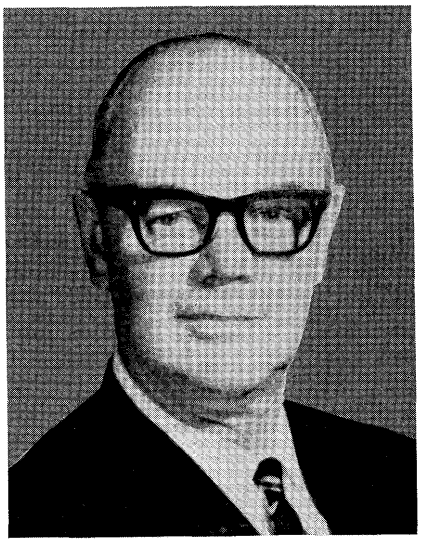
The loan was made to the East African Harbours Corp. (EAHC) and guaranteed jointly and severally by Kenya, Tanzania and Uganda. It is for a term of 25 years, including a 5-year grace period, and bears interest of 6½%. The loan was approved by the Bank's executive directors in July, before the new interest rate of 7% came into effect on Aug. 1.

Export-import traffic through Dar es Salaam and Mombasa now totals about 3 million tons annually. Imports and exports of Kenya, Tanzania and Uganda are expected to grow at an average rate of about 4½% between 1968 and 1975. Virtually all of this addition traffic will pass through the two ports. Additional capacity is also needed at the ports to handle the growing traffic of neighboring countries, particularly Zambian traffic through Dar es Salaam, which is now some 300,000 tons annually, and is expected to increase threefold by 1972 when the reconstruction of the Tanzam Highway will have been completed.

The Bank loan will assist in financing EAHC's development program for 1969-72, which will cost the equivalent of $58.3 million. The program includes the construction and equipping of two general cargo berths at each port capable of handling container traffic as it develops; a wharf for the handling of bulk grain and cement traffic at Mombasa with grain silos and appropriate mechanical handling equipment the completion of three general cargo berths of Dar es Salaam now under construction with the assistance of an earlier Bank loan, providing them with sheds and equipment; and a new offshore tanks mooring and submarine, pipeline at Dar es Salaam. At both ports existing berths and stacking areas will be renovated and re-equipped and other improvements will be undertaken.

The Bank loan will cover the foreign exchange requirements of the port development program, including interest on the loan during construction. The remaining costs will be met by EAHC out of cash gen-

Honored



Mr. V. G. Swanson

In the New Year Honours List, Her Majesty The Queen Elizabeth II has conferred upon Mr. Swanson the Honour of Commander Order of the British Empire (C.B.E.).

eration from operations.

Until recently the East African ports were administered jointly with the railways in Kenya, Tanzania and Uganda by the East African Railways and Harbours Administration for which the Bank made loans totaling $62 million in 1955 and 1965. In accordance with the Treaty for East African Cooperation which established the Community, the East African Harbours Corporation assumed responsibility for operating the seaports on June 1, 1969. (Shipping Digest)

Seaway Notice No. 15 of 1969

Cornwall, Ontario:—As stated in Seaway Notice No. 13 of 1969, the closing date for navigation in the Welland Section of the Seaway is December 22, 1969.

Due to the scheduled winter construction and maintenance program, it will not be possible to extend the season beyond that date. Therefore, no vessels will be accepted for transit at either end of the section after midnight, December 22.

Seaway stations at Picton, Oshawa, St-Catharines and Long Point will sign off for the season at midnight, December 23.
December 17, 1969

A. M. Luce,
Director of Operations.

Monthly Review

On the cover page of a new 8-page "Monthly Traffic Review", Vol. 1, No. 1, October 1969, published by The St. Lawrence Seaway Authority, is printed the following announcement:

Recognizing the need on the part of ports and shipping interests to be better informed on current Seaway traffic, the St. Lawrence Seaway Authority has undertaken the experimental publication of a Monthly Traffic Review dealing with the movement of waterborne cargoes into and out of the Great Lakes.

The Review, which will include summaries of current trends compared with previous experience, will be distributed throughout the navigation season.

For the balance of the current year details will be provided on ocean and inland vessel transits upbound and downbound cargo tonnage and commodity flow totals for selected cargo items. Initially, these will be limited, among bulk shipments, to wheat, corn, soyabeans, other grains, iron ore and coal. General cargo data will be limited to manufactured iron and steel, automobiles and trucks, military cargo and containers. It is hoped to extend these commodity reports, as historical data becomes available, to include scrap metal, petroleum products, newsprint and domestic package freight statistics, although this will probably not be possible before the start of the 1970 season. Also, information on in-ballast vessel transits will be collected for future reporting, allowing for an assessment of the frequency of back-haul movements.

The Authority invites your comments so that the content of this monthly review can be as useful and as relevant as possible to the shipping industry in the Seaway-Great Lakes system.

Pierre Camu,
President.

1969 Tonnage

Duluth, Minn., December 11:—Total international tonnage shipped through the Port of Duluth-Superior in 1969 fell slightly behind the 1968 pace, the Seaway Port Authority of Duluth announced today.

Despite record-setting performances in exports of scrap iron and in imports of all cargoes, the port's total import-export tonnage was down from 2,848,398 tons in 1968 to 2,783,706, a drop of 2.3 per cent.

Export grain shipments tailed off in late season from an already so-so year, the Port Authority said, and accounted for most of the loss.

(The totals do not include domestic shipping within the Great Lakes, which is continuing into December. The port's final ocean-going ship of the season departed Dec. 5.)

Grain exports for the year were down from 2,370,578 tons in 1968 to 2,219,776 (a decline of 6.4 per cent), but for the last five weeks of the season were down from 477,620 tons to 289,588 (a decline of 39.4 per cent). The annual average for Duluth-Superior grain exports for the first 10 years of the St. Lawrence Seaway — from 1959 through 1968 — was 2.59 million tons.

Scrap shipments for the year were up by 73.2 per cent, or from 71,545 tons in 1968 to a record 123,904. The previous high was 123,634 tons in 1961.

Imports of all cargo inched up from 67,793 tons to 68,310, a gain of only three-fourths of a per cent, but nonetheless a port record in that category for the fourth year in a row.

Other gains were recorded in exports of grain by-products (up 31.5 per cent, from 179,958 tons to 236,652) and bulk liquids (up 18.6 per cent, from 30,635 to 36,346) and in grain imports (up 33.5 per cent, from 7,172 to 9,576).

Declines were recorded in general cargo exports (down 16.3 per cent, from 117,930 tons to 98,718) and imports (down 3.1 per cent, from 60,621 to 58,734). The decline in general cargo exports was traced primarily to a reduction in government shipments of corn-soya-milk, a blended food product which accounted for 28,353 tons of export tonnage in 1968 but only 10,741 this past season.

Twenty-two countries were represented by ships in port in 1969. Norway had the most (32), followed among the leaders by Germany (21), England (18), Greece (16), Liberia (14) and France and India (10 apiece). (Seaway Port Authority of Duluth)

Honored in Antwerp

Los Angeles, Calif., December 9:—William Chernus, European Director of Trade Development for the Port of Los Angeles, was honored December 8 by the City of Antwerp, with the presentation of The Medal of Honor for his outstanding contributions in the development of trade between the cities of Antwerp and Los Angeles.

The Medal of Honor, rarely bestowed to foreigners, was awarded

Expansion at Port of Boston

Edward J. King, executive director of the Massachusetts Port Authority, points out the primary area to be developed under the $5.6 million contract signed November 21 for construction of the site of the first phase of the Boston-Mystic Public Container Terminal in the Charlestown section of Boston to officials of Massport, the contractor and the Authority's consulting engineers. From left are Guy Denizard, MPA project engineer; Frank Gitto, construction superintendent, Matthew Chamberlain, chief engineer, and James M. Salah, president, all of the Salah and Pecci Construction Co. Inc. of Canton, Mas-chief engineer; Thomas T. Soules, director of Massport's Port of Boston sec-sachusetts, contractor for the project; Mr. King; Thomas H. Kuhn, MPA tion; and Umberto R. Cocchiarella, project manager for Frederic R. Harris Inc., consulting engineers, who is assisting Massport in the container terminal project. (Public Relations Department Massachussets Port Authority)

at a dinner hosted by the Port of Los Angeles, in Antwerp, for city and port officials of the Belgian city, freight forwarders and shippers. Robert L. M. Vleugols, General Manager of the Port of Antwerp, made the presentation on behalf of his city.

Robert A. Day, President of the Los Angeles Board of Harbor Commissioners, who is presently in Europe, and Chernus were also honored by the Antwerp Union of Freight Forwarders with a Gold Medal for Service, to acknowledge the part taken by the Port of Los Angeles in the International Association of Freight Forwarders.

Chernus returns to Los Angeles January 5, 1970 to assume his new duties as Assistant Trade Development Director for the Harbor Department.

