

PORTS *and* HARBORS

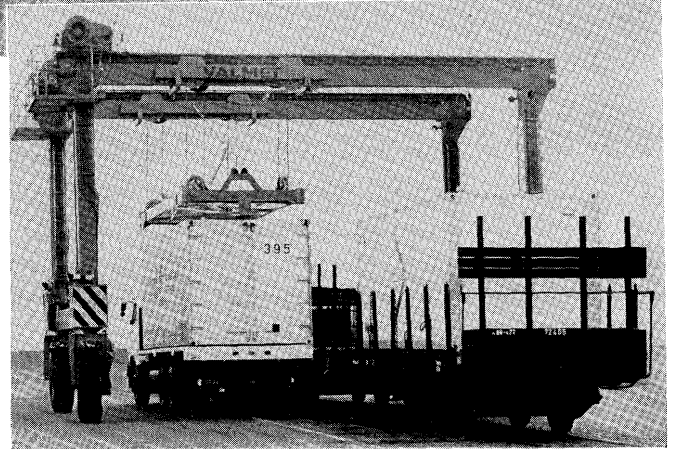
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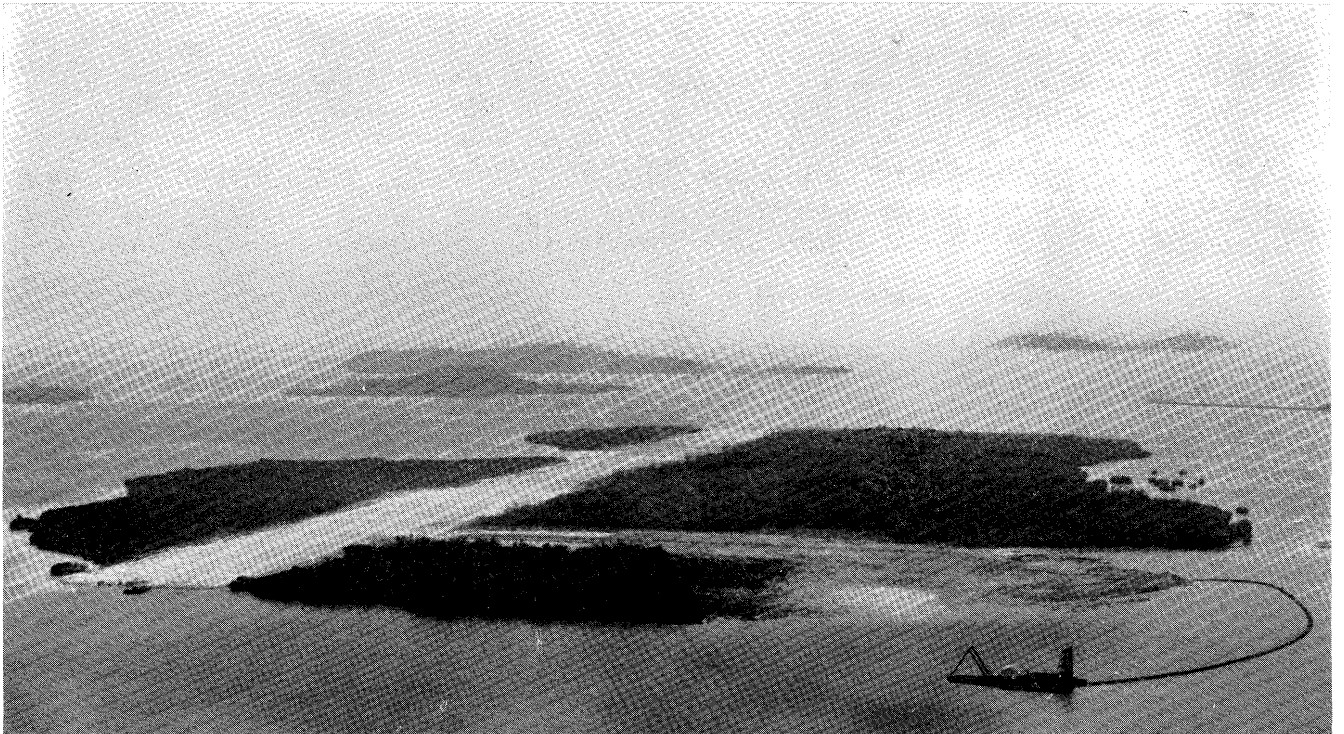
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PORTS *and* HARBORS

Forum on Port Problems:

Views of the Port Industry

By Roger H. Gilman

Director of Planning and Development,
The Port of New York Authority,
and
President, American Association of Port Authorities
*at National Meeting on Transportation Engineering
of American Society of Civil Engineers
Statler Hilton Hotel
Washington, D.C.
July 22, 1969*



Mr. R. H. Gilman

The port industry of the United States is seriously concerned by Federal proposals for regional port studies which, in some instances, have suggested Federal controls over the development and usage of the ports of the nation. These ports, located in the thirty states bordering on the four coastlines of this country, will resist any efforts which would lead to nationalization or Federal dictation of the decisions which properly belong with the states, the municipalities or their port agencies.

Ocean navigation has played a major role in United States history since its earliest days. That it still is important to the nation's development is evidenced by the magnitude of its foreign commerce. In 1968 the nation's oceanborne foreign trade totaled over 400 million tons valued at \$41 billion.

Without adequate ports, oceanborne trade could not flourish as it does. The nation certainly must have done something right in the development of its ports as gateways for moving these heavy volumes of trade.

The port industry firmly believes that the most important thing that was done "right" was that each American port has been allowed to develop competitively with other ports. The nation has never been

in the position of not having enough port facilities to handle all its oceanborne imports and exports and domestic commerce, even in wartime. This results directly from the fact that separate ports have been allowed to develop their own marine terminal facilities either through private enterprise or through state or municipal management. When new marine terminal facilities have been needed, they have been provided. While in some areas the general taxpayers have contributed to the provision and operation of these facilities, the ports have paid for themselves, in most cases by means of charges to the steamship lines and other tenants which use them.

Today, this fortunate situation still prevails as the maritime industry gets ready for the most dramatic and significant development in transportation in recent years. This, of course, is the introduction, and more importantly, the acceptance of container shipping by a great number of ocean carriers of packaged cargo.

Studies undertaken by The Port of New York Authority two years ago indicated that by 1975 about half of the oceanborne foreign trade moving through the New York-New Jersey Port will be carried in containers aboard full containerhips or in combination breakbulk-container vessels. Actually, the development

of containerization in overseas trade has been more rapid than anticipated. We know, for instance, that in 1969 more than 25 per cent of the Port of New York's oceanborne general cargo is already moving in containers and the rate is going higher each month.

The reason for this dramatic shift is clearly indicated by the contrast in the terminal operations and economics for the two basic types of ocean vessels—containership and breakbulk ship. In this country, a containership usually unloads and loads all its containers in one or two ports. The basic economics revolve around the fact that a containership can be completely unloaded and then reloaded for its next overseas voyage in the almost incredibly short interval of 20 hours. On the other hand, a breakbulk vessel takes 10 to 14 days to unload and load at the several ports of call on each of the ocean.

The sharp improvement in productivity is evidenced by the ability to make 26 containership round trips compared to 12 breakbulk ship voyages a year in the North Atlantic run.

Today's containerships cruise at up to 25 knots and those now under construction will have speeds in ex-

cess of 30 knots. They can carry 1,200 or more 20-foot long containers or their equivalent. A Maritime Administration survey showed recently that about 150 vessels, now in operation throughout the world, are specializing in carrying containerized cargo. A recent survey by the American Bureau of Shipping showed that 120 full containerships are under construction or on order throughout the world, 40 of them in United States shipyards.

To realize all the benefits of handling containerized cargo, a ship operator must have specially built containerships. These vessels, in turn, must have specially designed marine terminals at the ports.

No outside pressure was needed to alert the nation's ports to the fact that they must prepare to service this exciting new transportation trend. Since 1955, when container shipping was in its earliest stages of development, The Port of New York Authority has developed, without tax monies, a vast wasteland of swamps and salt grass fronting on Newark Bay in New York Harbor into an enormous center for containerships. Thirteen containership berths already are in operation there and a total of 26 berths will be in service by 1975.

At 31 ports throughout this country, there are at present about 90 berths in operation or under construction to handle fully containerized vessels, with 50 more in the planning stage. By 1972, United States ports should therefore have a total of 140 berths in operation by 1972.

A recent survey by the American Association of Port Authorities has proved the effectiveness of port competition in stimulating new and innovative marine terminal development. During the quarter century following World War II, approximately \$2.5 billion has been invested by the ports of the United States in construction of marine terminals.

None of this marine terminal development was from Federal funds paid for by Federal taxpayers. It is appropriate, of course, to point out that there has been a total Federal investment by the Army Engineers since 1824 for deep-sea channel improvements in all coastal

and Great Lakes harbors, amounting to almost \$1.5 billion, of which a little over one half was for construction and the balance for maintenance.

While American ports compete vigorously against each other for this trade, they also cooperate with each other on problems of mutual interest. This coordinated activity is carried out through the American Association of Port Authorities, of which I am serving as President this year. The AAPA's membership includes the public port agencies of the 75 major ports in the United States as well as many in Canada, Central and South America, and the Caribbean.

Early last year the Association learned of a growing amount of Federal interest and activity directed toward obtaining authorization and funding by Congress of a National Port Study. On further investigation the AAPA discovered that this activity apparently had several origins.

In February 1968, the National Council on Marine Resources and Engineering Development chaired by the Vice President of the United States submitted a report to the President, which disclosed that a "multi-agency research effort has been initiated to study regional requirements of a national system of ports with particular attention to regional aspects. . . . This effort will include a study of port needs and the costs and impact of the kind of improvements that modern shipping technology indicates as potentially desirable." While the report also noted that "port authorities and other State-local interests will be asked to participate in advisory capacities as well as to provide basic information," the fact is that the preparation of the Council's report and the efforts of other Federal agencies had been undertaken without the knowledge or consultation with the port industry.

A second instance was the initiation of a large-scale regional study of the San Francisco Bay Area by the Army Engineers at the request of some maritime interests and Congressmen representing that area. A preliminary study was authorized by the House Committee on Public

Works and has been under way during the past year.

Finally, in July 1968 the Corps of Engineers issued a report based on its preliminary study of future channel requirements to accommodate large ships. The report contended that: "There is critical need for in-depth studies of regional port requirements for safe and efficient handling of new super-sized carriers, and to enhance coordination in planning for harbor and channel works, terminal facilities, and inland transportation networks. The studies should involve several Federal Departments and responsible non-Federal interests." In presenting its outline for progress, the Corps states that: "Comprehensive surveys need to be conducted to determine the optimum number and spacing of ports, within the context of an integrated national transportation system, and the harbor and specialized terminal facilities at various ports."

The thrust of these various efforts was clearly reflected in draft legislation, developed last year for the consideration of Congress, which would have authorized, at a cost of many millions of dollars, a nationwide study of deep-draft ports and the preparation of regional harbor plans for the United States.

In the light of these developments, the American Association of Port Authorities expressed last year and again this year to the Secretary of Commerce, our concern about Federal efforts to undertake comprehensive studies on national or regional bases and our firm position that any such study should include the full participation of the Association and its members. The Association emphasized that port agencies throughout the country have resisted the present-day tendency to seek Federal funds for financing their facilities and, in addition, are making every effort to be self-supporting through compensatory charges for the use of their facilities.

Early this year came a renewed indication of Federal interest in the nation's ports. The reports by the Commission on Marine Science, Engineering and Resources, and particularly its Panel on Management and Development of the Coastal

Zone, again raise the specter of possible Federal direction and control over the entire and far-ranging field of port and terminal development, including land transportation facilities, which have been historically and successfully accomplished by non-Federal interests. Thus the Commission's report states "the maintenance of a major port in every major coastal city is no longer justified." It further goes on to recommend:

"A National Port Survey should be conducted by the Department of Transportation in cooperation with Departments of Army, Commerce, and Housing and Urban Development to define the nation's requirements in terms of major ports, offshore terminals and other facilities for maritime commerce. On the basis of this National Port Survey, a rational scheme for port and harbor development can be established against which the real needs of this country can be measured."

It might be noted that the Commission membership had heavy representation from the academic field, Federal agencies and various related industries in the field of marine technology and oceanography. However, no representative of the port industry was included on the Commission.

In view of our concern with the Commission's report, the AAPA, in a statement to the Subcommittee on Oceanography of the House Committee on Merchant Marine and Fisheries, emphasized that this threat of Federal direction and control completely reverses the traditional relationship between Federal and non-Federal interests and responsibilities in port development. Implicit in such statements in the Commission's report, is the idea that the Federal Government should allocate or mandate port activity as to type, scope and location of all port-related facilities and that this is a process superior to the benefits of healthy and vigorous competition which have in reality spurred the development of United States ports, particularly since World War II. The AAPA contends that the Commission's recommendation that there be a major interagency study of the nation's port and waterway

system is a form of Federal master planning.

Largely on its own, the port industry has foreseen the need for new facilities and has planned, designed and built marine terminals of the most modern design. In order to accomplish this, the port agencies have provided huge investments in public facilities and yet the Commission's report is silent on how such investments would be adequately protected under a Federal program, just as it is silent on the competitive nature of the port industry.

While the mechanism of the free market occasionally introduces some short-run surpluses and inefficiencies, on the whole it has proven to be the sound cornerstone of American economic life and the basis of much of our world leadership. As business entities, ports flourish best in a competitive business atmosphere. It would be disastrous to our nation if our seaports were forced to yield their right to self-determination and development in a climate of free competition simply because the Federal Government faces a cost problem in specific aspects of channel development. Nor will the ports be easily convinced that Federal control of all port development is truly in the national and public interest.

It is pertinent to mention the experience in Great Britain where a precedent is being established in their nationalization of all the ports in England and Scotland. Starting with the creation of the British Transport Docks Board in 1963, a number of the smaller ports in the British Isles were nationalized and all policy-making decisions placed in London. Also as part of this national control, any port development project at a port costing more than \$1.25 million must have official approval by the National Ports Council.

Last year the British Government announced its plan for nationalization by 1970 or 1971 of the major ports as well, with control to be exercised by a national Port Authority. The full inhibiting effect of such national control on the development and operation of ports as well as on healthy competition

between ports will of course have to await actual experience.

Let me stress that if these studies and reports by Federal agencies had been limited to the very legitimate Federal concern with port and harbor channel dimensions as they may be influenced in the future by radical changes in ship size and technology, the ports and the AAPA would fully support it. For example, channels at 35 feet are geared for 16,000 ton tankers, whereas the largest tankers now draw 79 feet and future requirements will be around 89 feet. These developments clearly pose major policy problems with respect to channel dimensions.

