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The Cover: Georgia’s Container Central

The Georgia Ports Authority’s Container Central at Savannah, opening in June of this year, features the largest container crane in the U.S.A. with a 20 acre paved storage area for 3,200 forty foot containers. The Port of Savannah has long been the leading general cargo port on the South Atlantic and expects to move to the forefront in container traffic with the all new Container Central.
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Port Problems:

Statement by
The Minister of Transport
On the Changes to be made
In the Role and Structure
of the Federal Transport
Portfolio of Canada

Department of Transport, Canada

Purpose
It is intended to change the objectives for the role of the Federal Government in transportation. This change involves a new approach to planning and organization of the Department of Transport and the Agencies making up the Federal Government's complex in this field and utilizes the principle of recoverable financing wherever this proves practicable. It is also designed to make transportation which falls within federal jurisdiction or is heavily influenced by federal financing or other action as responsive as possible to the other goals of the Government in economic, social or political terms.

To attain these objectives a responsive and efficient organization is needed to meet rapidly changing technology and to provide a more effective system of operation and management.

This will involve establishing the concept of a Ministry that controls and links, through a central headquarters, all of the agencies, whether of an operating, developmental or regulatory nature. The Minister and the Government would then be in a better position to assess programme accomplishment and managerial performance.

These proposed changes are based on the work of extensive study initiated about a year ago in the Department and their formulation has been developed over the past three months within the Government as a whole. These concepts and recommendations are practical and desirable in relation to the Government's broader goals and the needs of the national transportation framework.

Background
The 1967 National Transportation Act sets out the principle that transportation services could best serve the national interest if each component of transportation were free to respond to the financially supported demands placed on it and were made responsible for its own continuing viability. This follows the principle that transportation is a means of serving public and private purposes, and is not an end in itself.

The pace of technological development in transportation is increasing; there is a pressing requirement to match these developments to the changing needs of a society that is moving steadily towards larger urban-industrial complexes, and whose increasing affluence is rapidly developing extended means and directions for the leisure use of transportation. At the same time, transportation will continue to be a vital force and an instrument for national unity and economic development.

These developments and potentialities are impinging more forcefully on the nation and society. New routes and new and faster vehicles raise problems of sovereignty, ownership, access or control. Larger vehicles and increasing intermodality raise issues of adequacy and consistency in licensing and safety. The increased interdependence between the components of transportation systems raises questions about the vulnerability and adaptability of such systems.

The present structure of the transportation complex is not organizationally sound in that it does not bring together the regulatory, developmental and operational considerations in a balanced manner. It does not relate the other programme influences of Government to the federal transportation activity in a sufficiently cohesive fashion. Further, it does not ensure a ready means for achieving broader Government objectives.

It is against this background that objectives to guide future choices and actions of a new Ministry of Transport have been developed.

The Objectives
The four objectives proposed for the Ministry reflect greater emphasis of financial viability and are based on principles of responsiveness, service, regulation and development.

I—Ministry—to ensure that national transportation policy influences and responds to the objectives and programmes of the private and public sectors.

II—Operational—to provide, for any mode of transportation, such way, terminal and vehicular services, supportable where appropriate by recoverable financing from the users or other beneficiaries, that cannot or should not be offered by the private or other public sectors.
III—Regulatory—to balance economic, technical and social consequences resulting from changes in capability or use of transportation services and ensure that socially and economically viable standards of vehicle, way, terminal and operator performance are established and adequately maintained.

IV—Development—to encourage and promote continuous improvement, innovation, growth or phase-out of modal and intermodal transportation.

Ministry System

The new role requires a modification of the system by which the Minister is directly supported, and a realignment of functions of the present Department and the existing federal transport agencies. The new Ministry will provide a cohesive, unified management system, devoted to overall planning, development, policy formulation, programme coordination and evaluation. For this purpose some consistency in management systems will be necessary. On the other hand, delegation to establish a high degree of managerial autonomy for the components of the Ministry is an essential part of the programme for improved managerial effectiveness, particularly where the policy of recoverable financing is applied. The degree to which these concepts of cohesion and delegation influence each other will depend on specific situations and will be one of the primary concerns during implementation and operation.