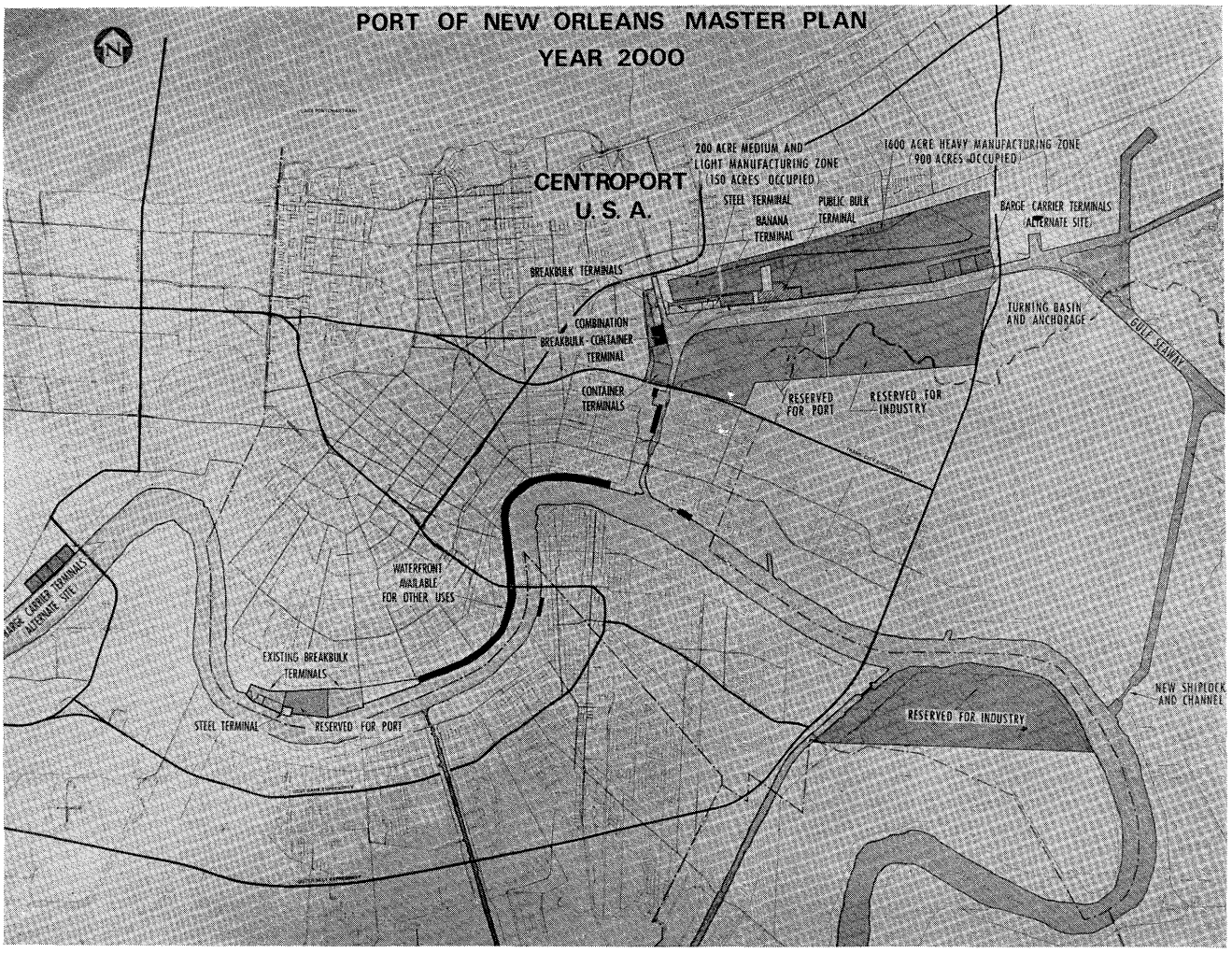
Training Program

Los Angeles, Calif.:—The most competent, highly skilled, well-trained waterfront work force in the world will soon be available for the expeditious handling of world commerce through the Port of Los Angeles.

A special training program, designed to provide experts for the operation of huge container cranes, straddle lifts, mobile land cranes and other special equipment needed to meet the booming containerized movement of cargoes, will supply this vital work force.

Joint agreements between the Pacific Maritime Association, the International Longshoremen's and Warehousemen's Union and Los Angeles port officials have made Harbor Department container-handling equipment at Berth 131 available for training purposes.

CENTROPORT USA at New Orleans



A master plan for the development of CENTROPORT USA at New Orleans has just been released by the Port of New Orleans. Construction and land acquisition has already begun on the development, which is to include almost $400 million in new port facilities alone, shown in the darkened areas above. Hundreds of acres, also in the shaded areas, are being made available to industry. The plan, to be carried out during the years 1970 to 2000, also calls for phasing out most of the part's older general cargo facilities on the Mississippi River. Construction is underway on a combination breakbulk-container terminal to have nine ship berths, as shown in shaded area in center of photo. (Port of New Orleans)

Training classes at the facility are held only when the big twin-lift container crane is not in use loading or unloading a ship, port officials point out. Adequate safeguards and insurance are provided.

Candidates for training are selected from a volunteer group and approved both by union and employer committees.

Instructors are highly skilled union members. The program is designed to provide waterfront workers with an incentive program leading to higher pay and other advancement.

"We currently have 12 men enrolled in the program to provide this versatile group of workmen for the safe and efficient handling of containerized cargoes," said John D. MacEvoy, area manager for the Pacific Maritime Association.

"A total of 60 qualified operators of these huge container cranes and other specialized equipment are to be trained during the coming six months under the program which is known as SCAMP, meaning 'Ship Cargo and Management Program,'" MacEvoy added.

Development of such a core of skilled waterfront workers will offer world shippers the most efficient force ever available for ship cargo-handling, according to Port of Los Angeles General Manager Bernard J. Caughlin.

Caughlin hailed the joint train-

ing venture as one of the most progressive steps taken in waterfront labor in many years.

The container crane training plan augments similar programs inaugurated during the past few years which have provided the Port of Los Angeles with qualified lift truck and jitney drivers, which operators for gear aboard ships and expert checkers.

Spokesmen for the International Longshoremen's and Warehousemen's Union Local 13 in Los Angeles Harbor declared the training offers workers an incentive and provides greater safety and security for both workmen and cargo.

Workers registering for training courses receive pay for the time spent in learning.

The Port of Los Angeles, by making port facilities available for the program, has taken a leading place in development of a more adequate work force for the entire Pacific Coast. Similar training schedules are in effect in other coast areas.

Gulf Ports Ass'n

Mobile, Alabama: — Vigorously, aggressively, the ports along the entire coastline of the Gulf of Mexico compete with each other. This is healthy: competition spurs competitors to do their best.

But these Gulf ports also cooperate. This, too, is healthy: Cooperation across the banquet and conference table through the medium of their own association means their mutual interests are protected and promoted.

The organization through which these cooperative efforts and actions are channeled is the Gulf Ports Association. Recently, the presidency of this association, now a quarter-century old, came to the Port of Mobile—in the personification of the Director of the Alabama State Docks, Mr. Houston H. Feaster.

Mr. Feaster's election came at the association's annual meeting in Galveston, Texas.

As the new president, it is his task to guide the association for the next year in carrying out its overall mission, and Mr. Feaster has pledged his colleagues new energies in that direction.

One objective is development of more foreign and domestic commerce to and from all Gulf ports. Another is development of ports along sound economic lines, including operations, maintenance, engineering, design, construction, administration and management. Still another is standardization of descriptions of rules and of services. The association also strives to carry on a beneficial exchange of ideas and information on all port activities.

"The Gulf Ports Association," says the new president, "is a very important, almost indispensable cooperative vehicle through which every port along the Gulf may derive substantial benefit. The work of this association proves dramatically that competition and cooperation are both possible—and advantageous—at the same time.

"Each port goes after all the business it can get with all the resources and all the vigor it can put to the task. Each port, simultaneously, recognizes there are many areas of mutual interest in which cooperation is vital. It is in these areas that the Gulf Ports Association does its outstanding job."

The association does much of its work through committees appointed by the president: committees on transportation and traffic, port practices, port operations, port planning, and law and legislation.

Since its original incorporation 25 years ago, the association's membership has grown from nine to 18 ports.

In addition to Mr. Feaster's election as president, the association has named another official of the State Docks, Mr. C. D. Haig, Jr., General Traffic Manager, as secretary-treasurer. Mr. S. E. Pomeroy of Orange, Texas, is first vice-president, and Mr. Howard Neely of Lake Charles, La., is second vice-president.

Representing the Port of Mobile at the Galveston meeting, in addition to Mr. Feaster and Mr. Haig, were J. M. Scott, General Manager, and Julian W. Smith, General Sales Manager. (Port of Mobile, September)

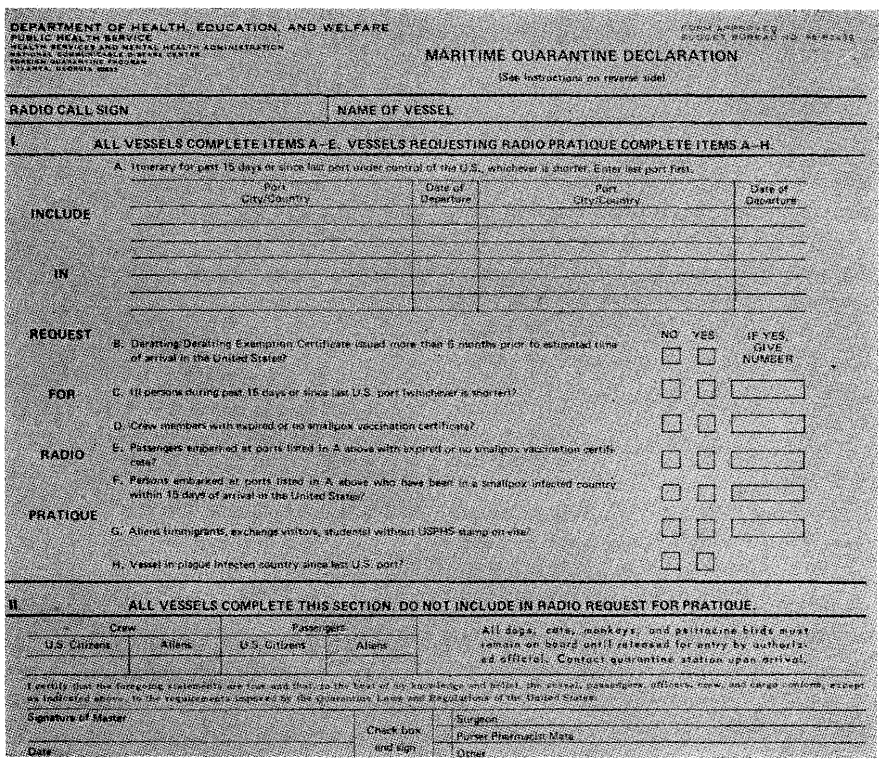
Mr. John F. Martin

John F. Martin, Vice President, Marketing, of PACECO, a division of Fruehauf Corporation, has been elected President of the Crane Manufacturers Association of America.

"Radio Pratique"

New York, N.Y.:—Ship quarantine clearance by "radio pratique," which has been in effect on an experimental basis in the Port of New York since last December, has now been simplified even further and extended to become the **preferred** United States Public Health Service at all U.S. ports staffed by full-time quarantine personnel.

Under radio pratique, a ship's master can obtain port quarantine clearance for his vessel while en route merely by radioing to his agent answers to certain specified questions (see partial reproduction at right of form HSM [13.10]) regarding health and medical conditions aboard his ship. Bypassing the formerly required stop for on-board inspection by a USPHS officer can save the steamship company from $120 to $175 and more for each hour its ship spends in quarantine, according to The Port of New York Authority, which has studied and endorsed radio pratique. Total savings, including savings on the cost of shore labor stand-by time and overtime payments for USPHS staff, may run as high as $1,200 for a single dry cargo vessel and up to



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE

MARITIME QUARANTINE DECLARATION

(See instructions on reverse side)

RADIO CALL SIGN | NAME OF VESSEL

I. ALL VESSELS COMPLETE ITEMS A–E. VESSELS REQUESTING RADIO PRATIQUE COMPLETE ITEMS A–H.

A. Itinerary for past 15 days or since last port under control of the U.S., whichever is shorter. Enter last port first.

INCLUDE IN REQUEST FOR RADIO PRATIQUE	Port City/Country	Date of Departure	Port City/Country	Date of Departure

		NO	YES	IF YES, GIVE NUMBER
B.	Sanitary Deratting Exemption Certificate issued more than 6 months prior to estimated time of arrival in the United States?	☐	☐	
C.	Ill persons during past 15 days or since last U.S. port (whichever is shorter)?	☐	☐	
D.	Crew members with expired or no smallpox vaccination certificate?	☐	☐	
E.	Passengers embarked at ports listed in A above with expired or no smallpox vaccination certificate?	☐	☐	
F.	Persons embarked at ports listed in A above who have been in a smallpox infected country within 15 days of arrival in the United States?	☐	☐	
G.	Aliens (immigrants, exchange visitors, students) without USPHS stamp on visa?	☐	☐	
H.	Vessel in plague infected country since last U.S. port?	☐	☐	

II. ALL VESSELS COMPLETE THIS SECTION. DO NOT INCLUDE IN RADIO REQUEST FOR PRATIQUE.

Crew		Passengers	
U.S. Citizens	Aliens	U.S. Citizens	Aliens

All dogs, cats, monkeys, and psittacine birds must remain on board until released for entry by authorized official. Contact quarantine station upon arrival.