In 1967 the AAPA initiated a study with technical assistance from the Army Engineers, the Maritime Administration, the shipping and petroleum industries and major overseas ports, to determine the nature and extent of the supertanker problem in the years to come as it might affect the need for deeper channels to serve the various ports and coastlines of our nation. Out of this study, we hope, will come a better understanding of future requirements and a rational plan for handling the country's tanker movements.

On the other hand, the contention that channel requirements for containerships might justify Federal control of port facilities is totally unacceptable to the port industry. The largest containerships on the planning boards today will draw 35 feet or less of water. This is hardly a problem for most ports and their marine terminals. It is most certainly not in the same category as the supertanker problem.

The AAPA will welcome and assist any Federal Government effort to study the future of more efficient channel development and possible alternatives. But the port industry is a long way from relinquishing its traditional role in port development in favor of an allocative or mandatory process under ultimate Federal control. Before further steps are taken in a study which could lead to such a result, the port industry insists on an opportunity to help shape and guide its objectives.

At the very least, a Federal

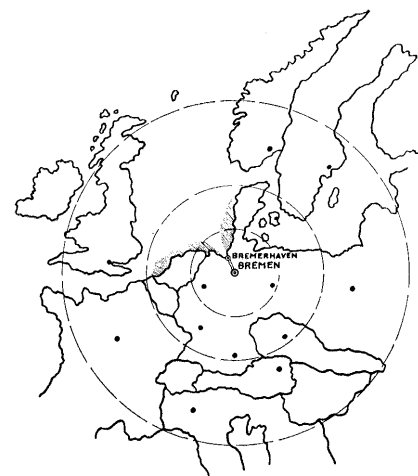
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Bremen / Bremerhaven

The Right Route

for Your Containers

Bremer Lagerhaus-Gesellschaft



From a traffic standpoint the container-terminals of the Bremen ports are characterized by an excellent geographical position to Central, Northern and Eastern Europe. The port of the Bremen City is the southernmost of all West-German seaports—with the shortest connections to the hinterland. This denotes most advantage out tariffs relative to pre-shipment or on-forwarding arrangements.

Bremerhaven and its container terminal are situated directly on the open sea. Excellent maritime conditions prevail for operating large container-ships and their feeder-services to and from Scandinavia and Great Britain, whilst the advantage of a favourable geographical location to the hinterland remains. In addition Bremerhaven is ideal for those shipowners running the so-called express "just to touch

a port" transoceanic service.

The terminals in Bremen and Bremerhaven are connected by the fully-electrified railway to the interior as well as by the well-developed autobahn-network to the industrial areas and main consumer-centres of Central Europe.

The container terminals of Bremen and Bremerhaven operate under a unified management; the Bremer Lagerhaus-Gesellschaft being responsible for both ports. The modern equipment in Bremen and Bremerhaven is fully interchangeable and operational adjustment is possible between the two port centres at all times, thus obviating both waiting time for vessels engaged in container transportation and delay in container dispatch. The maxim is:—speedy, individual, universal. The concentration of all the activities of both ports under a single

Die Häfen Bremen / Bremerhaven

management is a facility in organization which is not to be had in many world ports.

The container terminals of Bremen/Bremerhaven offer 5 sailings a week with the 5 container-lines currently trading on the North-Atlantic route.

The export and import traffic, moving between the Bremen and Bremerhaven container-terminals and the industrial focal points of Central Europe, functions reliably and speedily. The principal rail connections from and to Bremen/Bremerhaven are fully electrified and the "Delphin" container-train unites the port container-terminals daily with more than 30 terminals within the Federal Republic and neighbouring countries.

The location of the inland terminals, combined with the transport system of the Bremen ports' hinterland, guarantees an optimum in container rotation to and from the industrial/consumer centres.

The Bremen container-terminal has direct access to the autobahn-network. The West-German industrial area (Rhine—Ruhr district) is directly connected with Bremen by the "Hansa"-line, whilst the Walsrode — Hannover autobahns give fast connections to the south and southwest, as well as to Berlin. In addition there is a direct autobahn link with the so-called "bird-line" to Scandinavia.

Another autobahn is at present under construction between Bremen and Bremerhaven (continuing on to Cuxhaven); whilst, when the

regional port study program should only be undertaken if and when responsible non-Federal interests within a region request such a study. Furthermore, the local interests should participate fully in controlling such a study's progress and agree to its conclusions and recommendations in a capacity that does much more than merely lend some peripheral significance to the undertaking. Such studies should also be limited to ports or regions which have a specific ship size problem, such as crude oil tankers, and the improvements necessary to overcome the problem must be of a location and nature so as not to divert other categories of commerce to or from competing ports which have no channel problem.

To sum up, the ports of the United States are convinced that the

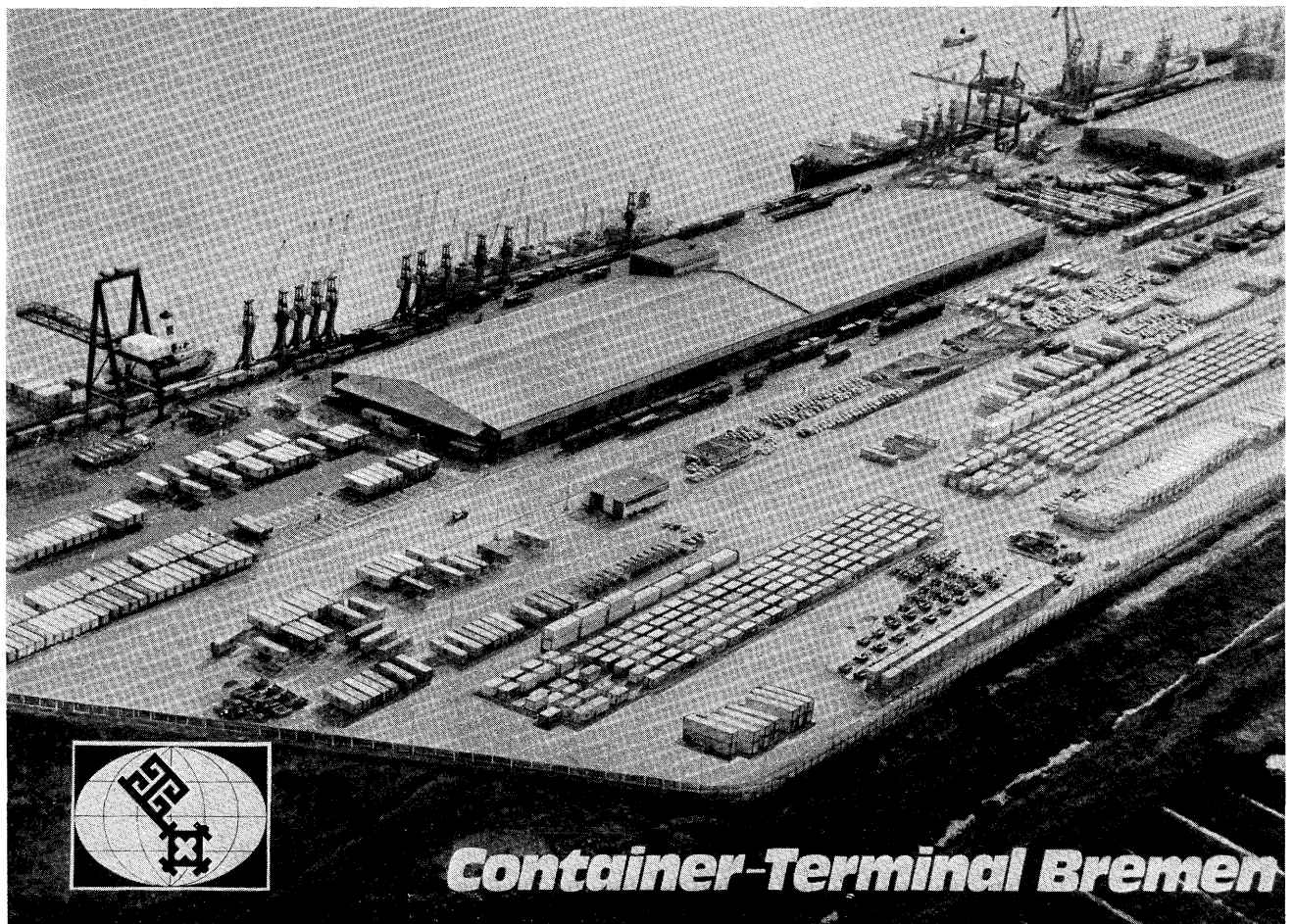
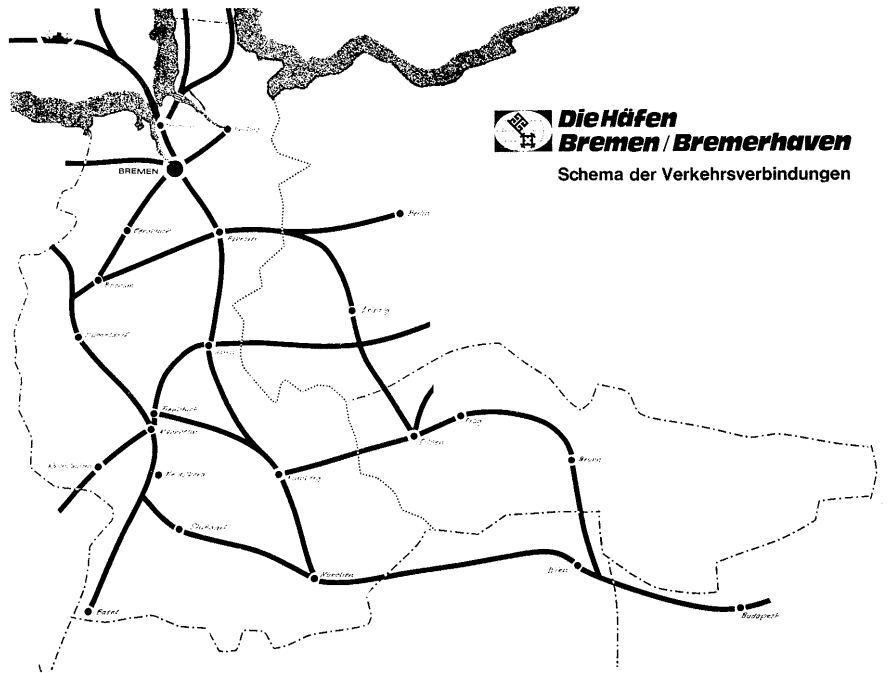
best interests of this country will be served by healthy, vigorous and sound competition for the movement of trade and commerce through their own gateways. They fully agree that the channel requirements for handling superships of very deep draft justify a careful examination by the Federal Government, with the cooperation and assistance of the port industry, of the country's needs in order to avoid unwise and excessive costs for channel deepening. On the other hand, the port industry will continue to resist efforts by the Federal Government to mastermind or control the development or usage of our ports for the movement of the nation's trade under a so-called "rational scheme for port and harbor development" determined by Federal agencies.

autobahn between Bremen and the Giessen/Frankfurt area, via Bielefeld—which has already been plotted—is completed, the route from Bremen and Bremerhaven to the industrial centre of Hesse will become considerably shorter.

Bremen was the first German port to adjust to container traffic. In 1968 a total of 47,000 containers of the 20', 35' and 40' types were handled (this is comparable to approx. 70,000 20' units). The timely construction of the container terminals in Bremen and Bremerhaven was effected in close liaison with foremost container shipping lines and secured a lead for the Bremen ports in "know-how", pertaining to the whole organization and technical development of this traffic.

There are two (in the autumn of 1969 there will be three) container-bridges in service in the

(Continued on Page 12)



The Container Terminal Bremen has possibilities both for full-container ships and for semi-container vessels. 800 m quay length, two container bridges and more than 100,000 sqm of marshalling yard. On a 22,000 sqm shed without ramps, port-to-port containers can be emptied or filled. Handling equipment of 6 van-carriers, 7 trucks with a hydraulic fifth wheel, 2 Diesel-fork-lifts with a 5-t-capacity and 9 with 3.5 tons is available.



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“Neustädter-hafen” container terminal. Their lifting capacity is 25 to 45 tons and they are adjustable to the various container sizes, as well as being capable of lifting two 20' containers simultaneously. Moving on rails along the quay, they can be manipulated into the required position alongside the ship and can be so manoeuvred that two bridges are able to work concurrently on one container ship. Two minutes suffice for the loading/discharging cycle per container, so that—with an average performance rate of over 200 containers per bridge and shift—the container vessel (which conveys some 1,000 of the 20'-type containers) can be turned-round in the shortest possible time.

The marshalling yard of the Bremen container terminal encompasses

open spaces totalling 117,000 square metres—sufficient for approximately 6,000 containers—and the current capacity is constantly being adjusted to conform with traffic-volume increase.

Van carriers operate between the yard and the ship and also assist in the loading/unloading of containers onto/from road chassis/railroad cars.

A total shed space of some 70,000 sq. meters is available for the packing/unpacking of pier-to-pier containers.

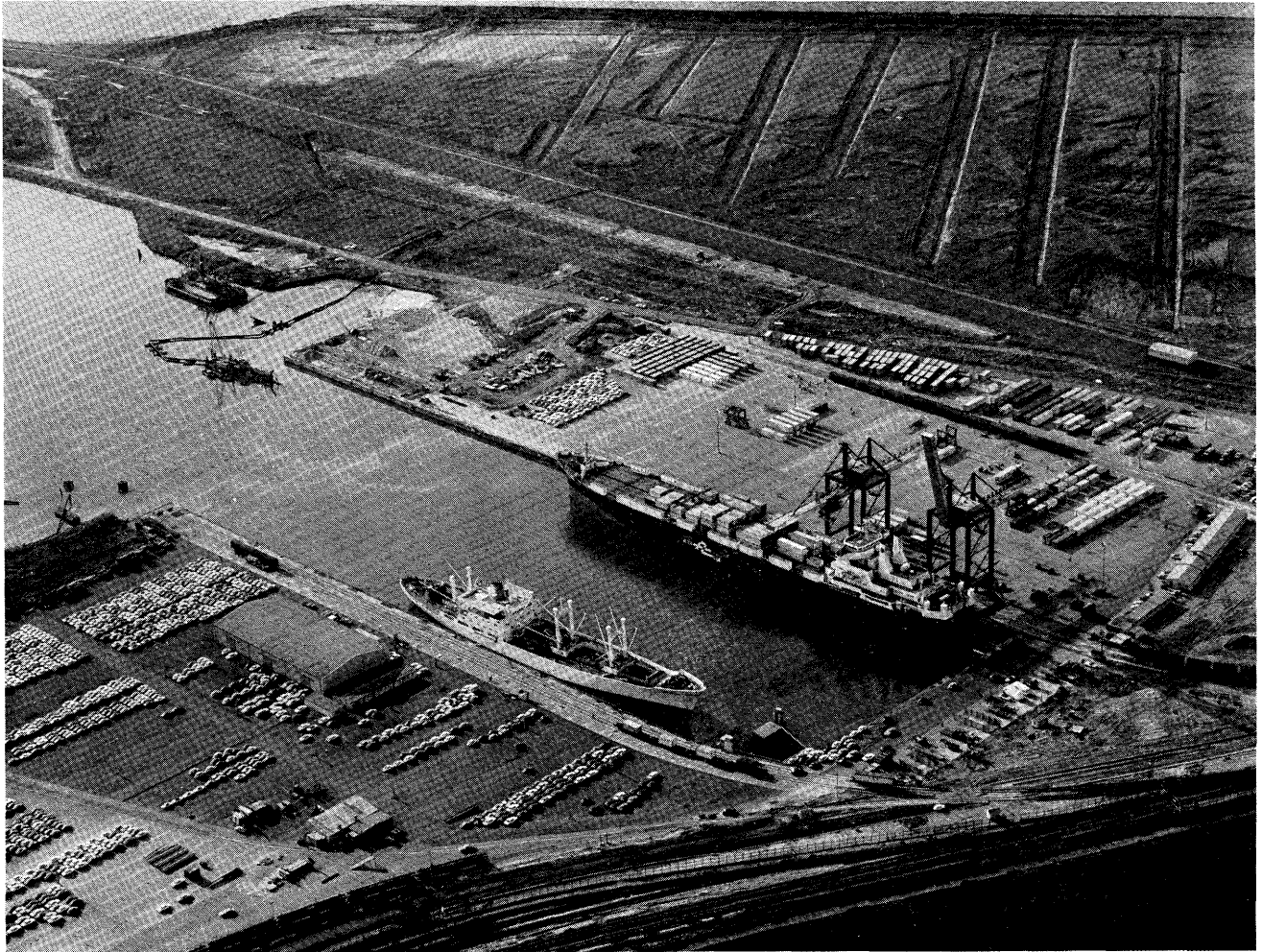
The technical equipment of the Bremen container terminal—with its three berths for full-container and semi-container ships; vessels carrying unitized cargoes (palletized units etc.); and conventional ships—offer the widest possible combina-

tion for modern general-cargo handling.

There is a sufficient number of electric-points in the Bremen container terminal for the reefer-containers—which enables the shipping company to maintain, without interruption, their advertised “refrigeration chain”.

The “Weserbahnhof”, in addition to its function as a distribution shed for accumulated export cargoes, acts as a packing-centre for the collected-cargoes destined for transport in containers between ports. The packing and unpacking of the containers, together with the sorting of the collective-lots for ontransportation to destination, is effected by specially trained personnel.

For the clearance of unitized cargoes, carried by the roll-on/roll-off



The aerial-view shows the vast extensions of the Container-Terminal Bremerhaven. The Nordhafen east side with its 77,000 sqm for roll-on/roll-off-traffic and transshipment of cars (left). The west side offers 119,000 sqm for the handling of containers (middle), while the background gives an idea of the 480,000 sqm area of the quay which is under construction.

ships in the short-sea trades of Europe, a special roll-on/roll-off installation has been constructed in the "Überseehafen" of Bremen, which conforms to just those types of ship.

At the present time the largest port-project in the whole North-Sea area is being realized in Bremerhaven. To supplement the two berths in the tidal-free "Nordhafen", where two container-bridges are currently operating, will come—in the middle of 1970—the first berth to be situated on the Outer-Weser (equipped with two container-bridges). A second such berth also equipped with two bridges will go into operation in the Summer of 1971. The final construction will enable 5 full-container ships to be worked simultaneously in the Bremerhaven container-terminal, where 8 container-bridges will then

be available. In addition to the 100,000 sq. metres assembly area already at hand and sufficient for some 5,000 containers, a further operational space, initially comprising of 400,000 sq. metres, will be prepared. These areas can be extended by up to two million square metres, should traffic development so warrant. The large terminal includes an efficient control-centre, equipped with an electronic computer, as well as a packing centre for pier-to-pier containers.

The "Nordhafen" in Bremerhaven, which is made independent of ebb and flood by a large set of locks, can—at all times—accept container ships with 38' draft. The depth of water on the river-quay will be 46'. The distance from the open sea to the container-terminal at Bremerhaven is only 30 nautical miles, which can be covered by

ships sailing at full speed in one and a half hours.

The proximity of the sea to Bremerhaven, as well as the large expanse of water behind the locks, afford first-class conditions for handling the LASH-carriers of the future—which type-vessel carries large floating-containers.

There are two roll-on/roll-off installations in the "Nordhafen" of the Bremerhaven container terminal. Thus the potentiality is created for operating the combined ro-ro/container-ships there; with the mobile units driving over the stern ramp of the ship simultaneously with the containers being handled by the container-bridges. A third installation for the roll-on/roll-off traffic is available at the Columbus Quay, on the open sea.

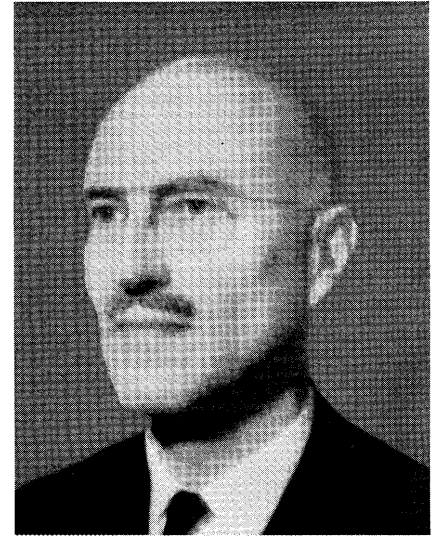
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Administrative Organization of Port Authorities of France

By C. E. Barrillon

Director General,
Marseilles Port Authority

*Paper presented at
IAPH Melbourne Conference, March, 1969*



Mr. C. Barrillon

Seaports rank high among national assets and are the mainstay of overseas trading, not to mention the chief support of any Merchant Service. They are, furthermore, essential for the prosperity of all industrial, agricultural or commercial activity to which they contribute.

Regional development tends to become more concentrated in the vicinity of major seaports in view of the advantages deriving from the quayside location of heavy industries or finished products or to the establishment nearby of associated manufacturing processes.

The speed with which harbour requirements have had to be met in recent years, especially with regard to the major investments now demanded by the considerable growth in tonnage of heavy shipping, has exceeded all expectations.

These circumstances, and the fact

The quay at the open sea presently under construction, together with the container handling area in the "Nordhafen", comprise one compact operating unit of the future—in the form of a complete container terminal. The opportunity will thus be provided to tranship containers ex feeder-vessels berthing in the "Nordhafen" directly into the massive container ships.

The Bremerhaven container-terminal installation, designated as the "Terminal on the Sea", is constructed for the ships tomorrow.

Container and computer, man and machine, all form a picture of modern maritime trading for the Bremen ports of the future.

that as a result of the Treaty of Rome setting up a European Community, French ports were required to forego certain privileges they had been enjoying until then along with the French Merchant Navy (such as flag rights, equity rules and high customs), have urgently drawn attention to the problem of handling costs levied by French firms which had long been virtually invisible in spite of the fact that these firms had always been known to charge more than their European partners in this respect.

Frequent cost analyses, however, failed to reveal that disparities were attributable to low-quality labour or costly handling operations. These differences were found to be due to the scantiness and technical shortcomings of the installations, with particular reference to water depths at harbour entrances, quay facilities and also the lower tonnage handled by French ports compared with their foreign rivals. This latter factor cannot but adversely affect the development of scheduled routes and the lowering of freight rates which could be achieved by full loads on return journeys. This is further aggravated by the fact that the level of taxation and harbour dues in France are higher than elsewhere.

It was therefore necessary, in the case of the leading seaports of France, to consider a new administrative and financial organization likely to adjust their technical development to suit their needs, at the same time reducing costs borne by users but without jeopardizing

the traffic patterns which tended to be concentrated in the six major ports of Dunkirk, Le Havre, Rouen, Nantes/St. Nazaire, Bordeaux and Marseilles, together accounting for about 80% of total freight. It was necessary also that the system be rational and comply with sound economic concepts without depriving the State of its promotive and controlling function or unduly restricting flexibility, a salient feature of maritime trading.

These are the reasons which motivated reform of the administrative and financial regime of the main sea-harbours of France and led to the French enactment of 29th June, 1965, which was further supplemented by two decrees.

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Until 29th June 1965, when legislation was enacted with respect to autonomous seaports, French harbours were governed by two administrative systems: a common administration and independent management both recognized by law on 12th June 1920. The sole beneficiaries of the second system were the ports of Le Havre and Bordeaux.

The ports governed by the first category, which included Marseilles, Dunkirk, Rouen, Nantes and St. Nazaire, were administered by the State which assumed responsibility for all upkeep and works services, the administration of conservancy operations, or equipments under concession and of public property.

The State collected wharfage fees on vessels and goods, as well as revenue from both public and private

land. It was also responsible for maintenance and management, the cost of which was largely covered by the proceeds of quay dues.

The Chamber of Commerce of a State-owned port was the concessionaire of the public equipments of which it was the purchaser and which it was required to maintain in good working order and operate; it had to supply the State, for the purpose of external works, with contributory funds in proportion to cost, and varying from 50% in major ports to 66% in average size ports and 75% in subsidiary ports.

Two main sources of revenue were:—

Local port dues which were allotted by the authorities to specific uses in accordance with an ad hoc accounting procedure. The bulk of the proceeds was used to cover the cost of contributions to the State and of purchasing equipments in public ownership. Customary fees for public equipments which, as a rule, covered only maintenance and administrative costs.

The Autonomous Ports of Bordeaux and Le Havre both had the powers and responsibilities of State-controlled harbours managed by the Chamber of Commerce. They were State-owned Public Concerns comparable to commercial undertakings.

They were controlled by a Board of Directors and by a General Manager appointed by decree, having the combined office of executive deputy of the Board, and representative of the central authority.

They were responsible under the French Minister of Equipment for all works for the maintenance and operation of all installations and equipments, for the management of the dock estates and for exercising control over operations.

Their sources of revenue were the same as for the Chamber of Commerce: local port dues and rental of public equipments, in addition to the revenue deriving from quay dues which were refunded to them by the State, and of land revenue.

They received State subsidies defraying 50% of expenditure in respect of ground facilities and some 70% of the cost of maintaining harbour entrances.

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Until the advent of the new independent status of French ports, virtually all maintenance costs were borne by users of the port who were not only required to pay wharfage but also 50% of works services and all pilotage and equipments costs.

In this respect, they were very different from other European ports.

It was proving essential to reform the status of the main French maritime stations with a view to increasing Government financial assistance, the State being responsible for controlling ports which were national property.

It was also proving necessary to spell out more precisely the administrative system under which the State would be exercising its control and the items of expenditure to which it would relate.

For purposes of administration, a choice was made in favour of autonomy. This option was motivated by three main principles:—

The principle of a single unified management: it is highly desirable that all operations be controlled by a sole authority and recorded in a single set of consolidated accounts. The general interest would thus be best served by central knowledge of all the problems requiring solution.

The principle of co-ordinated decentralization: this process is necessary in view of the complexity of maritime matters, the intrinsic flexibility of international freight patterns and the significant part played by ports in the local economy; co-ordination is equally desirable in the case of major ports in view of their contribution to the national economy.

The principle of a clear enumeration of the special responsibilities attaching to harbour authorities: the precise definition of the State's purview as well as of the powers of the individual harbour authority are pre-requisites to efficient operation.

Government financial assistance remains limited to the field of reconstruction and upkeep of facilities, with operating expenditure and equipment costs for both industrial and commercial purposes being met out of the proceeds of port user

charges. From the point of view of a sound economic return on investments, however, this source of revenue would be most unsuitable for defraying capital expenditure and certain maintenance costs relating to items unconnected with users.

With regard to fixed assets, a further distinction is called for between long-term investments such as main piers, access fairways, main locks and lesser facilities such as wharfs, platforms and other works designed to meet and anticipate traffic requirements.

This distinction is based on the following considerations:—

It is in keeping with generally accepted economic theory that the rates finally selected are geared to "marginal costs" consisting of expenditures proportional to the service rendered such as cost of labour, power, upkeep and renewal. The most recent definition of "marginal costs," known as "development costs," also includes costs relating to the development of those phases of the production process which are a function of any increases in demand.

In an expanding economy the "development costs" notion is a highly attractive one in that the "marginal costs" concept can be extended to investments proper provided that they follow demand closely enough for output to be overtaken by demand after only a brief time lag. This principle applies particularly to power stations, thermal stations and hydraulic plants having a sufficiently low individual output compared with overall production for their development to be closely geared to consumption.

It follows from these tenets that the charge for past capital outlay should not be allowed to affect tariffing. Where supply is allowed to keep pace with demand, however, expenditure in respect of future investments (provided that they are progressive) are reflected in current prices and by supplanting the charge for past capital expenditure, enabled the harbour board to bear the cost of such outlay.

Nevertheless, the "improvement

cost" notion and, to a certain extent, the concept of "marginal costs," no longer apply in the case of non-proportional expenditure such as outlay in respect of investments which are essential to the development of a Public Service but intrinsically sporadic, preceding demand by a substantial interval of time. The cost of this discontinuous type of improvement cannot be borne by users without the development or even the very existence of port traffic being made to suffer.

This kind of investment inevitably gives rise to a dilemma. Should it be decided to forego them, the community is likely to be placed in rapidly worsening economic jeopardy during periods of expansion owing to the inadequacy of existing facilities; on the other hand, should even only part of such expenditure be met by users, they will be deterred from using the new facilities, and this can only lead to further losses. The only way out of the quandary is to resort to collective financing.

The intermittent and intrinsically indivisible type of investment described above is assimilable to "basic investments" which are not immediately productive because used primarily to open up new territory or set on foot a Public Service. This type of investment may also often be required to stimulate an expanding economy which has already reached an advanced stage of development and is therefore associated with the field of "public works," the cost of which is borne by the community at large as opposed to the actual users of the port facilities.

There are three clearly distinguishable sectors to every seaport: one reflecting the traditional concept of marginal or improvement costs, another corresponding to the typically intermittent kind of investment, and yet another representing the intermediary version described in the preceding paragraph.

This pattern ensures in the first place that such harbour facilities as cranes, cargo-handling tackle of all kinds, sheds and rail tracks are capable of keeping pace with increasing port traffic. Regulation and control are governed by the usual rules, traditionally followed in in-

dustry, where the cost of operations, maintenance, renewal and development is borne by users. The incidence of the charge for this sector, the extent of which is dictated by the state of the capital market, can normally be expected to be met out of the proceeds of user charges.