I certify that the foregoing statements are true and that, to the best of my knowledge and belief, the vessel, passengers, officers, crew, and cargo thereof, except as indicated above, is in compliance with the quarantine laws and regulations of the United States.

Signature of Master | Check box and sign | ☐ Surgeon ☐ Purser-Pharmacist Mate ☐ Other

Date

All Clear is Simple Through Radio Pratique

$2,400 for a single tanker, according to a Port Authority report on the new procedure.

The new, simplified Maritime Quarantine Declaration form became effective October 1. Already distributed to all U.S. quarantine stations and all U.S. consulates abroad, it can be used by nearly all shipmasters, regardless of whether or not a ship's crew includes a qualified purser/pharmacist mate, and it has reduced the number of health and medical questions asked to the scant seven requiring "yes" or "no" answers.

The new radio pratique regulations also permit the master of a "clean" ship—one which rates a "no" answer to all seven health and medical queries—to condense his response to the brief code message "RPR-AIN," meaning "Radio Pratique Requested—All Items Negative." The ship's captain with problems does not have to waste many more words. His answer, if for example three crew members lacked vaccination certificates, would read: "RPR-AINX. D-3." This would translate to: "Radio Pratique Requested—All Items Negative Except Item D. Three crew members lack proper vaccination certificates." The quarantine station would then notify the captain, via ship's agent, what further action to take.

As a monitor on their new system, USPHS will continue to conduct inspections on a randomly selected 20 per cent of all vessels receiving full pratique clearances. These inspections, however, will be undertaken on an unscheduled basis while the ship is in berth in order to avoid any lost time to the ship. Ships which for some reason fail to request radio pratique, or are denied clearance, will continue to anchor off Staten Island for the full treatment at the old stand.

Radio pratique or other quarantine health inspection continues to be unnecessary for vessels which had spent the 15 days prior to entering the U.S. at certain "exempt" areas around North America. Exempt areas include all ports in the Caribbean, Canada, Iceland and Greenland, Miquelon and St. Pierre, the Panama Canal Zone, Bermuda and the Bahamas, and, for smallpox only, Mexico. (Via Port of New York, October)

Director in London

New Orleans, La.:—The Port of New Orleans will open a new European Trade Development office in London, England and has named Robert N. Pundsack as Managing Director. Pundsack will join the port staff on January 19, 1970 and is expected to report to his London duty station in late April, 1970 following completion of an indoctrination period at the port.

The territory covered from London will embrace the United Kingdom, Scandinavia, Portugal, Spain and North Africa.

Pundsack brings to the port of New Orleans 12 years of experience with Lykes Bros. Steamship Company, Inc. He has served Lykes in London, as a trainee; in Barcelona, Spain, as assistant to managing director; in Genoa, Italy, as operations officer; and in New Orleans in Lykes' east African service. He currently is manager, foreign trade development division, Lykes Bros., New Orleans, Lousiana, which position he has held since April 1967.

Pundsack has attended Brighton College, City of London College, Barcelona University and Tulane. He is a member of the Institute of Chartered Shipbrokers London, holds a diploma in maritime law and expects to complete a B.A. in Romance Languages at Tulane. He is single, a British citizen, and is fluent in Spanish and Italian.

This move represents the initial step in a major program of sales expansion by the Port of New Orleans.

In 1968 the United Kingdom's trade with New Orleans totalled 486,000 tons, valued at $96,000,000. Exports totalled 378,000 tons, valued at $58,000,000, while imports totalled 97,000 tons, valued at $37,500,000.

The port's trade with Scandinavia in 1968 totalled 144,231.8 tons, valued at $25,500,000. Between New Orleans and the Iberian Peninsula there were 287,993.1 tons, valued at $11,500,000.

By obtaining the services of a well-known and well-regarded British subject in the London shipping

and freight market, an individual also thoroughly informed about the Port of New Orleans's facilities and services, New Orleans will be able to canvass cargo far more effectively between the United States, the United Kingdom, Scandinavia and the Iberian Peninsula. Bulk cargoes between the United States and world-wide areas can also be better canvassed by the maintenance of a regular contact with the London Baltic Exchange.

COFC Breakthrough

Of major value in overland freight savings for exporters to the eastern part of the United States from Japan, Far East, Southeast Asia, Australia and New Zealand, and the steamship lines operating in these trades, is a recently inaugurated shipping service, the first of its kind on the East Coast. It is a major breakthrough for the ports of Norfolk and Portsmouth, Virginia in the "container revolution." The new service, which is provided by the Norfolk & Western Railroad, is called COFC (Container on Flat Car).

What it means is that the Norfolk & Western Railroad will move cargo containers on railroad flat cars without the use of wheels and chassis. Norfolk and Western is the first Eastern Carrier to provide this service.

Steamship companies will no longer have to provide wheeled equipment to take the container from the ship to the railroad car and then on to the railroad car where the equipment simply sits and is toted "piggyback." For the steamship company, it means that trailer units, which cost something over $3,000 each, will not have to be tied up for long periods of time. It also means the steamship companies will not have the massive administrative job of keeping up with trailers and chassis.

Under the new service, a steamship company will have a container taken directly off of a ship and put on a railroad flat car. The Norfolk & Western will take the container off of the railroad car in Chicago where it will be loaded on wheels provided by the N&W and delivered.

According to Lewis Carter, Manager of the Regional Foreign Commerce Department for the Norfolk & Western Railroad, this new service should "encourage steamship lines to tell their salesmen to concentrate on the ports of Norfolk and Portsmouth.

As of today, this service is being provided for cargo traveling between Norfolk and Chicago. In Chicago, the Norfolk & Western has special side-lifters which can handle the containerized boxes. According to Carter, the N&W is in the process of equipping a depot in St. Louis, Missouri, and if the experiment becomes as successful as is projected, other stations along the vast N&W Rail System will be equipped to handle containers.

The first shipment under this new service was loaded in late November at the Norfolk International Terminals. The Norfolk & Western says the same service is being provided to the Portsmouth Marine Terminals and the Lamberts Point Docks.

James N. Crumbley, General Manager for the Norfolk Port & Industrial Authority, calls the new service "a major breakthrough." As Crumbley sees it, "the new service is an integral part of the quickly evolving containerized process which has already made Norfolk the number two container port on the East Coast." The Norfolk port officials say, "for our port to be the first on the East Coast to offer this service, is most helpful."

"This is the finest thing that has happened for shippers to inland points of the United States via the East Coast ports," says W. J. Young, Director for Far East, Virginia State Ports Authority, Tokyo. "It puts the container ports of Hampton Roads, Virginia, on a par with West Coast ports where Container on Flat Car rates have been in existence for a long time," he says.

Experts in the containerized cargo field are quick to point out that for the process to work properly, there must be an efficient transportation system. This is why developments such as Norfolk International Terminals, Norfolk, Va., and Portsmouth Marine Terminal, Portsmouth, Va. have spent vast sums of money in recent years to buy cranes, piers and other equipment which compliment each other. The complicated equipment at both these facilities has been expertly integrated so that a container can be put on or off of a ship in a minimum amount of time at a most economical cost. (Virginia State Ports Authority Far East Office, Tokyo)

Work Assured for ILA

Norfolk, Va.:—Members of the International Longshoremen's Association in Hampton Roads, Virginia have started on a new milestone of employment conditions—the guaranteed work year for ILA members. Working relations on Hampton Roads, which has had the least disruptions by waterfront labor of almost any major port, should become even better.

In the case of Hampton Roads the guarantee is for 1,600 hours of work for the next 12 months. A year from tomorrow the guarantee rises to 1,700 hours.

The guarantee is part of a package deal arrived at last February in the settlement of the dock strike which ran for 63 days. It means if a qualified man works less than 1,600 hours—say 1,550—he will be paid for 1,600.

Effective tomorrow also will be a 25 cents an hour increase effective with the strike settlement.

David Alston of Norfolk International vice president of the ILA, said Hampton Roads joins New York, Philadelphia, Boston and Baltimore in the guaranteed work year.

The guarantee here is not as great as in the other ports, Alston said. Boston and New York's guaranteed work is 2,080 hours and Philadelphia's 1,800 hours. The three have had the guaranteed work year since the 1965 contract. Baltimore entered on the guaranteed work year this year with its hours numbering 1,800.

To be eligible for the guarantee here a longshoreman must have worked 700 hours last year. Alston

said paper work on eligibility is being done this week.

The ILA leader said he was of the opinion that the guaranteed work year will not work a hardship on the shipping companies.

"Most of the people will work 1,600 hours," he said.

Larry E. Pentecost, who was chairman of management's negotiating committee for the contract reached in February, said from 1,700 to 1,800 longshoremen here will get the guaranteed work year.

With the advent of the guaranteed work year, the size of the gangs dropped from 13 to 12 men, as the ILA wage rate raises to $4.25 an hour. A year from now the scale rises another 35 cents an hour. (Virginia State Ports Authority)

Annual Traffic

Philadelphia, Pa.:—General cargo movements through the Ports of Philadelphia continue to show impressive gains, according to the Delaware River Port Authority's annual compilation of maritime tatistics, International Waterborne Commerce.

Exports and imports of general cargo totaled 5.4 million tons in 1968, a 17.3 per cent increase over the 4.6 million tons handled the previous year. Adding significance to these figures is the fact that each ton of general cargo has a greater impact on the area economy than bulk tonnage.

It was the first time general cargo movements in Philadelphia ports have topped five million tons, according to Port Authority statisticians.

The report notes that general cargo imports totaled 3.7 million tons in 1968, up from 2.9 million the year before. Larger gains were recorded in manufactured goods, which showed a 53 per cent increase to 1.9 million tons. While machinery and transport equipment imports declined 11 per cent, they were offset by a 77 per cent gain in the export of such material.