The second category relates to the irregular but indivisible investments. Certain harbour projects need to be planned far in advance of short-term requirements. It is not possible for obvious reasons (including considerations of utility and security) to construct a large sea lock, access channel or protection mole to meet fast-changing shipping requirements or keep pace with the growth in size of merchant vessels. Such works are more typically geared to harbour development schemes. Similarly, the maintenance of works designed to withstand the elements such as breakwaters or access channels, or the maintenance and operation of locks which are subjected to tidal action bear no relation to the amount of shipping using the docks. In the case of works falling in this category, any attempt to pass even part of the relevant costs on to users is incompatible with sound economic practice. An optimum return on such investments is guaranteed by passing the relevant expenditure through the public budget.

The third sector covers internal port facilities such as quay revetments, platforms, harbour communications, etc. . . . which cannot always be planned in such a way as to meet the requirements of increasing traffic. Their very nature and inherent constraints impart characteristics which go beyond purely short-term requirements. When dealing with this category, apportionment of costs between community and users needs to be determined.

These are the economic considerations embodied in the 1965 enactment under which the State bears the cost of maintaining and operating access locks, upkeep of access channels, outer harbour water depth and sea defence works.

The works programme and estimate of expenditure are drawn up annually by the Minister of Public Works and Transport and the

Minister of Finance and Economic Affairs on a proposal from the Port Authority.

As regards modernization of harbour facilities, the State takes for its account 80% of the cost of:—

Dock improvement:

Dredging and improvement of access channels and outer harbours;

Erection and extension of sea defence works and access locks, including reconstruction work in both cases.

Furthermore, the State refunds 60% of the cost of servicing loans issued to finance similar operations prior to establishment of an autonomous port.

The cost of constructing, extending or replacing harbour facilities and dock equipments other than those specific above is defrayed by the State as to 60%. Furthermore, the State refunds 20% of finance charges relating to loans floated to pay for expenditures incurred prior to the setting up of an autonomous port authority.

State participation as described above is equal to the sum of its share of actual expenditure in the case of an autonomous port and corresponding overheads.

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Autonomous ports are public concerns enjoying a legal status and financial independence under economic and financial State control and the supervision of the Minister of Equipment.

The port is administered by a Board of Trustees, with the assistance of a Managing Director appointed by virtue of a ministerial order in council on a proposal from the Minister of Equipment after consultation with the governing body.

The governing body consists in equal proportions of:—

Members appointed by the Chambers of Commerce and Industry and the local authorities, as well as staff representatives including dockers.

State representatives and leading port users or officials appointed for their special knowledge of port matters, including sea traffic, transportation, and both the re-

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Searching for Tomorrow's Transport Systems

Symposium on Containerization A Mixture of Progress and Perplexities

from "Via Port of New York"

March 1969

Nearly three years after the "Container Revolution" arrived, the patterns emerging from the rapid change were formed sufficiently to be examined for their impact. What proved to be the first intensive review of these patterns took place recently in the Port of New York when the Container Institute, Inc., formerly the Bulk Packaging and Containerization Institute, Inc., held its Ninth Annual Convention on Containers and Containerization. This popular symposium attracted as panelists several of the foremost intermodalists in the United States, shippers familiar with containerized shipping serv-

ices, and federal government officials whose agencies are coping with the new alignment of transportation services. The audience, in turn, was equally knowledgeable, consisting of nearly 300 shippers and representatives of carriers, ports, financial houses, underwriters and suppliers of containers.

The two-day convention took the form of a critique, with as much time devoted to problems as progress, principally because the two major panels, "Is Containerization the Total Panacea?" and "Freight Conferences in a Changing World—Can This Marriage Last?" not only guaranteed diverse opinions

gional and the general economy. The President of the Board of Trustees is elected from among its members.

Members other than those appointed by the Chamber of Commerce and Industry and the local authorities are nominated by decree on a proposal from the Minister of Equipment. Staff and dockyard representatives are selected from lists drawn up by each of the more representative Trade Unions.

The number of Members of the Board may be either 18 or 24. With regard to the six existing autonomous ports, the strength is 24 in each case.

Eight members are appointed by the Chambers of Commerce and Industry of the port district.

The District Board of Councillors and the Municipal Corporation of the main city within the district each nominates a representative.

Fourteen members are appointed by decree:—

One member of the Privy Council; four representatives from various Departments (Equipment, Transport Finance and Economic Affairs, Industry); one staff representative; one dockyard representative; seven officials selected from among the port's main users or appointed because of their competency.

The duties of Commissioner at the port are performed by a senior Engineer of the "Ponts et Chaussées," appointed by the Minister of Equipment, who exercises regulation over the Board's proceedings and supervises the operation of all services. Economic and financial control over the autonomous port is exercised by a State Controller appointed by the Minister of Finance and Economic Affairs. Both are required to attend meetings of the Board in an advisory capacity.

The Board's meetings are also attended by the Prefect or his representative.

but begged some critical responses. A third panel, "Defoliation of the Paper Work Jungle," provided a more positive approach as did the concluding event—an on-the-spot inspection of container-handling facilities of the Elizabeth-Port Authority Marine Terminal.

An encouraging start to the convention was given by Maitland Pennington, chief, Office of Maritime Promotion, Maritime Administration, who served as moderator of the opening panel. Mr. Pennington gave a report on the quantity of containers moving across the North Atlantic during 1968. His report revealed a nearly balanced two-way flow—about 105,400 moving out of U.S. ports to the U.K. and the Continent and over 95,261 entering the Port of New York and other American ports. Starting with a level of about 24,000 containers in each direction during the first quarter of the year, the outbound volume peaked during the third quarter to 31,517 containers. The shutdown of U.S. North Atlantic and Gulf ports during December not only curtailed growth but reduced container traffic to 20,755 vans outbound and 21,900 inbound. Tonnage-wise, the transatlantic container flow also was balanced. Outbound from the U.S., the traffic amounted to 847,220 tons, while the inbound containerized freight reached 826,218 tons.

British and European progress in containerization, evident in the figures offered by Mr. Pennington, was cited by James B. Rose, European manager, U.S. Lines. He said that both the need for rail revenues and relief for congested highways have contributed to the growth of railway container services and rates in the U.K. and Continent. In Britain, Mr. Rose explained that freightliner service, started in 1966, now encompassed 25 terminals and provided excellent service with cars adapted to carry two 30-foot vans, one 20-footer and a 40-footer, or three units of 20 feet. Certain rail routes in Britain have also been modified to enable containers of 8 feet 6 inches in height to move over them. Such a development was thought impossible several years ago. British Railways also has ordered two containerships that will com-

plement its overland intermodal system for shipments to or from the Continent. "Even at the present," Mr. Rose said, "a British firm offers a \$168 container rate between Birmingham and Frankfurt."

It was obvious to convention delegates listening to Mr. Rose that he was pinpointing inland intermodal achievements on the eastern side of the Atlantic when he stressed "continental countries are moving like Britain." The role of INTERCONTAINER, the sales and rate-making body of European railways for containers, was explained. Also an example was given of a Plan V-type rail rate in Germany under which containers are carried at a single rate (without classification of freight). As his final point, the U.S. Lines manager for Europe said that more than 17 ports there had invested in major container-handling facilities, including Antwerp which has 7 large dockside cranes.

Indications that inland carriers in the United States are moving to catch up with their European counterparts dominated the presentation by Frank M. Winterholler, president, Equipment Interchange Association (EIA). Organized about ten years ago, EIA was composed solely of motor carriers until piggyback, and sea-going containers made it virtually mandatory that membership be opened to other modes. Consequently, a more representative EIA now deals with three broad areas: the development of uniform intermodal rules; obtaining federal legislation that facilitates the intermodal exchange of equipment; and the TIR carnet system (see *VIA PORT OF NEW YORK*, pages 16-18, October 1965) which will also facilitate intermodal interchange and movement of containers across national frontiers without customs examination.

An important step forward for U.S. container interests was made known when Mr. Winterholler reported: "On October 25, 1968, President Johnson signed HR 18373, a bill which cleared the way for U.S. accession to the TIR Convention. The necessary documents indicating accession were deposited with the United Nations on December 3, and the U.S. will officially

become a party to the treaty 90 days from that date." The EIA president also announced that his organization may agree to serve as the U.S. issuing agent for the TIR carnets.

Some of the complexity inhibiting smoother interchanges of containers within the U.S. also was brought to the fore by the EIA president when he outlined his organization's inability to include uniform container per diem charges in its Uniform Intermodal Interchange Rules published in April 1968. Regulations of the Interstate Commerce Act and Shipping Act of 1916 do not provide immunity from anti-trust laws for rates published on containers interchanged between ICC- and FMC-regulated carriers. Therefore, late in 1968, the EIA was instrumental in having introduced the "Equipment Interchange Act of 1968." This pending legislation would provide the appropriate anti-trust immunity needed by carriers or groups of carriers of different classes to accomplish intermodal equipment interchange. The proposed law would not alter or transfer any regulatory authority of the ICC, FMC or CAB but would establish a joint board "which would have the power to approve agreements in those instances where no single regulatory agency has the authority to do so."

The current search in the U.S. for perfected intermodal exchange of equipment ran through the comments of Donald L. Loftus, assistant vice president, intermodal services, Western Pacific Railroad. He called the present intermodal handling of containers unsophisticated and riddled with efficiency gaps. "The railroads," he stated, "are presently formulating a uniform interchange agreement." Such an agreement between the rail and ocean carriers would be outside the purview of the EIA, although Mr. Loftus stated part of his line's approach to oceanborne containers involves: "both highway and rail movements between the port and the railroad's container terminal."

And so it was that the need for greater coordination between truck, rail and ocean carriers within the U.S. quickly became the dominant

issue of the convention, a standout in stark contrast to the faster and smoother transition to containerization by European truck and rail systems. A transition of massive proportions that was achieved despite a later start (than the U.S.) caused by a built-in handicap of converting from Europe's own system of small containers to much larger highway-trailer types popularized by pioneer container operators in the U.S.

Dr. John J. McMullen, president, U.S. Lines, also referred to European container advances when he delivered the convention's principal address. He called for truly integrated transportation systems and left little doubt that ocean carriers which have invested in container equipment fleets worth more than their ships should be masters of such systems. "Clearly," Dr. McMullen emphasized, "one single operator controlling all elements of the thru-transport system can best promote and develop the business." He implied that to his way of thinking such a system is virtually the same as an oceanborne container operation. "Painful as it may be to the old time break-bulk shipping man," he continued, "the trucking concept is better suited to operating container transport than the steamship concept. As a matter of fact, it is more appropriate to identify the container movement as an international thru-transport system comprising rail, ship and inland barge segments than to speak of ocean shipping alone."

The president of U.S. Lines summarized by saying that the role of an owner (of an international container fleet) will become increasingly a financial manager investing in newer, faster and larger equipment to maintain profitability. "Ultimately," he concluded, "this can only lead to a concentration of thru international transport systems in fewer companies. . . ."

Advantages of an alternative system for shippers of the seventies was outlined by Joseph G. Barkan, executive vice president, Prudential Lines, Inc. In requesting a comparison with pure containership operation, Mr. Barkan described the LASH (lighter aboard ship) concept as a more economical, ver-

satellite system that would be available by this time next year. Although disclaiming his organization as anti-container, the Prudential Lines executive charged, "the containership operator has broken his ship up into a thousand pieces and scattered these pieces over a wide market." This distribution is very costly, according to Mr. Barkan. "It is so costly," he added, "that containership operation should actually demand a premium in tariff rates instead of reduced freight rates."

Instead of dispersion of ship's equipment, the LASH operation will have cargo delivered directly to its lighters or the ship at the port of call. The 73 sixty-one-foot-long lighters aboard each of Prudential's LASH vessels, working in concert with two ship-mounted cranes (one of 500-ton capacity to lift the lighters and a second to hoist containers), will permit the novel ships to handle all categories of freight—palletized, unitized, containerized, heavy-lift, break-bulk, vehicular, refrigerated, liquid and dry bulk. Somewhat vague as to the means by which cargo would be transferred from a wharf into a lighter, Mr. Barkan said that small, mobile dock cranes would perform this function. He also indicated that shippers would always have a vessel on berth with LASH presumably because the covered lighters would be stationed at a port in the absence of the "mother ship."

The costs of LASH operation will be highly competitive. Mr. Barkan stated that LASH costs would amount to 18 cents per CFT when measured against a full 1,000-unit containership that costs 33 cents per CFT. A/S Mosgulf Shipping Co., Norway, apparently reached somewhat the same conclusion. A Japanese shipyard is now working for Mosgulf on what will be the first LASH ship afloat—her delivery date is September 1969. And, as Mr. Barkan concluded, "LASH will soon become a reality for the tomorrow-minded shipper. The concept of the future is fast becoming the ships of tomorrow and tomorrow is sooner than you think."

In focusing attention on the inability to adapt intermodal transport to the lesser developed areas,

Edward Bridges, transport analyst, Moller Steamship Company, said that it would be virtually impossible to apply the load center concept whereby all cargo is off loaded at one port and that portion not consigned locally is trucked or rail-roaded to destination. He added that the lack of inland transport systems in those areas would require shuttle vessels, which he considered a costly addition to operating expenses. Generally critical of containers for the lesser developed regions, particularly the standard 20-foot van which he claimed should never have been made standard in the first place, Mr. Bridges inadvertently supported the standpoint taken by the earlier panel spokesman on LASH. The advertised advantages of LASH ships and/or lighters to berth at undeveloped ports and take on or discharge any type of freight would seemingly go far in meeting many of the inadequacies detailed by Mr. Bridges.

The consensus of panelists on freight conferences predicted a change in format if not outright dismemberment of the current organizations only to be followed quickly by a regrouping into new conferences. Panelists on documentation stated initial steps have been achieved in the march toward simplification but any defoliation of the vast paper-work jungle still remained an elusive accomplishment.

Delegates to the Ninth Annual Conference on Containers and Containerization left the gathering better informed but firm in their belief that while intermodal transport is making remarkable headway, the search continues for new and better systems of utilizing it to serve world markets more efficiently.

Transport Consultant

New Orleans, La.:—Fred E. Pate, a recognized international authority on the handling and movement of bulk cargo, has been engaged by the Board of Commissioners of the Port of New Orleans as management consultant for the Public Bulk Terminal.