Impressive gains were also seen in the handling of coated and uncoated steel. Imports were up from 520,000 tons to 886,000 tons. Exports also increased from 18,000 tons to 95,000 tons.

The port's total business grew 9.4 per cent, the greatest jump in volume since 1962. More than 53 million tons flowed into and out of the Delaware River terminals, making it the nation's second busiest port. This tonnage helped increase the port's share of the U.S. total to 10.78 per cent.

The leading imports include: crude petroleum (26.9 million tons), iron ore (10.5 million), residual fuel oils (6.7 million) and sugar cane (1 million). These commodities accounted for 89.2 per cent of Philadelphia's import tonnage.

Bulk imports increased 8.9 per cent, from 46 million tons to 50.7 million tons. Petroleum imports increased 27 per cent.

A declining trend in corn exports was sharply reversed in 1968 when 635,464 tons were shipped abroad. This is more than double the tonnage exported in 1967. Corn accounted for 20 per cent of the port's bulk exports. Exports of residual fuel oils also increased dramatically, from 34,000 to 214,000 tons.

The foreign commerce report shows trade figures for 120 countries. South American nations contributed 47 per cent of the imports to Philadelphia, much of which was iron ore. Imports from Africa doubled, from 4 million to 8 million tons, making it the second-ranking exporter to Philadelphia. Iron ore from Libya was responsible for most of the increased tonnage from Africa. Asia continued as the third largest supplier of tonnage for the Ports of Philadelphia.

Customs receipts for the Ports totaled a record $150 million, up $4 million from the year before.

International Waterborne Commerce is prepared and published by the Delaware River Port Authority's World Trade Division. Copies are available upon request to the Division's headquarters, Public Ledger Building, Philadelphia, Pa. 19106. (DRPA LOG, November)

Philadelphia News

• The Norwegian port of Bergen will soon challenge Methuselah when it comes to longevity. The city will celebrate its 900th anniversary next year with an exposition and international conference designed to show new countries how ports can aid their development.

The exposition, "Port 70," is to run from September 25 to October 24, according to Peter B. Namtvedt, chairman.

• Profitable shipping routes in the coming years will include bringing Libyan oil and Venezuelan iron ore to Philadelphia, according to studies recently prepared for the U. S. Maritime Administration. These ships might take coal to Italy and wheat to Brazil on their return voyages, the reports said.

The four recent studies conclude that future U. S. flag bulk carriers probably will be combination dry bulk/liquid bulk vessels of between 40,000 and 60,000 dwt. traveling at speeds of 16 to 18 knots.

The reports are available from the Clearinghouse for Federal Scientific and Technical Information, Springfield, Va. 22151. They are "The National Need for a Dry Bulk Fleet," "Trading Opportunities for U. S.-Flag Dry Bulk Carriers," "Bulk Carrier Program Technical Requirements," and "Optimization Studies for a Standardized Dry Bulk Carrier."

• Construction has begun on a 20,000-square-foot warehouse for the Linde Division of Union Carbide Corp. in Mid Atlantic Park in West Deptford, N. J. The warehouse inventory will include approximately 6000 different items, a spokesman said.

• A new refrigeration system for containers that is one-sixth the size and one-tenth the weight of existing systems has been introduced by Malakar Corp. Temperatures can be controlled from minus 20 degrees to room temperature, according to Dr. Stephen Malakar, president of the firm. (DRPA LOG)

Illegal Port Equalization?

Portland, Oregon, December 4:—The Commission of Public Docks (Portland, Ore.) today announced it will petition the Federal Maritime Commission to investigate on its own motion the alleged practice of Sea-Land Service, Inc., of soliciting in the Orient for cargoes destined for Portland but discharging these cargoes in Seattle and trucking them overland at Sea-Land's expense to consignees in this city.

Thomas P. Guerin, Dock Commission general manager, in describing the practice, said that if allowed to continue unchecked it can only serve to draw off increasing volumes of cargo that normally would be freighted aboard vessels calling at Portland.

He outlined the procedure thus: cargo is shipped from the Orient on Portland bills of lading in Sea-Land containers and discharged at Seattle. It is then forwarded overland to the consignees, with Sea-Land paying applicable overland freight charges. Sea-Land then bills consignees the local cartage or freight charge that would have applied had the cargo been discharged at Portland. Other costs, such as the truck freight between Seattle and Portland, are then absorbed completely by Sea-Land.

Guerin told the Commission that the big danger for Portland lies in the adoption of this policy by other shipping trades. He stated that Sea-Land, as well as other carriers, have asked if the Dock Commission would receive freight forwarded from Seattle in this manner and that in all cases the request has been turned down.

The Dock Commission has been investigating Sea-Land's practice for several months and believes that approximately 10 per cent of the containers discharged in Seattle have been destined for Portland.

Thomas J. White, Dock Commission legal counsel, said this form of port equalization, whereby cargo is discharged at a port other than specified on the bill of lading with the ocean carrier absorbing overland freight hauling costs, eliminates the geographical advantage of a port by diverting the flow of cargo from its tributary area to another port by artificial means.

Such practices have, in the past, been declared illegal by the Federal Maritime Commission. In the mid-1950's, in a reverse situation, the Pacific Westbound Conference of steamship lines was told by the FMC to halt its practice of paying overland freight charges on cargo moving outbound through San Francisco but originating in the Pacific Northwest. The Dock Commission, together with the Port of Seattle, initiated this well-known "Equalization Case" and brought an end to this procedure.

The Dock Commission unanimously agreed to petition the Federal Maritime Commission to investigate the present situation. If the petition is granted, Sea-Land will be required to defend its practice before the Commission. (Portland Public Docks News Release)

Higher Cost Averted

San Diego, Calif., December 10:—A proposal that would have increased the cost of shipping commodities by truck from three western states to the Port of San Diego was defeated in action taken at Los Angeles Friday (Dec. 3) by the Rocky Mountain Motor Tariff Bureau.

Don L. Nay, Port Director for the San Diego Unified Port District, said the Bureau had proposed to levy an arbitrary charge of 6 cents per 100 pounds to and from Port of San Diego docks and warehouses ostensibly to compensate for "heavy traffic conditions and crowded operating areas." The added cost would have been put on shipments from Arizona, New Mexico and West Texas, a prime market area for exports moving through the Port of San Diego.

Nay said such arbitraries are in effect at other West Coast ports, but that San Diego long has been free of such extra costs. "Certain natural advantages plus careful planning in our port development has helped us avoid the traffic congestion, freeway snarls and operating difficulties in warehouse and dock areas that force excessive waiting time for trucks," Nay said.

The Port Director said the Port had filed protests concerning the proposal, and had notified the Bureau that the Port and other affected parties would file a complaint with the Interstate Commerce Commission should the 6 cents levy be imposed. The I.C.C. previously overturned a similar proposal in 1959.

The Bureau's decision today not to establish the arbitrary was regarded with satisfaction by the Chamber of Commerce and ten local shippers and agencies who had joined the Port of San Diego in protesting the proposal. (Port of San Diego News Release)

Nagasaki-Seattle

Seattle, Wash.:—The Port of Seattle broadened its trade relations in Japan with the signing of a trade agreement with Nagasaki Prefecture.

The new pact calls for expanded efforts on the part of Nagasaki and Seattle to promote trade and tourism between the two port cities. The agreement was signed at a ceremony in the office of Governor Katsuya Sato of Nagasaki on September 13.

During a visit last spring by the Nagasaki Trade and Tourist Mission to Seattle, preliminary plans were made to hold Nagasaki trade fairs at the Seattle Center. The first would be held in June 1970. The fairs would exhibit export products and promote tourist attractions. It was during the visit of the Nagasaki mission to Seattle that plans were formulated for the joint Seattle-Nagasaki trade agreement.

The Port of Seattle delegation included Capt. Merle D. Adlum, commissioner; J. Eldon Opheim, general manager; Taul Watanabe, director, Far East trade; Richard D. Ford, legal officer, and Robert H. Fletcher, director, public relations. (Port of Seattle Reporter, October)

Office in Kobe

Seattle, Wash.:—The Port of Seattle's office in Kobe's Commerce, Industry & Trade Center will be opened on December 1, marking another significant step in the

Port's promotional program in Japan, according to Robert W. Turner, director of the Port's World Trade Center and executive director of the Washington State International Trade Fair.

The office will be located on the 17th floor of the 26-story tower, which is just a stone's throw from Kobe's City Hall. The Port of Seattle was the first foreign port authority to sign up for office space in the new center.

Turner said the 1,300-square-foot area to be leased by the Port will be divided into office space and exhibit hall. There will be two private offices—one for the Port and the other for use by Washington State businessmen. The Port office, when not in use, will also be available to Washington trade representatives.

The exhibit hall will be used to display Washington products and services. The displays will be changed quarterly by the Washington State Trade Fair.

Another useful promotional feature will be a library stocked with catalogs of Washington State business firms.

An interpreter-secretary will be on duty at the Port office. (Port of Seattle Reporter, October)

New Phone System

Melbourne:—A new type automatic telephone recorder is to be installed in the Port's Shipping Control Centre, at a cost of nearly $3,000.

Known as the Mark II variable Message Recorder, it will be able to handle five outside calls from the public at the one time.

The present two answering recorders can handle only two calls from people wanting to know the movements of vessels arriving and leaving the port. The inability of the machines to handle the incoming calls has led to the public ringing the Shipping Control Centre direct, thereby interrupting their busy day-to-day duties.

The installation of the new machines will not only relieve the personnel on duty at the Control Centre, but also provide a much better service to the public. (Melbourne Harbor Trust Port Gazette, November)

River Improvements

Melbourne:—Most of the major work now being carried out in the Port of Melbourne is concentrated around the lower reaches of the River Yarra. The projects when completed will further help to make the port retain its position as one of the nation's leading ports, able to handle virtually any type of specialised and deep draughted ships, which are expected to use the facilities provided by the Trust in the next decade.

Amongst the most important of these jobs are—

Lowering of Sewer Tunnel: Situated at Spotswood in the lower reaches of the river, the present tunnel has been a major factor in limiting ships with drafts of more than 31.6 ft. from using berths in the port area.

Built in 1896-97 by the Metropolitan Board of Works, an agreement was reached between the Victorian Government, M.M.B.W. and the Trust to lower the tunnel to 55 ft. below low water. Work on this very vital project was begun in 1968.

The cost of lowering the tunnel ($3.5 million) is being shared equally between the three parties mentioned. Work on the construction of the 1,750 ft. long main sewer tunnel, beneath the River Yarra has been virtually completed. The entire project is expected to be completed by early 1971.

Short Road Depot: Situated near the entrance to the River Yarra, the Trust's Consruction Depot, is being moved back from its present location. The re-location of the depot will enable the river to be widened to 600 ft. at this point.