Pate will advise the Board on all matters relative to the promotion, operation and maintenance of the

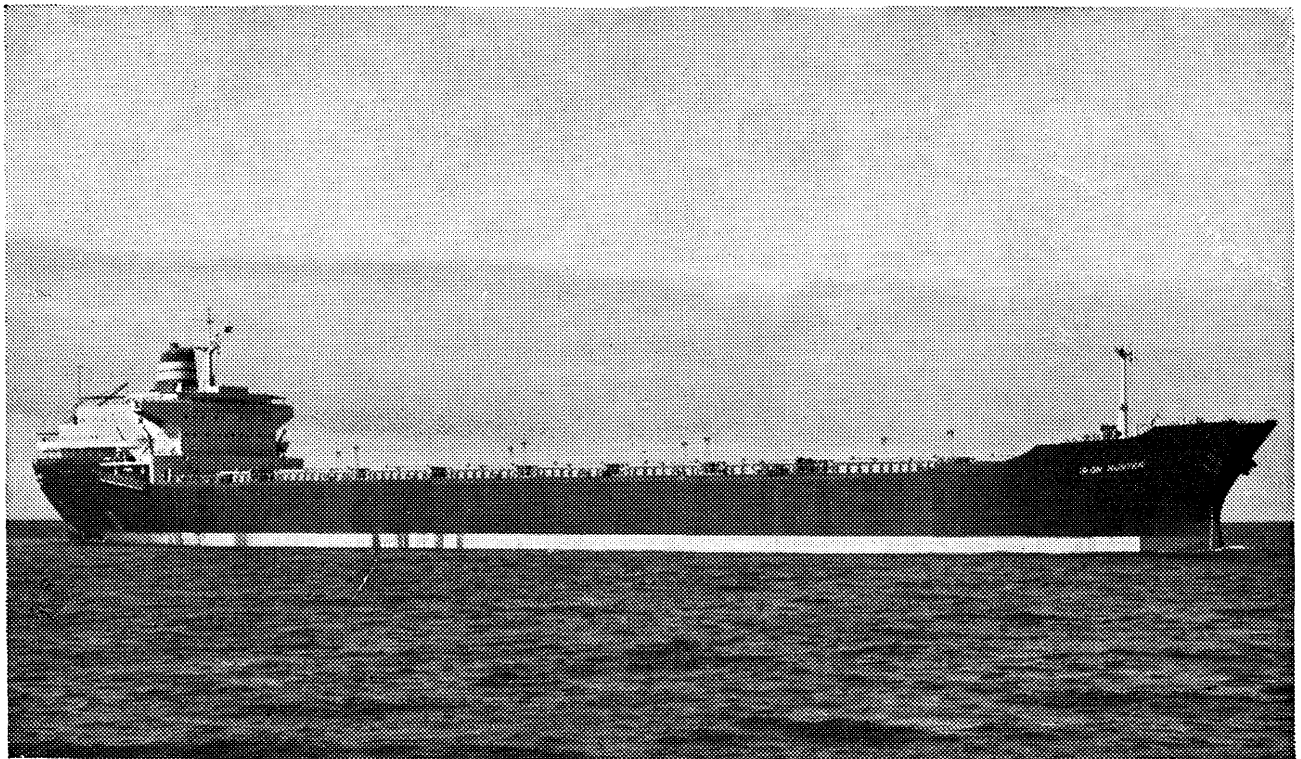
terminal.

"Mr. Pate is broadly experienced in the transportation and handling of bulk materials," said Robert R. Barkerding, Sr., president of the Board. "His background of shipping operations has given him first-hand knowledge of bulk cargo activities all over the world. With his experienced guidance, the Public Bulk Terminal will be expanded and diversified in its operations. We will be able to attract and handle additional substantial bulk tonnage in the future, to the further economic benefit of our state and city."

Born and educated in Washington state, Pate has been vice-president of Navios Corporation in Nassau, Bahamas, since 1956. Navios is a subsidiary of U.S. Steel Corporation and deals in the shipment of bulk commodities. Pate began his career in transportation in 1927 with a Seattle steamship company. He was on active duty in the Navy in World War II and recently retired from the Navy reserves with the rank of Commander.

From 1946 to 1956 he worked for Isthmian Steamship Line, also an affiliate of U.S. Steel, and during that time he spent three years in New Orleans.

The Public Bulk Terminal is the port's newest and fastest growing facility, constructed at a cost of \$19,000,000 from the revenues of the Board. It is a completely automated plant capable of transferring or storing bulk cargo such as coke, alumina, sugar, gypsum, coal and other diverse materials. Under the capital improvement program of the port, to be financed with bonds recently authorized by the Louisiana Legislature, additional storage and other expanded facilities will be constructed at the terminal. (Port of New Orleans)



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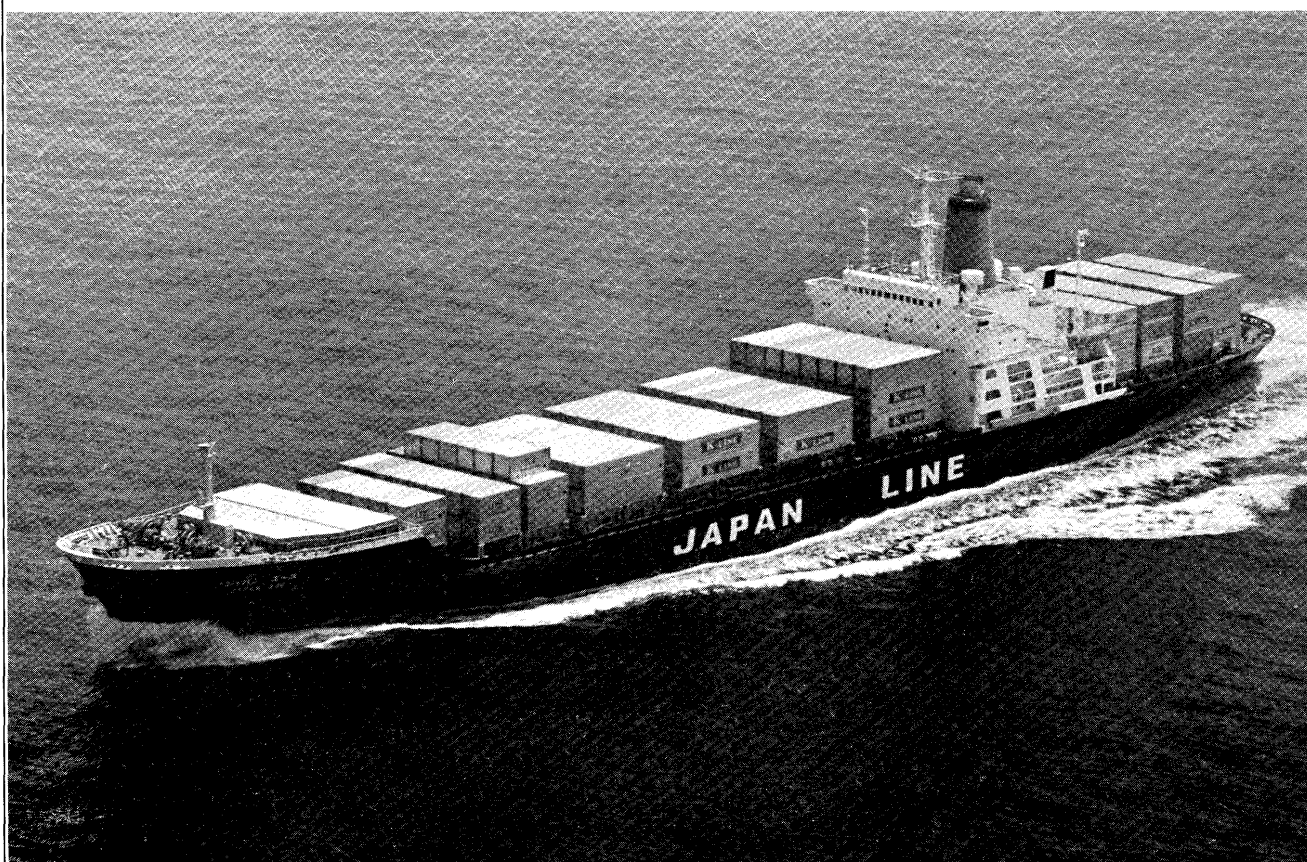
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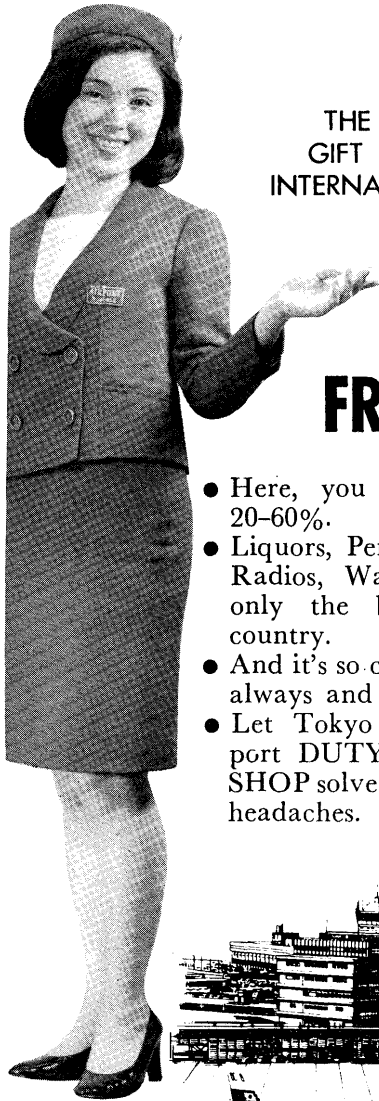


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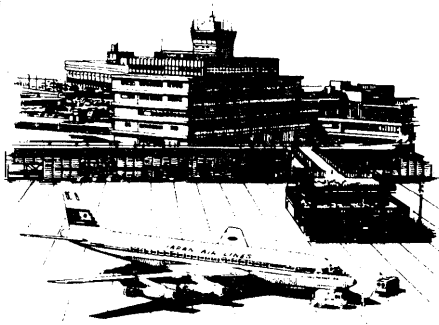
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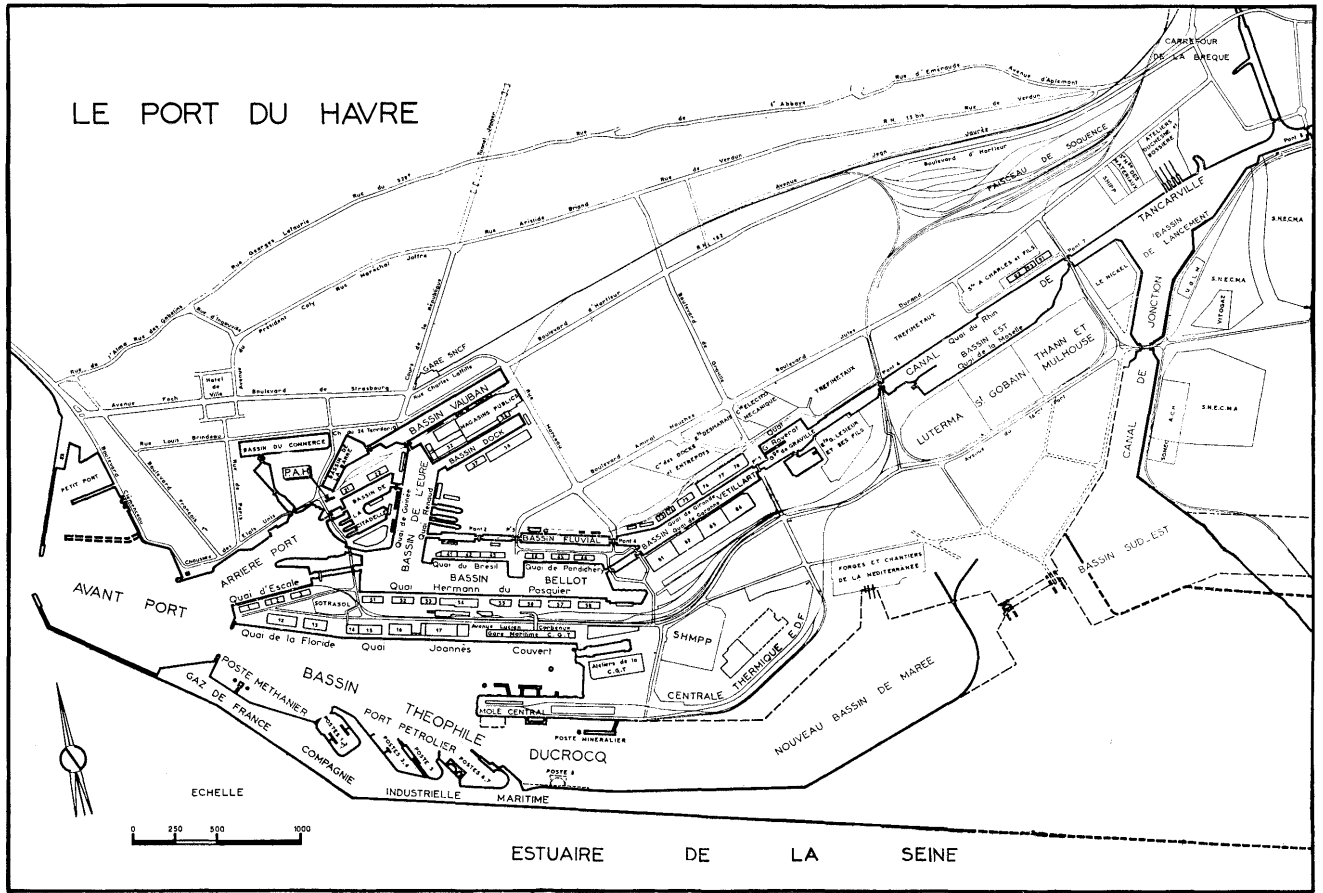
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and
200,000-ton bulk carriers in 1971

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immediate access to the sea

PORT AUTONOME DU HAVRE:-TERRE-PLEIN DE
LA BARRE, 76-LE HAVRE. Telephone: 42.52.01

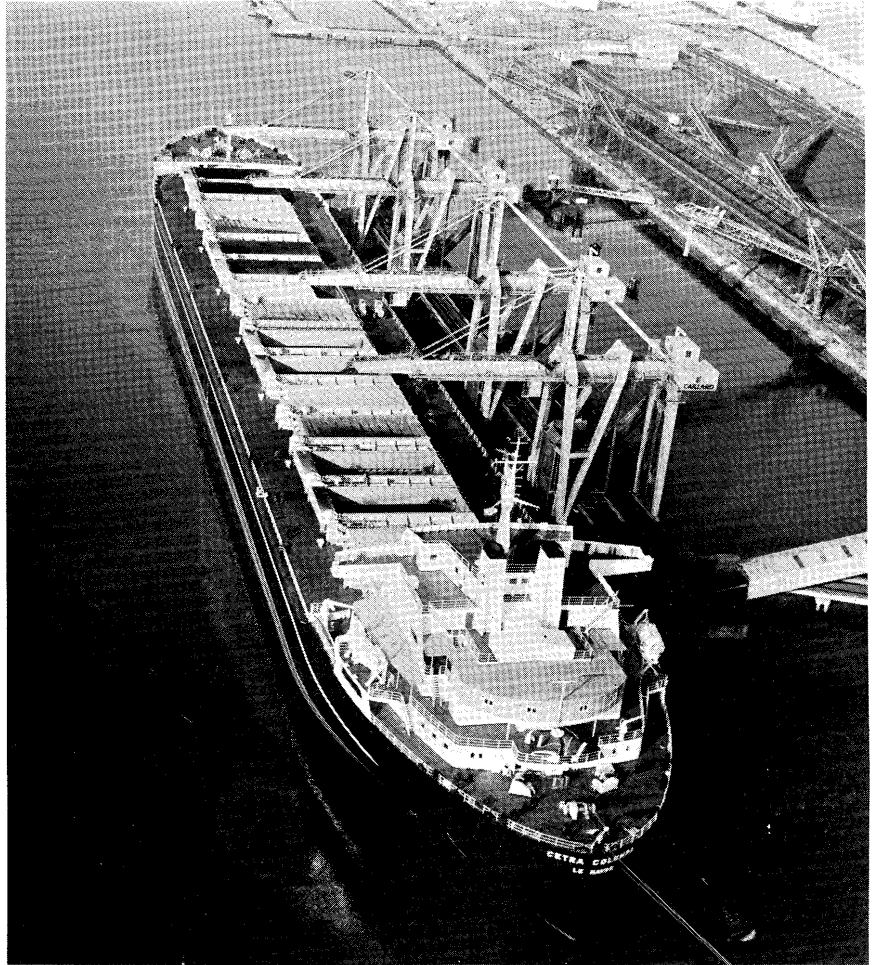
LONDON OFFICE:-THREE QUAYS, TOWER HILL,
LONDON E.C.3. Telephone: 01-623 9603

Port of Le Havre in Pictures



2. The 206,000 ton petrol tanker "Bergehus" towed into Le Havre.

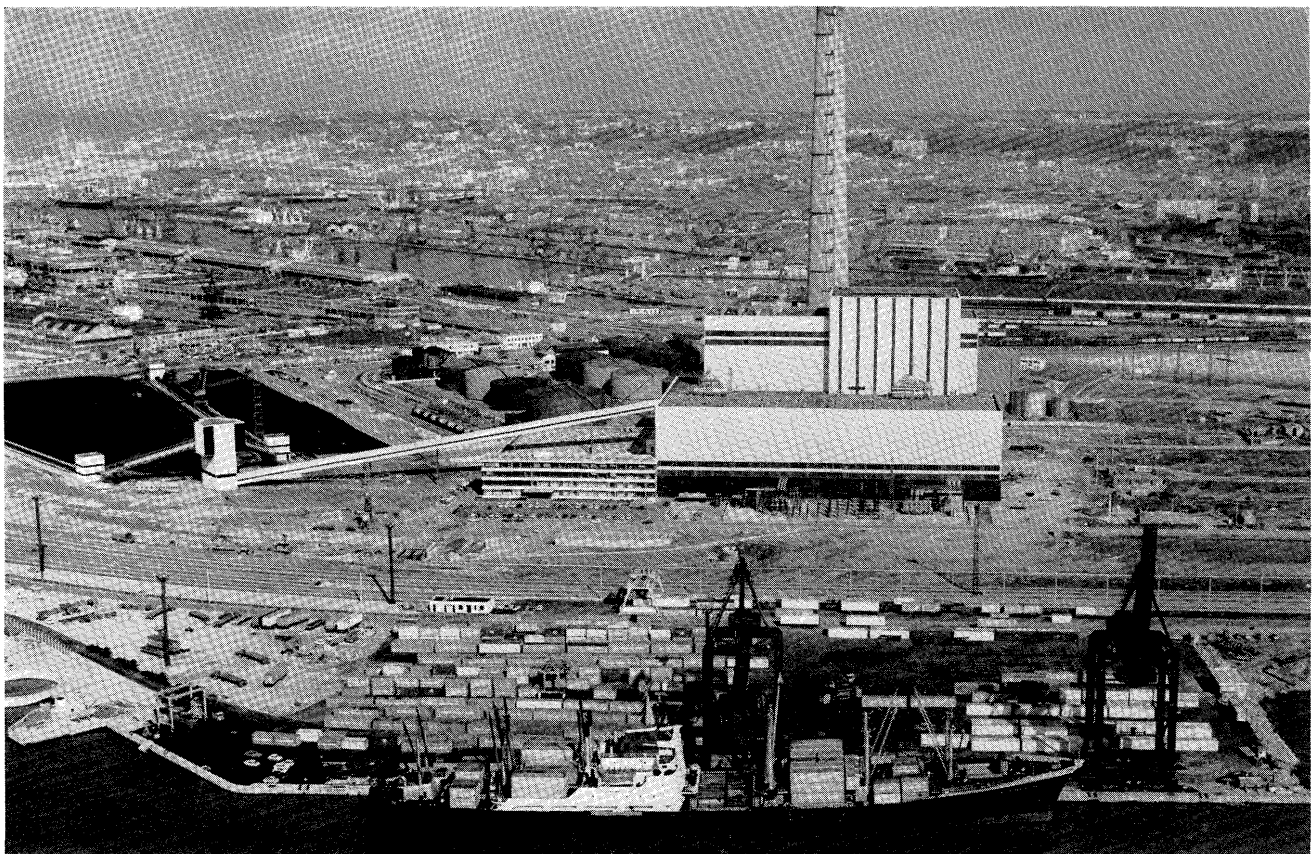
- 3. The 87,000 ton bulk carrier
"Cetra Columba" in operation.



4. The Bellot Basin specially assigned to general cargo traffic.



5. The Quai d'Atlantique, container terminal.



6. The Quai d'Atlantique, container terminal, in the background, the power station.



7. The building site of the large lock which will be accessible to bulk carriers of 200,000 tons as from 1971.



8. Cars awaiting loading at Le Havre.

Orbiter Probe

IAPH News :

Head Office

- On July 9 a letter from Mr. R. L. J. Wills, Vice Chairman of the British Transport Docks Board announced the death of Mr. Sidney Finnis, Chairman of the Board. Mr. Toru Akiyama, Secretary General, immediately sent him a telegram of sympathy. Mr. Finnis was appointed member of the IAPH Executive Committee at the Melbourne Conference last March.
- Mr. Ho Shao Meng, Senior Electrical Engineer of Port of Singapore Authority, called on Mr. Toru Akiyama, Secretary General, at his business office on July 4 morning and exchanged views with him for 20 minutes. Mr. Ho spent about 2 weeks inspecting Japanese ports.

Japanese Directors

Japanese Directors have elected the following two alternate directors: Mr. Takeo Hori, President, Hanshin (Osaka Bay) Port Development Authority, to succeed the late Mr. Den Takase (who died as President of Keihin, Tokyo Bay Port Development Authority), and Mr. Takemasa Okumura, Director of Bureau of Port & Harbor, Tokyo Metropolitan Government, to succeed Mr. Masamoto Tamai, his predecessor.

Correction

On page 22, 2nd column of the July issue of "Ports and Harbors", the heading "PIANC — Istanbul", should have stood "ICC—Istanbul" instead.

Joint Study

Ottawa, July 14, 1969:—It was announced to-day by the Canadian and United States Seaway Entities, U.S. Army Corps of Engineers, U.S. Coast Guard and the Canadian Department of Transport that

Help Wanted at UNCTAD

A vacancy exists in the Secretariat of UNCTAD for an economist to work on the economic issues involved in the development of ports in developing countries. The duty station is Geneva, but frequent missions may be expected. The man appointed is likely to be a graduate in Economics and to have several years experience working in a port (or airport) on either general administration or development plans. He will join a team headed by a systems analyst and including an engineer and an economic geographer; the whole team works under the overall supervision of a senior economist. Salary in accordance with age and experience on official UN scales. The appointment may be for a fixed term of two years or on a probationary basis with the possibility of a career appointment. Fluency in English is essential. French or Spanish highly desirable.

For further particulars and application form please write to Office of Personnel, UNCTAD, Palais des Nations, Geneva.

an international joint study is being carried out during this navigation season to determine the effect of passing ships on the shore line of the St. Lawrence River from Montreal to Lake Ontario.

The study is being conducted in the portion of the river between the foot of Cornwall Island and the head of the river in Lake Ontario. Since the shipping channel passes through both Canadian and U.S. waters in this reach, the study has been made international in scope.

The main objective of the study will be to establish and measure the inter-relationship of the numerous factors which contribute to the

generation of ship waves and the effect of these waves in selected areas of the river. To accomplish this, technical personnel are now conducting visual surveys and instrument recordings of the action of waves and related phenomena caused by passing ships of diverse form, draft and size, travelling at various speeds. Data collection is expected to continue throughout the summer after which a report encompassing the findings of the investigation will be prepared and used as a basis for possible future speed regulations. (The St. Lawrence Seaway Authority)

Mountain of Sand

Buffalo, N.Y.:—The self-unloader, McKee Sons, has unloaded 15,281 tons of sand onto Seaway Piers off Fuhrmann Blvd.

This was the first of 95,000 tons expected to pile up there this year under a two-year storage contract between the Construction Aggregates Corp. of Chicago and the Niagara Frontier Port Authority.

Shipped from Grand Haven, Michigan, the sand will rise on a one-acre pad at Seaway Piers to await transfer by truck to General Motors' Chevrolet foundry in River Road, Town of Tonawanda, where it will be used in grinding and blasting to clean cast-iron molds. It will be transported to Tonawanda by Pfohl Trucking, a stevedoring company.

The 95,000 tons of sand, to be delivered in four or five boatloads, will exceed last year's receipts of all bulk cargoes—less than 89,000 tons—providing a big boost to Port Authority plans to build Seaway Piers into the No. 1 Great Lakes bulk terminal.

Other principal bulk commodities stored at Seaway Piers are ice-control salt, clay and abrasive ore. (Port of Buffalo Progress Bulletin)

Port Development

Los Angeles, Calif.:—A projected construction and land purchase program totaling more than \$23 ½ million to improve and expand facilities at the Port of Los Angeles over the next two years was presented today (Wednesday, July 16)

Impressions on the I.A.P.H. Conference Melbourne, 1969

*By Dr. Ing. Fernando de Yturriaga
Director General de
Puertos Y Señales Maritimas
Ministerio Obras Publicas
Madrid, Spain*

For the Spanish Mission that was attending this Congress, there was a precedent in the Tokyo Conference in 1967. This Conference will never be forgotten by us owing to its magnificent organization, the attentions which we received and the first quality subjects which were dealt, and later discussions.

We must realize that the Melbourne Conference was a faithful follower of the quality of this one above mentioned. The organization, the courtesy which we received of part of the Australian Authorities, as well as the subjects studied, have been of unforgettable memory, which we shall never cease to think of, as persons working on the Ports.

We do not believe as necessary to do an exhaustive remembering of all the subjects which were dealt, but we shall say that each of them deserves the deepest interest. Therefore, at our arrival in Spain we were quick to send a report to the Spanish Ports on the subjects dealt in the Conference.

The actually present and red hot subject of CONTAINERS, the questions which the imposing increase of oil tankers and ore carriers raised in Ports, the problem of the tonnage measures, the magnificent project of the Japanese island to be constructed in Kobe—to mention only a few subjects—shows clearly the importance of this Congress; however it does not mean to be the only interesting, but we have caught them at random as an example of the colloquiums during this Congress.

In order to exemplify we consider of the highest interest, the colloquium

raised on occasion of the Australian exhibition on their oil-tankers ports—once lectured—between the Japanese and the Australian representatives. The first ones considered the problem from the shipping standpoint and the latter from the point of view of the Ports Construction. They state some matters which helped the participants to see the problem under both fundamental aspects: Ship and Port. We are sure that the best teaching will have been obtained from this colloquium and that in the next future will benefit all of us.

We have referred in a quick manner to technical questions stated in this Congress. There is another point of view: We consider this of the human relations as much important as the first. The social meetings, the trips, the festivals enjoyed, gave rise to a true comradeship among all the participants; ladies and congressists. This is the best way to be ourselves acquainted and to see our problems, which are through this way, known by the rest of the persons and we find furthermore a solution to a number of problems which can be of the best advantage for us.

The relations, friendships and persons acquainted made in our soul an impressive, unforgettable impact. Therefore, these lines are the indication of the great satisfaction that have the Spanish participants of the Congress, which provide them with friends and knowledges that, by its quality, are not to be forgotten.

Madrid, the 5th April 1969

the overall program must be considered now to assure an active, systematic continuance of port development.

Among the projects to be completed during the next two years are a \$7 million container terminal near the East Basin on Terminal Island, completion of a \$2.3 million LASH (Lighter-Aboard-Ship) facility at the Consolidated Marine Terminal in San Pedro and the purchase of approximately \$4 million worth of land within the port complex.

Other projects included in the program are necessary backland development and utilities installation, an automobile storage and processing area, wharf construction, certain modifications of the port's bulk-loader to enable it to handle additional commodities, installation of a container crane for the outer harbor terminals and further channel dredging.

The Commission will also consider a long range development program providing additional port capability to meet Southern California growth requirements with the creation of new land and terminals totaling \$183 million from 1972 through 1990.

Reciprocal Trade Pact

Los Angeles, Calif.:—A trade agreement between the Port of Los Angeles and the Prefecture of Shizuoka, Japan, has been signed by representatives of the Los Angeles Board of Harbor Commissioners and Shizuoka Governor Takeyama in Japan, it was announced today (Tuesday, July 1).

It is the sixth reciprocal trade pact between the Port of Los Angeles and major industrial and manufacturing centers in Japan.

"Shizuoka Prefecture is located in the commercial and industrial heart of central Japan," Port Commissioner Fred I. Wada reported. "Many Japan exports are manufactured and shipped to the United States from Shizuoka's Port of Shimizu," he said.

Shizuoka is an expanding and dynamic area, according to Wada. The prefecture is known for its manufacturing of pianos, motor-

to the Los Angeles Board of Harbor Commissioners for their information and consideration.

According to Bernard J. Caughlin,

harbor general manager, port traffic and other needs at the port in the near future may require changes in the development program, although

cycles, electronics, canned sea foods and general merchandise.

"The Port of Shimizu can conveniently accommodate modern cargo vessels at its new facilities and additional modern improvements are now under construction," Wada said.

Approximately 65 per cent of the products now exported from Shizuoka are sent to the United States, while imports from the U.S. through the Port of Shimizu are steadily increasing, according to Port of Los Angeles records.

With the signing of the reciprocal agreement, trade between Shizuoka Prefecture and the Port of Los Angeles is expected to increase, thereby strengthening U.S.—Japan trade relations and international commerce.

Other trade agreements are in effect between the Port of Los Angeles and the prefectures of Hokkaido, Okayama, Wakayama, Nagasaki and Miyagi. (Port of Los Angeles News Release)

More Datsuns

Portland, Oregon, July 8:—Portland Oregon's Public Docks recently bought six Datsun pickup trucks for personnel and tool hauling purposes around the three terminals, stretching over several miles of Willamette River waterfront.

And while six Datsun's don't make an import quota, the acquisition is typical of Datsun's rapid rise in the Northwest United States.