600 ft. of sheet piling forming the new river frontage has already been completed and the further extensions will be carried out as the need arises. A 7½ ton stiff-legged crane, has also been moved to its new site.

Holden Dock: This new $1.5 million Oil Dock being built outside the main navigation channel of the river is also well in hand. When completed early next year, the new dock will replace the three present oil berths at Yarraville and Newport, which are situated on the edge of the river channel. Dredging for the new dock has been completed and piles are being driven for the mooring and berthing dolphins.

Jetties: Old wooden jetties, situated on the east bank of the river, are being removed by the Trust's Engineering Department. The removal of these obsolete jetties will allow widening of the river at this point to be carried out.

River Widening: The main river channel has been widened to 400 ft. bottom width from Swanson Dock, the new container complex, to the river entrance, except for a restriction to 265 ft. at the location where the Williamstown Ferry still operates the crossing between this suburb and Port Melbourne.

However, the construction of the Westgate Bridge, which will span the entrance to the River, is well in hand. Expected to be completed early 1971, the giant bridge, which will be the biggest in Australia, will make the present ferry service unnecessary, thereby allowing the river at this point to be widened to 400 feet.

Beacons: New navigation beacons to mark the altered entrance to the river have been installed. These new type beacons carry red and green neon triangles.

Webb Dock: Dredging has been carried out between the entrance to the river and Webb Dock swinging basin, which has further improved the entrance to the dock, for the new roll-on roll-off, vehicle deck type ships, on the Melbourne-Japan service. The area has now been dredged to a depth of 33 ft. below low water.

Cables and Oil Pipe Lines: To allow for widening and deepening the electrical cables and oil pipe lines crossing under the river at Spotswood have been extended and lowered to a depth of 55 ft. below low water. The laying of the power cables for the State Electricity Commission and the Victorian Railways was begun in January this year. Eleven 1,120 ft. lengths of Polypipe were first lowered to the trench specially dug for it. Next stage called for the passing of the elec-

tric cables through the plastic pipes. These special type pipes were used to protect the cables from damage and deterioration.

Most of the work in the lower reaches for the first stage of improvement to the river channel is nearing completion and this will allow navigation of larger vessels both by day and night. (Melbourne Harbor Trust Port Gazette, November)

New Wharf at Newcastle

Sydney, 20th October:—The new No. 1 Throsby Basin wharf and cargo shed will be officially opened at noon on Friday, 7th November, 1969, by the Hon. M.A. Morris, M.L.A., Minister for Transport, on behalf of the Premier.

This was announced in Sydney today by Mr. W.H. Brotherson, President of the Maritime Services Board, who said that features of the new wharf are the extensive areas of open space available for the stacking of cargo and the large cargo shed.

Approximately 3 acres of back-up area are available at the rear of the shed for the handling of cargoes not requiring covered space.

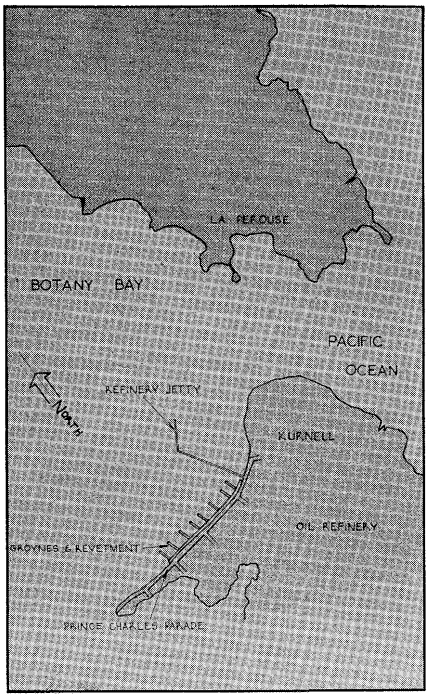
Mr. Brotherson said that the square footage available in the cargo shed, which is 435ft. long and 120ft. wide, approaches the aggregate square footage available at all the other sheds on the adjacent Lee Wharves.

He said the office and amenity installations are of the modern standard adopted by the Board for such facilities.

In May of this year, Mr. Brotherson announced the letting of a contract for the provision of four 26-ton capacity wharf cranes, one of which would be installed at No. 1 Throsby Basin and the other three would be for use in Sydney. In his announcement today, Mr. Brotherson said that the first of the four cranes would be ready for service early next year and this would be installed at No. 1 Throsby Basin.

It will be used for handling all types of heavy lifts including containers moving through the port.

Mr. Brotherson pointed out that



although this is the first new general cargo berth developed in Newcastle for many years, the Maritime Services Board has, in recent times, commissioned a major coal loader at Carrington, a bulk unloading berth at Kooragang Island and is currently in the final stages of the redevelopment of the grain berth. (The Maritime Services Board of N.S.W.)

Botany Bay Contract

Sydney, 5th December:—The first major contract let by the Maritime Services Board in connection with the development of Botany Bay was awarded this week.

In announcing this in Sydney today, Mr. W.H. Brotherson, President of the Maritime Services Board, said that, at its meeting held on Thursday, 4th December, the Board awarded a contract to Brambles Industrial Services for the construction of eight groynes and a revetment wall fronting Prince Charles Parade at Kurnell.

The amount of the contract approximates $800,000.

Mr. Brotherson explained that the system of groynes with a revetment wall will restore the foreshores at Kurnell and this restoration will stabilise the beach which has been subject to erosion over many years.

He said the design of the revetment wall will allow of the Sutherland Shire Council restoring its roadway at Prince Charles Parade and sand will be placed between the groynes to create a shelving sandy beach.

Mr. Brotherson said that the Commonwealth Government will shortly commence dredging at the entrance to the Bay in connection with the extension of the Kingsford-Smith Airport Runway but this dredging will also provide the first stage of the major deep water channel leading to the port. (The Maritime Services Board of N.S.W.)

Visitors

Karachi:—A batch of 23 Senior Military Officers attending the Command & Staff College, Quetta, led by Major-General Mohammad Sharif Khan, Commandant of the College, visited the Port on 19th August, 1969. The object of the visit was to apprise the Military Officers with the economic development in various important sectors of the country, and also to familiarize them with the Administrative set-up, the Development Programme and operation of the Port of Karachi.

The visitors were received at the K.P.T. Harbour Hydraulic Investigations Model at Queens Road and talks on the Ports & Shipping Sector were given to them. In the opening Session, Commodore U.A. Saied, S.Q.A., T.Pk., (P.N.), Managing Director, National Shipping Corporation, addressed the visitors. He outlined the development of the N.S.C. and the role of the Shipping Sector. After the first session, there was a "Tea-Break", held in the Conference Room of the Hydraulic Investigations Model. In the second Session, Commodore Mahmud-ul Hasan, S.K., TPk., P.N. (Rtd.), Chairman, Karachi Port Trust, addressed the Offices. Commodore Hasan in a very comprehensive, illustrative and informative talk on the essentials of Port Administration, outlined the Planning Strategy and vital role played in Ports and their imports on the economic growth of developing, countries, the distinction between the Port of Karachi and the K.P.T. Adminis-

tration. He also explained to the visitors the salient points of difference in Berth-handling Capacity and Cargo clearance capacity of the Ports in the context of Port congestion, lucidly bringing out the necessity of rapid clearance of Port transit areas by the Road and Rail Transport.

He told the visitors that as regards the Shiphandling Capacity of the Port, the Port of Karachi has been utilizing its Berthing Capacity to the extent of 125 per cent by using Double Banking methods and also streamlining the Administration and Operations of the Port. Commodore Hasan also discussed the Port of Karachi vis-a-vis other Ports of the World, providing the visitors a panorama of the Port's Administration & Operation as existing elsewhere. Commodore Hasan assured the visitors that the Port of Karachi has been handling all the Cargo brought to the Port and that it was fully prepared to meet its future obligations as well. (K.P.T. News Bulletin, September 1)

Port Opened

Kashima:—The Port of Kashima, which is designed to be the hub of a huge industrial complex on the Kashima Pacific seaboard region in Ibaraki Prefecture, northeast of Tokyo, opened October 15 with Prime Minister Eisaku Sato attending the ceremony.

The harbor, guarded by a 5,000-meter-long breakwater, can accommodate freighters of the 200,000-ton class.

A new town with a population of 300,000 people will rise behind the harbor.

Addressing the opening ceremony, Sato said the town expected to rise soon in the vicinity of the harbor will spur efforts to build a rich economic society and a fine environment for men to live in. (Shipping and Trade News)

New Container Berth

Tokyo: — The Keihin (Tokyo Bay) Port Development Authority (KPDA) hosted a completion ceremony of the No. 6 container berth of Yokohama's Honmoku pier at its freight station October 22.

KPDA chairman Yoshio Minami said; "The ¥6,300 million construction work of the Honmoku container pier was started in January 1968. Of the planned three berths, the first one, No. 6 berth, was successfully finished recently.

"The remaining two, Nos. 5 and 4 berths, are scheduled to be completed in December this year and March next year, respectively. "We hope these berths will prove excellent and worthy of the name of a container transport base."

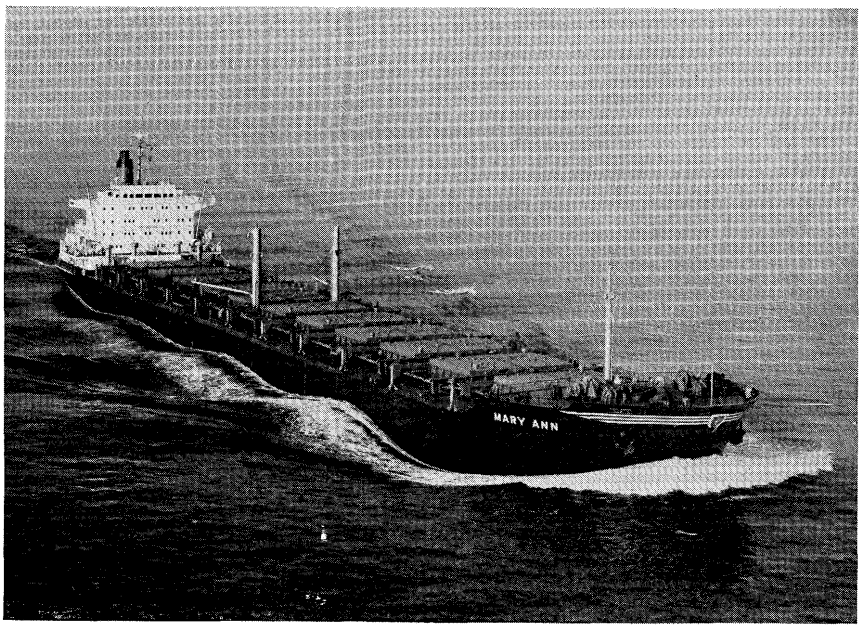
Kawasaki Kisen Kaisha and Japan Line will jointly use the 12-meter-deep and 250-meter-long No. 6 berth, which is capable of mooring 25,000-dw/t containerships for cargo handling.