About 60 percent of 8,561 Datsuns brought into the Northwest in 1968 went across Portland Public Docks' facilities.

While the percentage through Portland facilities should remain the same, Russ Gould, Regional Manager, Nissan Motor Co. Corp. in USA, expects 1969's unit figure to be about 12,000. And he predicts a 1/3 increase—to 1800—in 1970.

The Public Docks is readying for the increase. By fall 1969, a floating automobile dock should be in operation. Cars will be offloaded to the floating pier and driven across one of two ramps to the 24 acres of paved and lighted storage and 11 acres of service facilities.

Cost of the terminal will be about

New Marine Exchange President



San Francisco — Newly elected president of the San Francisco Bay Region Marine Exchange, Chr. L. "Chris" Blom, admires with Maritime Queen Evelyn Draper the just-published Golden Gate Atlas. Blom, president of Overseas Shipping Co., was selected by the directors of the 120 year-old maritime service and development agency to head its programs for the coming year. Two years in development by the Exchange, the new Atlas is a "first" for the region. It provides 156 pages of facts, maps and photographs covering every phase of shipping, trade and related services and facilities of the Golden Gate harbor complex.

\$770,000, according to Portland Public Docks' Chief Engineer A. M. Eschbach. (Portland Public Docks News Release)

New Hotel

San Diego, Calif., July 9:—The Board of Port Commissioners of the San Diego Unified Port District yesterday approved plans by the Sheraton Corporation of America to build

a 12-story resort hotel complex on Harbor Island opposite Lindberg Field, according to Walter A. Vestal, Board Chairman.

The 400-room hotel plans to include shops, meeting rooms, a health club, restaurants, a roof-top night club and gourmet dining room and an oyster bar-restaurant built out over the water. Luxury accommodations will feature 100 private lanai

Chart of Ship Stacks



San Francisco—Admiring the just-published chart of “Ship Stacks of the Pacific Coast” are Laura Moe and Ruth Henry, atop Telegraph Hill—named for the wooden “telegraph” semaphore system used over a century ago by the Marine Exchange to herald the arrival of Gold Rush sailing ships. The Exchange staffers noted the 135, full-color vessel stack insignias will identify most ships serving ports from Vancouver to San Diego, are color-coded for quick reference, and contain an alphabetical cross index. Plastic coated for permanence and self-bordered, the new charts are available for \$2 each, plus 30 cents for handling and mailing (California residents add 10 cents tax) from Don Maskell & Co. (Distributors), Pier 35, San Francisco 94133.

bungalows.

Recreation facilities will include private beach area and swimming pools. B. A. Berkus Associates of Los Angeles have designed the complex so that an additional 250 rooms may be added when they become feasible.

The hotel is comprised of a 12-story tower from which the airport

and harbor facilities may be viewed. The ground level of the hotel and plaza area has been raised four feet and a circular ramp ascends to the lobby from the street level. The 3-story glass enclosed lobby is accented by a system of support “trees” which form a series of vaulted arches. The tower houses a bridge system which is used to pro-

vide access from the elevators to each guest floor, and a private lounge is also located in the tower on each guest floor.

Four main themes are featured in the decor of the hotel. Spanish mission, contemporary and Japanese country are the themes used in the guest rooms in the hotel as well as in the public areas. The fourth, a contemporary nautical look will characterize the lanai bungalows and be used in the roof-top night club.

At the ground level are the hotel towers, central recreational plaza, lanai bungalows and the beach and marina facilities.

The lanai units are located between the hotel and marina and have their own private parking. The 50 duplexes will have a split-level upper apartment and a one-story lower unit.

From planted areas at the ground floor shaded trees will rise through “skylight” areas into the outdoor plaza floor above near the pool and terrace areas.

Above the ground floor on the plaza floor is the main lobby, a 3-story glass enclosure which houses a cocktail bar, public lounge, escalators, and elevators. In the two wings off the lobby, the speciality shops, offices, coffee shop and some hotel facilities are located. Some 900 persons can be accommodated in the ballroom which houses meeting and assembly rooms on the plaza level.

Additional offices and speciality shops are on the mezzanine level and guest accommodations are on the floors above.

In keeping with the international flavor of the decor, a total graphic approach has been designed in coordination with the different room atmospheres.

According to Vestal, continuation of the first 500 room phase is to be completed within two years of the date the lease is signed by Port and Sheraton officials. (Port of San Diego News Release)

More Trade

Melbourne:—Trade through the Port of Melbourne showed an overall increase during the first three

Georgia Ports Authority's Dry Bulk Handling Terminal

Savannah, Ga., July 17: — Bids were opened July 16th on five contracts constituting the construction of the Georgia Ports Authority's multi-million dollar dry bulk handling terminal.

Diamond Construction Company of Savannah was the apparent low bidder on the largest of the five contracts with a base bid of \$4,800,838 for the storage and marine facilities.

The other four contracts representing approximately five million dollars consist of conveyor equip-

ment, a ship loader, a ship unloader and a reclaimer.

It will take several weeks, according to G.P.A. officials, to analyze the numerous specified alternates contained in all the bids before the awarding of any contracts.

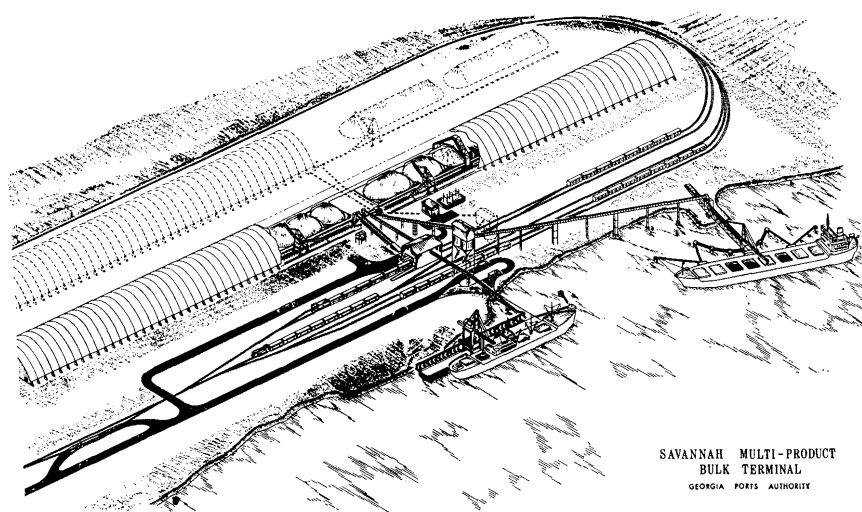
The ultra-modern bulk terminal, to be built on the Authority's Whitehall industrial tract adjoining the Garden City terminals, is an ambitious venture into bulk handling of multiple products. The new facility will provide shippers unrestricted terminal performance. The follow-

ing material movements will be performed, most of them simultaneously: from ship to barge, barge to ship, railroad or truck, from railroad and truck to storage or ship, and from storage to ship, railroad or truck.

The major advance in the new bulk terminal will be that various products can be received and stored for later reclaiming and shipment. In order to provide for receiving small shipments by rail and/or truck for later large bulk shipment by water, a covered storage area will be provided. Large shipments received by water can also be readily stored and reclaimed as needed for delivery by rail or truck. The covered storage will provide compartmented areas for some 10 grades of kaolin, potash, ammonium nitrate, ammonium sulphate, phosphate rock, borate, bauxite, manganese ore, alumina, ilmenite, titanium slag, zirconium ore, lithium ore, etc.

The scope of the material handling problem is indicated by the size of the initial storage building which has a planned length in excess of 2500 feet. The system includes provisions for multiple buildings of this size.

Due to the large number of products to be handled, special attention has been devoted to reduce the possibility of contamination. All material placed into storage has a small 'Free Drop' to minimize dusting. A movable curtain wall is provided to seal the kaolin area from



SAVANNAH MULTI-PRODUCT
BULK TERMINAL
GEORGIA PORTS AUTHORITY

months of this year, compared with the same period in 1968. A total amount of 3,037,887 tons of cargo passed over its wharves, an increase of 464,679 tons.

The figures for total bulk cargo handled show an increase of 104,733 tons, with general cargo showing an increase of 359,946 tons.

Imports totalled 2,118,037 tons, a rise of 222,433, or 12 per cent., whilst exports amounted to 907,423 tons, a rise of 240,574, or 36 per cent.

An increase of 238,040 tons in the overseas imports for the first quarter of 1969 compared with the corresponding period of 1968 was due

mainly to crude oil, a rise of 27 per cent., phosphatic rock 147 per cent., carbon black 4,703 per cent., fuel oil and pipes, tubes and fittings 282 per cent. Whilst a decrease was shown in sulphur, a fall of 68 per cent., motors spirits 49 per cent., and new cars a fall of 7 per cent.

Exports to overseas countries showed a total of 595,303 tons against the 1968 figure of 370,362 tons, an increase of 224,941 tons, due mainly to wool, Australia's number one export, scrap metal, hides and skins, dairy produce, oats and briquettes, whilst fresh fruit and meats showed a slight decrease.

The coastal trade between Mel-

bourne and other Australian ports remained almost static, showing only a slight increase of 26 tons, bringing the total to 890,284 tons.

Of this total 578,164 tons were imports showing slight variations in increases for motor spirit, kerosene and touring passenger cars. Decreases were noticeable in coal, crude oil, raw sugar and iron and steel.

Of the total export, which amounted to 312,120 tons, increases were noticed on touring passenger cars, goods in containers and new motor cars, whilst a decrease in fuel oil was noticeable. (Melbourne Harbor Trust Port Gazette, June)

Europe-Africa

other areas. Washdown equipment is provided for cleaning and dust control equipment is to be installed along the conveyor systems. The retrieval of stored material is accomplished by automated reclaimers which do not operate on the storage pile or floor, nor is any auxiliary dozing equipment required. The operation will result in no machine contamination of products and offer maximum safety to personnel.

Since the terminal will be operated by the Georgia Ports Authority, it will not impose any control of the shipper's mode of transportation. Therefore, rail loading and unloading facilities have been provided for unloading hopper or box cars and loading covered or open hopper cars, box cars or gondolas.

The loading and unloading stations are arranged to also handle trucks. Indicative of the flexibility and performance of the arrangement is the fact that multiple products can be loaded or unloaded simultaneously and without regard to the type of carrier involved.

Ships and barges will be unloaded by a traveling bucket unloader. All types of ships can be handled from small general cargo type to large bulk carriers in the two berth facility.

The loading of ships and barges will be accomplished with a slewing-bridge shiploader. This novel type of loader provides for maximum ship coverage by using an elevating boom conveyor combined with a shuttling truss. The entire assembly is then carried by a slewing bridge. The shiploader has three-dimensional flexibility in a polar coordinate system while still maintaining a fixed feed point. This loader, therefore, affords economy in marine construction, conveyor feed supporting structures and dust control, yet provides exceptional ship coverage.

The entire engineering and construction supervision of the bulk terminal is being performed by Soros Associates of New York, New York, and Robert and Company Associates of Atlanta, Georgia, who have combined their talents to provide Savannah and the people of Georgia

with this valuable addition to its existing general cargo operations.

Construction should start in late August or early September with completion in about 15 or 18 months.

Mr. Finnis Dies

London:—Mr. Sidney Finnis, O.B.E., E.R.D., the Chairman of the British Transport Docks Board, died at his London home in the early hours of this morning, after a short illness. He was 60.

Mr. Finnis was appointed Chairman of the Board on 15th June 1967, by the Minister of Transport, having been firstly General Manager and then Managing Director since the inception of the Board on 1st January 1963.

His career in the transport industry commenced in 1927 when he joined the London and North Eastern Railway Company as a Traffic Apprentice. In 1948 he was appointed Assistant Chief Regional Officer, North Eastern Region, British Railways. He was Chief Docks Manager of the Humber Ports from 1949 to 1956 and Chief Docks Manager of the Ports of Southampton and Plymouth from 1956 to 1962.

He was Immediate Past President of the Institute of Transport; a Member of the National Ports Council, a Vice-President of the Dock and Harbour Authorities' Association, a Director of the International Association of Ports and Harbors, a Member of the Council of the Confederation of British Industry and a Member of the Executive Committee of the National Association of Port Employers. He also held the rank of Colonel in the Engineer and Railway Staff Corps, R.E.

He had a distinguished war record, having served in the French and North African Campaigns in the rank of Major in the Transportation Branch of the Royal Engineers. He was in charge of Tobruk Harbour, and was taken prisoner in June 1942. He was twice mentioned in despatches. (British Transport Docks Board)

Export of Cars

London:—An eighty per cent increase in the number of export cars shipped from the South Wales ports of Cardiff and Newport during the first half of 1969 is reported by the British Transport Docks Board today (Monday, 21st July). Up to the end of June shipments of export cars from the two ports totaled 27,990, compared with 15,560 during the same period of 1968.

The port of Cardiff handled the larger share of the total, with 19,667 cars shipped compared with Newport's 8,323. Percentage increases for each port over the first half of last year were 73 per cent at Cardiff and 97 per cent at Newport.

Individual cargoes of over 2,000 cars are being dealt with regularly and, in fact, Newport has achieved this virtual doubling of car exports in only five shipments compared with eleven in the same period last year. The largest cargo from Newport this year, and one of the biggest car shipments ever made from South Wales, consisting of 2,193 cars, was loaded by the Norwegian motor vessel **Thorbjorg**, 22,000 tons gross, in May.

Cardiff dealt with 15 car ships in the first six months of this year, the largest single shipment being by the motor vessel **Simonburn**, 21,000 tons gross, which loaded 2,073 cars.

Referring to the dramatic rise in car exports through the port, Mr. John Williams, Cardiff's docks manager, said: "We are proud to be of assistance to the motor industry in its magnificent export achievement." (British Transport Docks Board)

U.K. Is "Land-Bridge"

London, June 5:—Increasing use is being made of overland routes in the U.K. for containerised traffic moving between Europe and North America. Savings of two to three days are being claimed on movements between, for example, Montreal and North Germany with a land transit across the U.K. from

Manchester to the East Anglian port of King's Lynn, compared with a direct voyage to a North European port.

A spokesman for the British Transport Docks Board said today that the movement of container traffic from North America through King's Lynn to Hamburg on the twice-weekly Washbay Line roll-on/roll-off service began only this year. "The concept of a U.K. land-bridge* is a very interesting development and I understand that savings of several days in overall transit time are involved," he said. "We are now receiving containers regularly via the Manchester Liners trans-Atlantic container service for shipment to Germany."

Other U.K. ports are also benefiting from overland movements. Specialised North Sea container ferry services from other East Coast ports including Hull and Immingham are dealing with container traffic from Scandinavia and the Continent en route to Manchester for shipment to North America. Between 40 and 50 containers are being handled this way each week.