M.V. "Australian Searoader", 11,000-dw/t roll-on/off containership owned by Kawasaki Kisen Kaisha, Ltd., Japan, was berthed there and demonstrated roll-on loading of containers.

The berth is equipped with a 65,800-square meter container yard, a 30.5-ton capacity container handling shore crane and a jetty for roll-on/off container carriers.

The Nos. 5 and 4 berths are of the same depth and length as the No. 6 berth but the container yard of the former extends over 64,200 square meters and the latter 67,500 square meters.

The No. 5 berth will be under the joint use of NYK, Mitsui OSK Lines, Yamashita-Shinnihon Steamship and Showa Shipping and the No. 4 berth by Sea-Land Service, Inc. of the United States. (Shipping and Trade News)



M.V. "Mary Ann", a 71,013 dwt multi-purpose carrier (ore/bulk/oil) was delivered September 30, 1969 to the owner, Global Bulk Carriers, Inc. The ship's dimensions are so arranged that it can pass the Panama Canal, and the propeller shaft is so made that it will withstand the impact of ice.

Arctic Route

Tokyo:—The K. Markov, a 9,500-dw/t freighter of the Soviet Union, sailed from Onahama, Fukushima Prefecture, her last loading port in Japan, for a special sailing to Murmansk via the Arctic Ocean September 22.

She was loaded full with rolled steel and sundry shipments from Japan at Wakayama, Kobe, Yokohama and Onahama ports. Her expected date of arrival at Murmansk is Nov. 14.

While in the Arctic the K. Markov will be escorted through the ice-packed waters by several Soviet icebreakers. Her own icebreaking capacity is about 50 centimeters.

The K. Markov will be the second merchant vessel to cut through the Arctic circle. Her predecessor is the 4,150-dw/t Novovoronesh, another Soviet ship which came to these shores from Hamburg via the Arctic in July 1967.

There has never since been any

additional Soviet sailing via the Arctic in view of the weather condition and the unavailability of proper ships.

This special sailing from Japan to Murmansk by the K. Markov has been arranged at the strong request of the Nakhodka Kyodo Jimusho—the liaison office of three Japanese liner operators serving the Japan/Nakhodka route. The congestion at Nakhodka has caused a hug backlog of shipments to that port here.

According to informed sources, the Soviet Union is busy building up a merchant fleet of icebreakers capable of establishing a full-scale shipping service to link Japan and Europe via the Arctic by around 1975. (Shipping and Trade News)

Anti-Fire Agreement

Tokyo:—An agreement calling for cooperation in fighting tanker fires was signed August 6 among Kawasaki City in Kanagawa Prefecture, Chiba and Ichihara cities in Chiba Prefecture, and Tokyo—all four situated on Tokyo Bay.

Due to an increase in the number of tankers calling at Tokyo harbor in recent years, cities along the coast of Tokyo Bay face an increased danger of fires and explosions.

In addition, a good number of petrochemical complexes are rising in the bay coastal region, increasing further the danger of tanker fires.

According to a survey by the Fire Agency approximately 33,900 oil tankers call at Tokyo harbor a year with the ports of Kawasaki and Ichihara handling about 54,000 and 11,000 respectively.

In addition to the 75,540,000 kiloliters of crude oil, carried by the vessels, some 28,000 warehouses and oil storage facilities stand along the coastal region.

There has been a growing awareness among civil leaders of these cities that if a fire or explosion should occur aboard a mammoth tanker, it could easily spread beyond the control of the fire brigades of a single city.

Such was the case of the fire aboard an oil tanker at anchor in the Port of Muroran in Hokkaido in June 1965. The fire wrought great havoc in the port area and vicinity.

Of the cities in the pact, Tokyo possesses the greatest fire fighting capacity with 11 fire boats, seven special fire combating vehicles and 66 chemical and high pressure trucks. Besides, Tokyo owns two helicopters for aerial observations of marine fires.

Kawasaki has only two fire boats and Ichihara one. (Shipping and Trade News)

1 Mil.-Ton Dock

Tokyo:—Mitsubishi Heavy Industries (MHI), in a bid to meet the recent ship enlargement trend, is pushing plans to build a dock capable of constructing 1,000,000-dw/t vessels.

MHI is likely to submit to the Transport Ministry an application for the dock set for installation at Koyakijima, Nagasaki Prefecture, as soon as final blueprints are drawn up probably in November.

MHI, mainly at its Nagasaki yard, is proceeding with the plan and will form a special team to head the project.

At the moment, the size of the dock is to be slightly over 600 meters in length and 100 meters in width.

Commencement of operations for the yard and its dock has been set for 1973 with an investment totaling ¥25,000 million.

An MHI spokesman said "The actual scale of our newly projected yard will be worked out in consultation with the Transport Ministry's Ship Bureau.

"No firm decision has been made yet on the actual dimensions of the yard. Nor is it an easy thing to do.

"The main aim behind this project is the construction of a dock capable of building 200,000-300,000-dw/t ships. Vessels of 500,000-dw/t sizes are unlikely to appear on the scene for quite a while.

"Our first and foremost aim is a higher productivity by allowing a higher degree of mechanization and rationalization at the new dock by utilizing its ample leeway in dimensions.

"We except to come up with a firm decision, dimension wise, sometime in late November." (Shipping and Trade News)

50 Mini-Bulkas

Tokyo:—Hakodate Dock Co., Ltd. is expected to receive an order shortly from G. P. Livanos of Greece for another twenty 3,100-dw/t "Mini Bulka" or "mini" bulk carriers.

With the current negotiations concluded, Hakodate Dock will have a total of 50 such vessels registered in its order book for the same owner.

In view of massive orders for the same hull line, the figure will be second only to Ishikawajima-Harima Heavy Industries' 55 order receipts for the 14,800-dw/t "Freedome" cargo ships.

The "Mini Bulka" is a small sized economical ship developed jointly by Hakodate Dock and Livanos for nearseas and coastwise transport. It is highly automated to cope with a growing shortage of seamen and can be operated by a crew of eight to ten.

The vessel has a draft of 4.8 meters and is capable of loading automobiles and steel besides containers in bulk.

Specifications are: length (overall) 65.6 m; length (bp) 62.8 m; breadth 15.3 m; depth 6.6 m; draft 4.8 meters. Cargo-hold capacity: 3,540 cubic meters. Main engine: two sets of Daihatsu 6PSTCM-22-type diesel engines, 425 bhp each. Maximum trial speed: 10.5 knots. (Shipping and Trade News)

Saver in Distress

Antwerp:—The attraction of a port is the resultant of numerous factors such as a good, easy, safe access to the great ocean routes, which implies not only an adequate waterway but in addition a lot of nautical aids such as radar-beacons, land radar, radio-telephonic links, good pilot and tug services etc. In addition a port, being a transhipment area, must meet a lot of demands such as a good "lay out" where the water and land surfaces must fulfil the requirements of navigation and commerce, a good equipment with a multitude of lifting devices, elevators, conveyor-belts, sheds, warehouses etc., a good social organization providing a flexible,

continuous time table and assuring a qualitative as well as quantitative sufficient contingent of dockers, a good administrative organizations resulting into the smooth working of all public and private services, fulfilling their tasks at competitive tariffs, a good tertiary sector which in some way completes the whole and protects every port-customer whatever may happen. Finally a port must also dispose of appropriate connections with the hinterland.

A port not having all these elements at its disposal, or where some of those elements leave to be desired, runs the risk to lose important traffics. To a similar danger Antwerp was exposed at the end of the fifties and the beginning of the sixties. The port traffic went up with bounds but one element of the very complex infrastructure did not follow. The set of locks had become insufficient to meet the traffic increase. The utmost was done to achieve the largest possible number of lockings by means of the existing locks. Even the greatest efforts were of no avail and in spite of the admirable zeal of everyone concerned and more in particular of the members of the Harbour Master's Office congestions became gradually a current feature. Watch times of 12 hours or even more were not exceptional. Today all this is forgotten, for since the completion of the ten year plan and the inauguration of the Zandvlietlock everything proceeds as if in Antwerp locking does not exist. Even the container shipping companies, which in this respect are very exigent, are astonished at the sluicing capacity and the dispatch they enjoy in Antwerp. However too often the merits of those who in that critical period cleared the situation are overlooked. If during that period no spectacular traffic diversions occurred, this is solely due to the fact that nearly always the time lost by sluicing was made up during the loading and unloading operations. Here especially the discernment and the know how of all persons concerned came to light: shipping agents, water-clerks, stevedores, wharfingers etc.

However, it is evident that these "producers" would never have succeeded in performing their daily play if they could not have counted on consummated actors: the Antwerp dockers. And this induces us to conclude together with a French excommander: "In that period the dockers saved the reputation of the port". We do believe that this too might be stressed, also to make it clear that the cooperation of all those who made Antwerp a great port is and remains an indestructible trump. (Antwerp Port News)

Container Traffic

Antwerp:—In Antwerp during the first ten months of 1969, 71,285 containers (37,439 incoming and 33,846 outgoing) were transhipped. These figures only concern **loaded** containers, since in the Antwerp statistics empty containers are never included.

Together, in those 71,285 containers 839,963 tons of goods (428,-440 tons incoming and 411,523 tons outgoing) were transported.

It should be remarked that these total figures were affected unfavourably by the relative recession of the container traffic between Europe and the U.S.A. during the first quarter of 1969, this solely due to the port strikes in the American ports.

Since the month of April 1969 the **monthly average** in Antwerp amounting to 8,916 containers increased remarkably as compared with 1968.

In addition the balance between incoming and outgoing units has been maintained: per month 4,696 containers were discharged out of ocean going vessels whereas 4,220 units were loaded. (Assiport)

Port of Call

Antwerp:—On November 26th last, sir Andrew Chrichton, President of Overseas Containers Limited, announced that the OCI-vessels which until now provisionally called at Rotterdam and Antwerp, will be completely concentrated on Antwerp, pending the normalization of the situation in Tilbury, where the boycott by the London dockers has been lasting for 22 months.

From an inquiry held by the Antwerp port circles it results that when taking this decision OCL and ACT undoubtedly have been guided by the numerous favourable factors offered by Antwerp as a container port, and more in particular by:

—the extent of the Antwerp container centre;
—the system of full interchangeability of the container cranes;
—the good service;
—the good labour relations;
—the fact that in the Antwerp port work goes on around the clock;
—the favourable possibilities for the re-forwarding of containers.

Indeed, with its total area reserved for the handling of containers of 312 acres, its Belgian Railways and the numerous consolidation services, the Antwerp Churchill dock is the largest and best equipped container centre in Europe.

From now on every nine days an OCL-ACT-container-vessel will call at Antwerp. Per year the maximum number of containers that can be transported between Europe and

Australia by the 5 OCL- and the 3 ACT-vessels amounts to 124,800 units. Initially it almost exclusively concerns a container traffic between Australia and Great-Britain via Antwerp. As the leeder traffic to and from Great-Britain will be combined with the continental traffic via Antwerp, regularly several OCL-ACT-vessels will make berth in Antwerp at the same time and therefore the system of the full interchangeability of the container cranes is very important. Although the Antwerp terminals are set up by different individual companies, uniformity exists to an important degree in equipment. As a result, there is full interchangeability of the container cranes between the different terminals.

In addition official leases of the City of Antwerp for the use of berths stipulate that vessels unable to dock at their usual berth, can do so at any available container berth. By this, under all possible circumstances, continuity of the loading- and unloading operations of the OCL-ACT-vessels is assured. If "Noord Natie"—being the terminal operator—could no longer cope with the container traffic by means of their 53-tons-container-crane, they always can make use of the cranes of another terminal operator.

Once the continental container traffic via Antwerp completely established an increasing number of containers will reach or leave the port more swiftly, thus realizing a faster turnround of the container vessels. In this respect, the favourable geographical location of Antwerp in the heart of the EEC, the excellent connections with Great-Britain and the continental hinterland undoubtedly will play an important role and offer favourable possibilities as to the re-forwarding of containers being unloaded in Antwerp. Indeed, thanks to the efficiency of the Belgian Railways, partner of "Intercontainer", a container unloaded in Antwerp can reach a series of important European centres within the next 24 hours. Also with respect to the containers reaching or leaving the port by road Antwerp is ideally located in the hub of a very dense European motorway network. Via this network containers coming from all parts of the European hinterland can be brought under the Antwerp container cranes without leaving the motorways.

The fact that OCL-ACT have chosen Antwerp as their European port of call is a proof of the confidence that foreign shipowners put in Antwerp as a container port. This also appears from the favourable evolution of the container traffic in Antwerp. During the first nine months of 1969 60,768 containers were handled as against 33.595 during the corresponding period in 1968. The net tonnage amounting to 446,270 tons during the same period in 1968, rose to 711,383 tons during the first nine months of 1969. This favourable evolution, together with the fact that OCL-ACT have chosen Antwerp, amply proves that Antwerp—also with respect to the container traffic—can face the future with confidence.

Agent in Antwerp for ACT-vessels and -containers are Furness' Shipping and Agency S.A. whereas for OCL-vessels and -containers the agents are General Steam (Belgium) S.A. (Assiport)

Management Changes

Liverpool:—Important changes in the management structure of the Mersey Docks and Harbour Board are announced today (Wednesday) and will take effect on December 1st on the retirement of Sir Clifford Dove, C.B.E., E.R.D., the Board's Director General.

Mr. Robert S. F. Edwards, C.V.O., C.B.E., the General Manager, will become the Director General, and Mr. James H. Mundy, the Assistant General Manager, will assume a newly-created title of Joint General Manager. The appointment of a further Joint General Manager will be announced at some future date.

The Board have decided to divide the management structure under the Director General by appointing Joint General Managers each with a specific area of activity. One will be responsible for policy and administration and the other for commercial and operational activities.

The new Director General, Mr. Edwards, is aged 59 and joined the Board in 1963 as their first Docks and Commercial Manager. Two years later he became Deputy General Manager and in 1967 General Manager.

Mr. Edwards has a wide knowledge of transport affairs. Before coming to Liverpool he was General Manager of London Airports —Heathrow, Gatwick and Stansted. His other appointments have included Director of Sea Transport, Principal Private Secretary to the Minister of Transport and Shipping Attache at the British Embassy in Washington.

A native of Hereford, Mr. Edwards trained as a civil engineer and was called to the Bar in 1941.

He was awarded the C.B.E. in 1963 and the C.V.O. in the following year.

During the past ten months Mr. Edwards has devoted a great deal of attention to improving working conditions in the Port, and as Chairman of the Port Modernisation Committee has guided the talks which resulted in the agreement last Monday on a new dock workers' pay deal.

Mr. Edwards is married with a son and two daughters and lives at West Kirby, Wirral.

MR. JAMES H. MUNDY.

The new Joint General Manager announced today (Wednesday) Mr. Mundy, has been with the Board for 40 years and is aged 60.

He has been Assistant General Manager since 1963 and was previously Assistant Chief Traffic Manager.

In 1939 he was appointed Secretary of the Liverpool Port Emergency Committee which was set up to ensure the efficient wartime operation of the Port.

Despite the heavy bombardment of the Port this committee succeeded in keeping open the Mersey as the country's main supply life-line, and after the war Mr. Mundy was

seconded to assist the Regional Port Director in establishing a new dock labour scheme and the eventual changeover to the National Dock Labour Board's administration of port workers.

Mr. Mundy is married and lives at Heswall, Wirral. (Mersey Docks and Harbour Board, 11th November)

Export Booking

London, November 11:—The Port of London Authority and the Australian Outward Freight Committee have instituted a new space reference scheme for cargoes destined for export to Australia through London's Royal Group of Docks.

The new scheme, which is linked to the lorry pre-booking procedure for exports carried on Australian Conference Line vessels, is aimed at overcoming the confusion and difficulties which have arisen recently.

It will apply with the commencement of receiving for the m.v. 'Port Pirie', from November 26 to December 4 at No. 6 Shed, King George V Dock.

When shippers apply to the Line for space, they will be allotted a reference number, which will have to be quoted when the shipper, his agent or the haulier apply for an appointment at the Authority's Royal Albert Dock pre-booking centre.

If the PLA receives a request for an appointment and the firm making the request cannot quote the reference or give the wrong reference, no appointment will be made and they will be referred back to the Line concerned.

The reference numbers will be telexed to the pre-booking centre by the shipping companies on a daily basis.

The new scheme will not, however, apply to vehicles with loads of 1 ton or less, of which no individual package weighs more than 5 cwt. These vehicles are not required to pre-book with the PLA. (News from PLA)

PLA Managerial Changes Are Announced

From The PLA Monthly, October, 1969

Revolutions are Understandable; Everyone knows there is a fight on and is forced to take one side or another. Evolution is less easy to see. The realisation that things are not the same any more comes gradually.

The point is pertinent to the Port of London. It has been there for 2,000 years, changing all the time. Sometimes it has stagnated, as in the 17th century. Sometimes, despite good intentions, things went wrong, as when the independent dock companies of the 19th century fought each other commercially until Parliament had to change a suicidal situation by forming the PLA. That was in 1908~1909.

Since then the Port of London's fortunes have usually been on the side of solvency. This was no mean achievement, for unlike many other world ports, London's whole destiny was not completely in the hands of the port authority. The private river wharves remained independent; only the enclosed docks were taken over by the PLA as direct revenue earners. There was, moreover, the famous free water clause which exempted lighters from dues when they came into the enclosed docks to discharge cargo from, or load it into, the ships there.

Two world wars played havoc with the PLA's financial and port development plans too.

And leaving aside the rights and wrongs of the matter, labour problems, as in all British industry, contributed their quota of managerial headaches. Today, this is one of the most important issues which the whole of Britain, not just the nation's ports, must solve. Indeed, anyone who troubles to examine the statistics impartially will find that the port industry is by no means the most strike-prone in Britain.

With such thoughts in mind, appraisal of the present state of the Port of London is not difficult. It is a port which is crucial to the whole nation's overseas trade. It is in competition with Continental ports. To compete with them it had to be at least as well-equipped as they, if not better—we are, after all, an island. Putting the Port of London on to equal terms with its competitors inevitably meant spending money in large amounts.

The planning and engineering work involved in building a vast new container port, a grain terminal and so on took time. Again taking no sides, the labour dispute over the operation of the new facilities delayed, and is still delaying, their full deployment.

But the PLA is leading a movement to speed up the evolution of a modern port of London. The improvement applied to working arrangements too. Not unnaturally, if one recalls the bitter legacy of the past, dockers take the view that *all* of the port's labour shall enjoy these improved conditions. So the PLA is in the position of many leaders; that of waiting for the rearguard to catch up.

This is an over-simplification; there are many complex problems such as those concerned with reducing the dock labour force without hardship to those no longer required, but in essence the PLA has no reason to accept complete responsibility for either its financial deficit of the moment or the labour problems it has on its hands. These exist because the PLA wants things to be better, because the Authority *is* moving with the times.

This situation is the key to the recently announced re-organisation of the PLA's management. Unforeseen setbacks, both in the labour and technical field, have demanded some pause for consolidation and

to cope with the deficit resulting from the fact that the better finacial return planned has been delayed by these setbacks.

Whenever an organisation has to deal with such a situation, one thing is certain—a tightening of belts all round. So one newly appointed as-liam Bowey, will have the not every popular job of seeing that everyone *does* take up a few notches. As detailed in the official announcement below, he takes over the day-to-day administrative functions of the PLA.

The other new assistant director-general, Mr. John Lunch, has the vital responsibility of turning a business organisation (for that is what the PLA is) with a deficit into one with a surplus, not simply to ensure economic and financial survival, but because the pace of technical change is so rapid nowadays that equipment is out-of-date as soon as you have bought it. In other words, he cannot expect port evolution to stop conveniently as soon as he has turned a deficit into a surplus.

All this leaves out, the discerning might say, the one key problem, that of industrial relations. You cannot sail a ship with no crew, or an unwilling one. The PLA's board, of which the director-general himself, Mr. Dudley Perkins, is a member, agrees and has appointed a director of industrial relations Mr. Stanley Turner.

London's dockers may have their constitutional differences with Mr. Turner, but few management men enjoy their respect so much as he. This was abundantly clear when he met them at London Dock to explain the terms of the PLA's redundancy and severance payment plans when London and St. Katharine Docks were closed.

So the PLA's recent managerial changes are basically a move to make this dock labour force, the best in the world, effective. They are designed to achieve three things, an efficient administrative machine, a winning trade strategy and, above all, mutual confidence between management and staff of all grades.

It is important that all whose livelihood is connected with the Port of London (and that means all of us in terms of the nation's economy) should understand what is at stake and co-operate to achieve the common object—a thriving Port of London.

Official Announcement

On August 29, Mr. Dudley Perkins, the director-general of the Port of London Authority, announced important new managerial appointments designed to contribute to the more effective and economical conduct of the Authority's affairs, and to increase net revenue by recapturing profitable business which had been lost, and by attracting worthwhile new business. "This," Mr. Perkins pointed out in a note to all members of staff, "will take time and depend very much upon the achievement of industrial peace, but in the meantime it is my intention to make substantial reductions in overall expenditure."