*The land-bridge concept of overland movement by rail of complete container cargoes is receiving serious consideration in North America, where it is claimed that considerable time and cost savings could be achieved compared with sea transit between Pacific and Atlantic coast ports. (British Transport Docks Board)

B.T.D.B. in 1968

Finance

Operating Surplus for 1968 was £7.950 million, the highest ever (1967: £7.900 m).

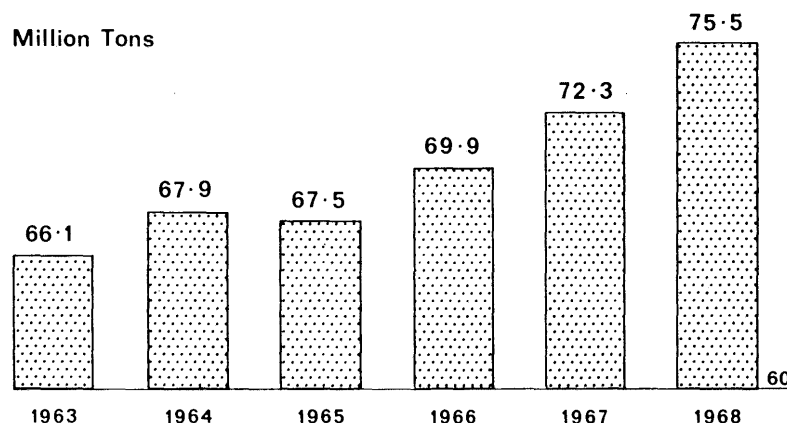
Net Surplus for 1968 was £1.485 million before tax, the sixth successive year in which a profit of over £1 million has been achieved (1963: £1.535 m; 1964: £1.640 m; 1965: £1.132 m; 1966: £1.495 m; 1967: £1.614 m).

Receipts totalled £28.329 m (1967: £28.619 m).

Working Expenses including replacement cost depreciation were £23.524 m (1967: £23.650 m).

TOTAL TRAFFIC THROUGH DOCKS BOARD PORTS

Million Tons



Source: British Transport Docks Board Annual Report 1968

Interest Paid on Capital Debt was £3.344 m (1967: £3.355 m).

Trade

Total Traffic through the Board's ports in 1968, at 75.486 million tons, was 4.3 per cent up on 1967.

Principal Commodities were:

Ores 8.513 m tons—8 per cent up

Timber 1.632 m tons—2.6 per cent up

Coal 8.097 m tons—0.6 per cent down

Petroleum 41.104 m tons—4.8 per cent up

Manufactured goods & other 16.140 m tons—4.1 per cent up

All classes of traffic except coal showed increases

Containers and Flats handled at Docks Board ports in 1968 totalled 77,026 (1967: 56,974).

Tonnage of Unit Load Traffic handled showed a 40.8 per cent improvement, from 952,000 tons in 1967 to 1,340,000 tons in 1968.

Sailings by container ships rose from 547 to 872, and by roll-on/roll-off vessels from 2,349 to 2,820.

Number of Passengers using Docks Board ports in 1968 rose by 3.5 per cent to 2.284 million.

Net Registered Tonnage of shipping using Docks Board ports was 110.023 m tons—0.1 per cent up.

Number of Vessels entering and leaving Docks Board ports in 1968 was 134,874 (1967: 134,335).

Modernisation and Development

Capital Investment by the Docks Board during 1968 amounted to £14.9 million, bringing expenditure on modernisation and development during the Board's first six years to a total of nearly £56 m.

Major Schemes under way included:

Southampton—1,000 ft. ocean container berth with 18 acres of marshalling area at the Western Docks extension.

Port Talbot—tidal harbour ore terminal for 100,000-ton vessels.

Hull—28-acre South-East Arm Extension to King George Dock including ocean container terminal.

Immingham—deep-water tanker terminal capable of accommodating partly-laden 200,000-ton vessels.

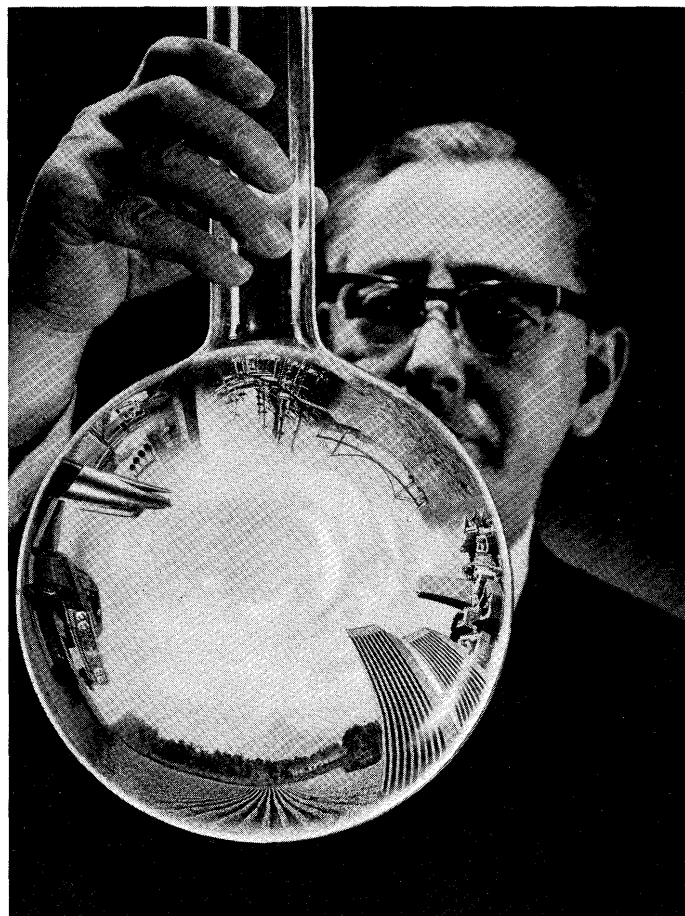
Newport—deep-water container terminal at South Dock.

Swansea—roll-on/roll-off passenger/freight ferry terminal.

Staff

Total Number Employed by Docks Board and its subsidiaries at the year end was 12,132, including 3,595 registered dock workers.

Training courses for all levels of



Chemistry is man's best friend.

No other sector of science and industry renders greater service to the needs and comforts of man. Take a basic thing like food. Many people would be eating less if it weren't for chemical fertilizers. And imagine a kitchen bare of plastics or aluminum. Or, for that matter, dentistry without anesthetics. At its extensive research and manufacturing facilities, Showa Denko is actively engaged in making chemistry render even greater service to man. Listed below are our main product lines. We may be just the ones who can make chemistry an even better friend of yours.



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34, Shiba Miyamoto-cho, Minato-ku, Tokyo
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staff at the Docks Board residential Staff College at King's Lynn were attended by 278 staff. 26 courses were held during the year.

Job evaluation was carried out jointly with the Unions as a preliminary to the negotiation of a new wage and salary structure.

Half a million pounds expenditure was authorised for the improvement of staff amenities.

Research

Hydraulics Research studies were undertaken for nine U.K. ports at the Docks Board Research Station at Southall.

Service Info

London:—Information about specialised unit load/container services from nine U.K. Ports is presented in concise form in a pocket-sized folder published by the British Transport Docks Board. Entitled "Unitisation in Action" the six-page folder details destinations served, and numbers of sailings, by seventeen specialised services from the

Docks Board ports of Hull, Grimsby, Immingham, Goole, King's Lynn, Southampton, Newport, Swansea and Garston.

For shippers interested in taking advantage of these opportunities for rapid shipment of cargo to North America, Scandinavia, the Continent and Ireland, "Unitisation in Action" includes a list of port and commercial offices where enquiries will be welcomed. Copies of the publication are available free, on request, from the Marketing Manager, British Transport Docks Board, Melbury House, Melbury Terrace, London, N.W. 1. Tel: 01.486 6621. (British Transport Docks Board)

12,056,057 Tons

Lourenço Marques:—Numbers do not always express what they represent, unless they are properly analysed.

Their natural coldness, the necessary knowledge for their exact interpretation and other factors which explain the reluctance of many to look at figures, do not make them

interesting to the majority.

When, however, as in the case of the Port of Lourenço Marques, they are so expressive and clear, that looking at them leaves no doubt about what they represent; when the simple presentation, without commentary, of the quantity of 12,000,000 tons suffices to give an idea of its development in the last decade; when everybody knows that, thanks to the drive that its Administration has known how to impart to it, and to the considerable investment it has received, apart from the natural conditions with which it is blessed, the Port of Lourenço Marques occupies a foremost place amongst those of Southern Africa, it is not surprising that at the end of every year the simple number indication expresses immediately and clearly what is claimed—to let everybody know, especially the users, that their port continues in full progress and in 1968 handled more than 12,000,000 tons of cargo. (Boletim Portos, Caminhos de Ferro e Transportes de Moçambique, Janeiro 1969)



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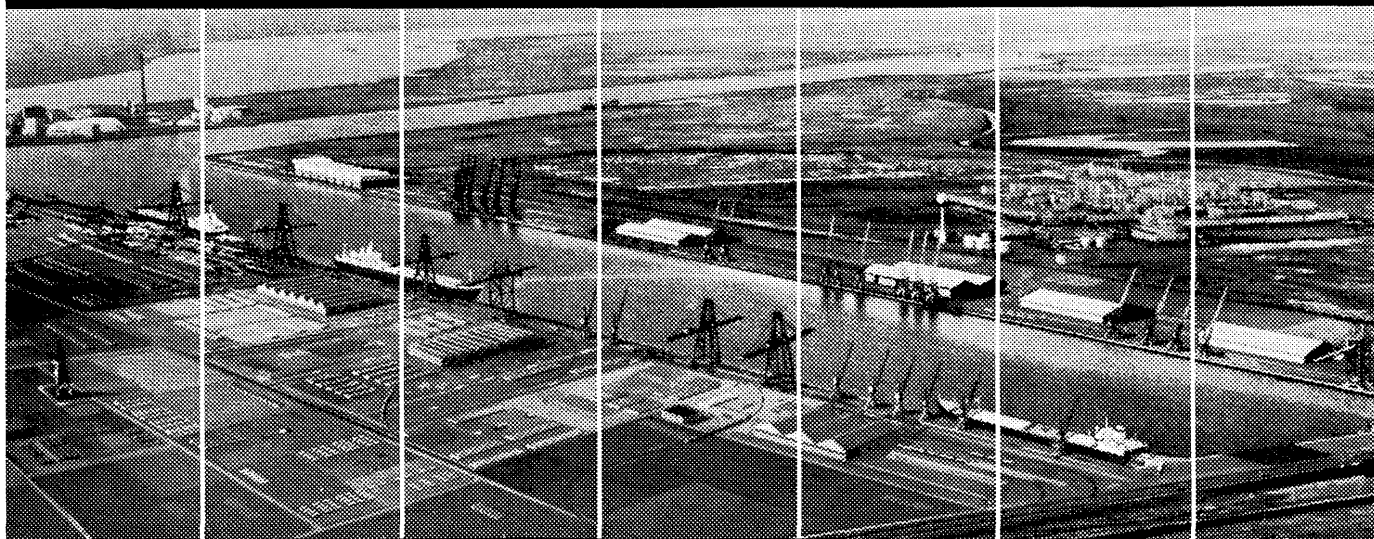
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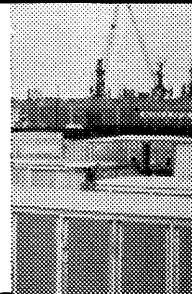
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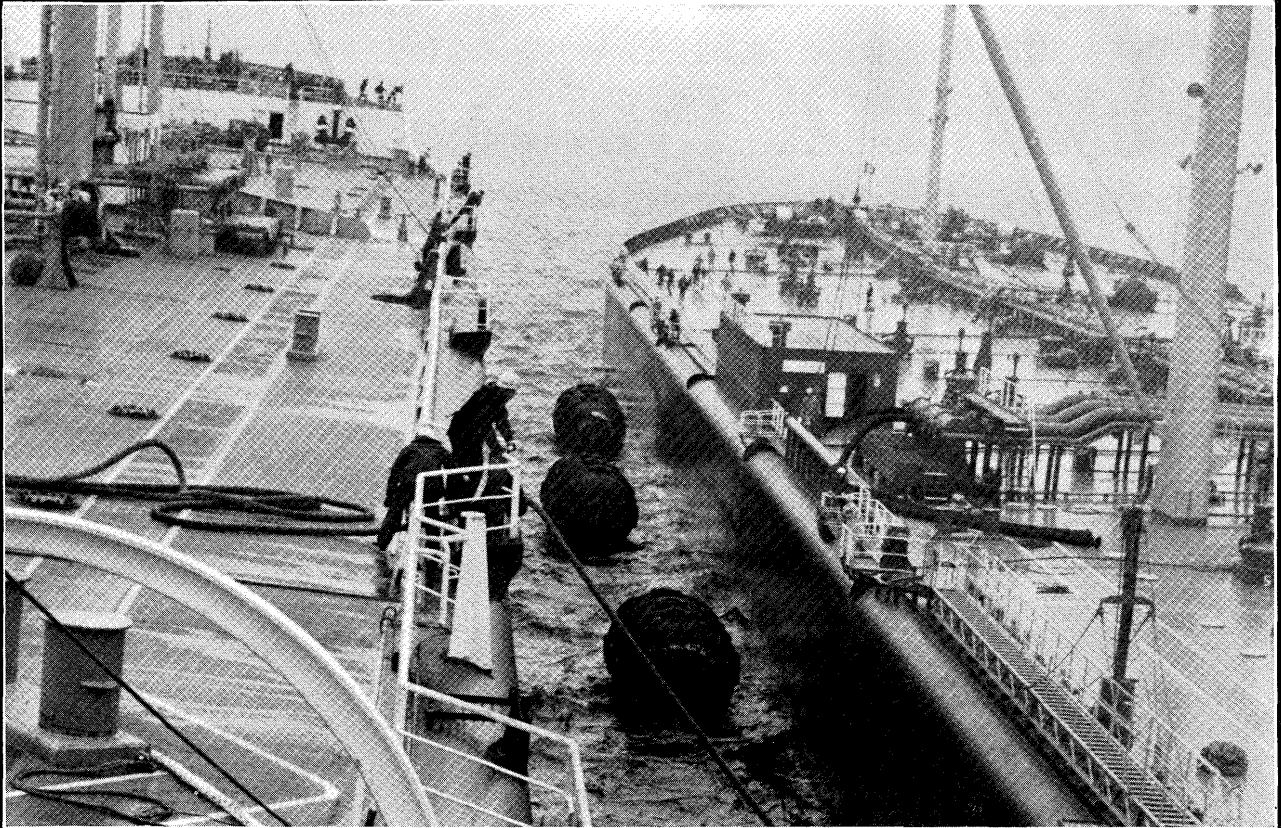
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