As from Tuesday, September 2, there are two assistant directors-general, one taking over business control of all those units and departments which contribute to the PLA's revenue, and the other responsible for general administration. Three other senior managers are responsible for industrial relations, finance and personnel.

Mr. John Lunch relinquished the appointment of director of finance, which is abolished, and has become assistant director-general responsible for all business units (i.e. the four docks, river department, plant department, grain terminal and central lighterage department).

Mr. R. H. Butler, who ceased to be deputy chief docks manager, has become a chief officer, and is appointed co-ordinator of operations, to advise and assist Mr. Lunch.

Mr. J. F. Stanbury, who will continue to be designated chief engineer, also has become a chief officer, and is responsible to Mr. Lunch for the engineering and stores departments.

Mr. William Bowey relinquished the appointment of director of marketing, which is abolished, and has become assistant director-general, responsible for general administration, which includes the following departments: the solicitor's, the secretary's, estate, police, public relations, marketing and trade development and catering.

Mr. Stanley Turner relinquished the appointment of chief docks manager, which is abolished, and has become director of industrial relations, responsible for the planning and conduct of negotiations with all trade unions.

Mr. P. A. R. Lindsay continues as director of personnel, responsible for overall policy, and all personnel matters except those now being handled by Mr. Turner.

A financial controller responsible to the director-general for the central financial and management accounting services will be appointed, and until this appointment is made, Mr. P. D. Blackburn, assistant director of finance, is carrying out these responsibilities in an acting capacity.

Mr. N. N. B. Ordman continues to report to the director-general as director of planning, responsible for the corporate planning function and for providing an internal consultancy service.

Grain Expert to U.S.

London, 28th October:—Mr. A.G. Harris, Senior Officer at the Port of London Authority's new riverside grain terminal at Tilbury, is to visit the United States of America on a two-week tour sponsored and organised by the U.S. Feeds Grains Council.

Mr. Harris will be a member of a five-man party, drawn from users of American maize in various parts of the United Kingdom. A place was offered to the P.L.A. because the Tilbury terminal is now the largest importer of bulk American maize in this country.

The tour will begin on Monday, November 3rd and the party will visit Washington, Desmoines, Toledo, Minneapolis, Chicago, New Orleans and New York. In studying the handling and shipment of maize and maize products they will be following the progress from production areas to export points, with special

emphasis on grading during various aspects of the movement of grain in the U.S. The party will return on Tuesday, November, 18th. (news from PLA)

A.D. 2000

Hamburg:—In the next few years the Hamburg Port Extension Area is to be extended by 46 sq.km. to 146 sq. km. to enable the Hansa City to meet the growing demand for industrial sites. This is envisaged in the development scheme "Perspective A. D.2000". The additional industrial areas immediately adjacent to the south and west of the port extension area will be developed and kept ready above all for the establishment of new enterprises, mainly industries requiring deep water for sea-going vessels.

An expansive water area west of the island of Finkenwerder will be partly filled up and harbour basins built which can be approached from the Elbe without intervening locks.

But two locks are envisaged as the seaward approach for part of the site behind the dyke: one of them, planned for some time and to be built in the near future, is situated south of the Koehlfleet arm of the Elbe and will serve as the approach to some parts of the port extension area, whilst the second lock will offer a western approach for sea-going ships, its construction being envisaged at a later date. Approaches, locks and harbour basins are to take vessels of the 200,000 to 250,000-ton class.

The new area will have perfect connections for road transport from the north, south and west through the Federal motorway "western bypass" now under construction, via the junction Hamburg-Waltershof, as well as through a connection with Federal Highway No. 73. Rail connections to the Deutsche Bundesbahn lines will be established by the Hamburg port railway.

In a certain part of the existing port extension area, so far kept in reserve, harbour basins for general cargo handling—perhaps containers—are envisaged. The project of the Hamburg Department for Economics and Transport is in conformity with the "Development Model for Hamburg and its surrounding region" which the Senate of Hamburg a short while ago submitted to Parliament. Both of them are subject to variations, in other words, they are guiding lines for definite plans and decisions in the future, and can be improved or adjusted at any time as occasion or new planned targets demand.

Around 14 sq.km. (1,400 hectares) are at present in reserve in the port extension area. They are expected to cover requirements for industrial sites with deep water alongside up to about the middle of the 'seventies. The areas and facilities envisaged in the new scheme are to meet demands up to about the year 2000.

The decision for the first postwar extension of the port had been made in 1961. Its target was to create space for an expansion of the facilities and for accommodating port-oriented industries. Meanwhile a considerable part of this area has been occupied or plans approved, thanks to the intensive efforts of the Senate. This shows that Hamburg, as ever, is a very attractive centre for large-scale industry looking to the future, and which will find a first class, qualified labour force, direct connection with deep water for large vessels, and the world-wide relationships of a traditional trading city. (Ship via Hamburg, October)

Port of Lisbon Traffic in 1968

1—Incoming shipping

In 1968, 6,137 ships came to the port of Lisbon; of these 1,830 were Portuguese (30 per cent of the total), and 4,307 were foreign vessels. The number of ships was sensibly the same of the previous year.

However, we must point out that a reduction of 35 ships was registered in Portuguese vessels calling the port.

In spite of this stationary situation in the number of ships the gross tonnage had an increase of 16.7%, in relation to 1967. The gross tonnage attained 30,898,665 tons, corresponding 24,683,451 tons to foreign vessels and 6,215,214 tons to Portuguese vessels; to these figures there correspond the percentages of 80 and 20 per cent, respectively.

October was the peak month followed by May and August. The month with the lowest movement was February.

2—Sea-cargo

The port of Lisbon handled, in 1968, 8,011,202 metric tons of cargo, 5,994,941 tons being of unloaded cargo and 2,016,261 of loaded cargo.

In the whole there was an increase of 186,364 metric tons of goods handled. August was the peak month for offloaded cargo and October registered the highest figure of loaded cargo.

3—Sea-passengers

There was an increase of 5.1% over the preceding year, in travellers arriving in the port of Lisbon. The peak months were July, August and September.

4—River passenger traffic

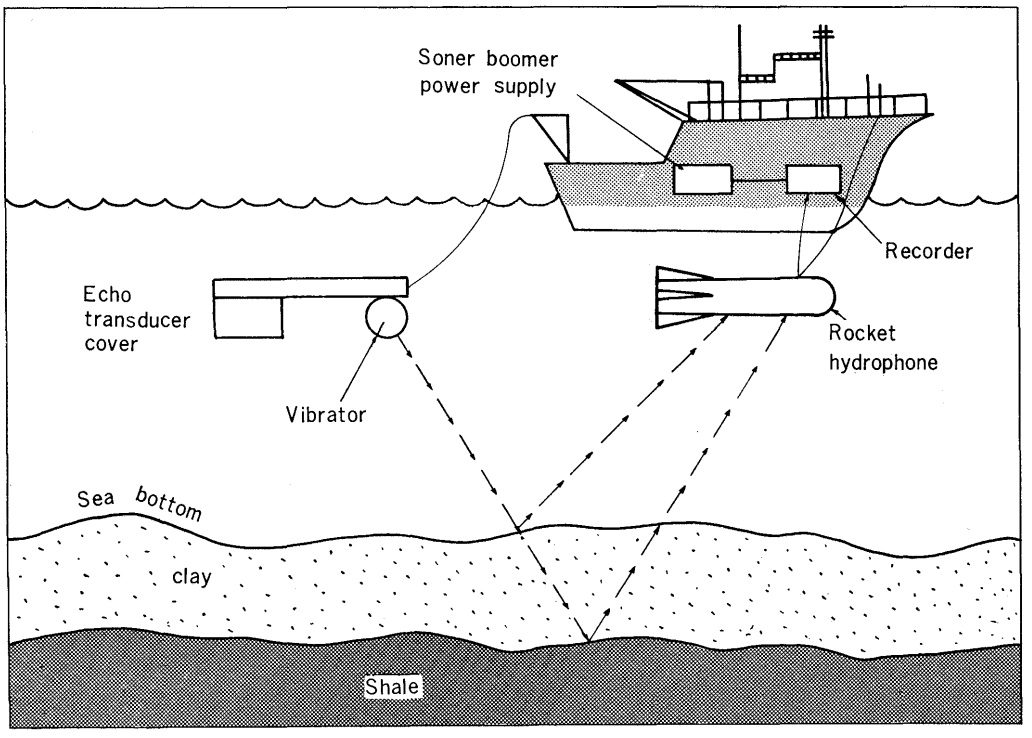
The monthly number of 2 milllion passengers was exceeded except for February. In August 2,5 million travellers were registered.

5—Budget implementation

Ordinary and extraordinary revenue collected in 1968, in accordance with the Port of Lisbon Authority's own budget, totalled jointly 325,168,000 escudos; the figure for 1967 was 338,276,000 escudos.

Ordinary and extraordinary expenses attained jointly, in the economic year of 1968, 312,617,000 escudos against 325,831,000 escudos in 1967. (boletim do Porto de Lisboa)

Oceanic Observation and Hydrographic Survey



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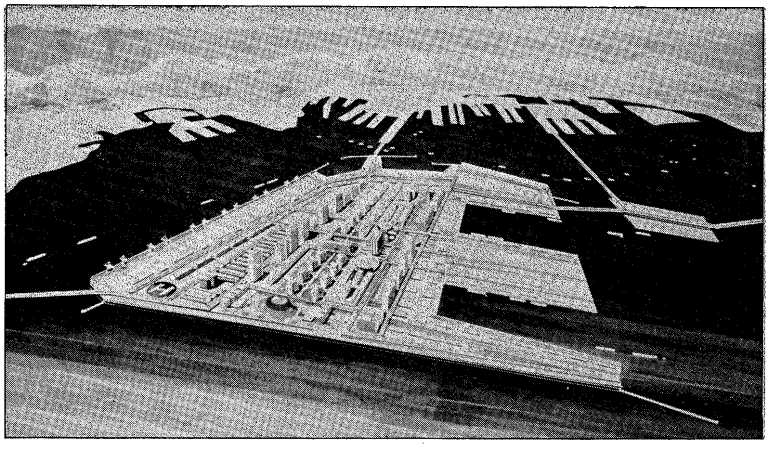
Port-Island Emerges above Water in Part

On the man-made land of 4,360,000 m² in the bay, named "Port-Island", will arise a new "Maritime City" surrounded with the quays providing 30 super-modern berths for oversea liners.

The construction is steadily in progress on schedule toward its completion in 1976, in parallel with the reclamation work, to function as Japan's new doorway to international trade with facilities for all business enterprises of the world.

Part of the Container Berth Area will come into operation in early July this year.

Artist's drawing of Port-Island at its completion



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