The current operations of the Department will be revised and restructured to facilitate its adaptation to the Ministry concept.

(a) Organization — The Ministry system envisages a corporate structure of Crown Corporations and operating Administrations with varying degrees of autonomy, together with separate regulatory and development agencies. The Minister will continue to serve as both the senior corporate executive of the federal transportation complex and as the individual responsible to Parliament.

The Deputy Minister will work closely with the Minister in directing the total complex, and integrating national transportation programmes with the activities of other departments and sectors. Complementing the increased delegation to the operating Administrations, a small Ministry Headquarters staff will support the Minister and Deputy in planning and policy formulation. The delegation will require new processes of audit and evaluation, the application of which would depend on the degree of autonomy enjoyed. As is now done with the Crown Corporations, the performance of each Administration would be assessed in large measure on its annual operating reports and projections in support of capital and operating budgets.

Air Canada and Canadian National Railways will continue to operate with existing managerial and corporate autonomy as set out in their respective Acts; their budgets will continue to be examined within the Ministry prior to discussion with Treasury Board and the Department of Finance and before submission to the Government, and the Minister will maintain close and effective liaison with the Chief Executive Officers. Other transportation services that need to be provided by the Federal Government would be the responsibility of several new organizations identified as Administrations.

The Canadian Air Transportation Administration will operate airways and federal airports; the Canadian Marine Transportation Administration will coordinate and develop all federal waterways and harbours services. Within the organizational structure of these Administrations, Authorities based on self-financing would be set up to manage components of the system, in particular, major international airports and major harbour complexes.

A Canadian Surface Transportation Administration is proposed to consolidate federal participation in the operation and coordination of highway, rail, bridge, ferry and other surface modes. While programme and planning functions will be located in this Administration, it will not assume any construction functions.

An Arctic Transportation Administration will assume responsibility for way and terminal operations, for all modes of transportation which come solely under federal jurisdiction in the North (e.g. federal airports and air and marine navigational aids). It will not include any activities which would normally come under provincial jurisdiction or any activities in the territories which are otherwise assigned. This Administration will be a coordinative entity for operations under the jurisdiction of the Ministry of Transport and will be responsive to the objectives and policies of the Department of Indian Affairs and Northern Development and other Departments with interests in the area.

Northern Transportation Company Limited, which is at present responsible to the Minister of Indian Affairs and Northern Development, will be included within the Ministry. This carrier would then be associated managerially with other aspects of federal transportation and its vehicle operations could be extended to other modes.

Effective interaction between the operating agencies and the Ministry Headquarters would be achieved through Advisory Committees whose members would provide a cross-section of interests. Effective management interactions among the Corporations, Administrations and Authorities would be supported by making these memberships interlocking; their composition would reflect the requirement, particularly for port and terminal authorities, to be responsive to local and regional interests.

A Transportation Development Agency will be established within the Ministry to develop and coordinate technological and economic research. The Agency will undertake much of the research work now being

PORTS and HARBORS
carried out by the Research Division of the Canadian Transport Commission as well as certain research functions now located in the Department of Transport. Working closely with the Canadian Transport Commission and the academic and scientific community, the Agency will provide the national focus for changing technology and economic development in the field of transportation.

The Canadian Meteorological Service will be established as a separate organization thereby facilitating the provision of a more balanced service to all transportation components and the growing needs of the national economy.

The Canadian Transport Commission will continue to perform its economic regulatory role independently, subject to Ministerial and Governmental review as established in the National Transportation Act.

(b) Finance—The underlying concept reflected in the Ministry objective concerning operations generally is that, to the extent practical, the costs of transportation services should be borne by the users or other beneficiaries of these services. This would facilitate adjustment between the provisions of, and demand for, transportation services, whether produced by the federal sector or by other public or private sectors. The concept of user or beneficiary-pay would require policies designed to more closely equate revenues with operating costs.

While these principles would be progressively applied, as may be appropriate, to existing operations, new or extended transportation services provided to meet change or growth in demand would normally be expected to be self-supporting. The cost of meeting the transportation needs of other Government programmes, i.e. other beneficiaries, must therefore be clearly identified and relative to the purpose of their objectives. These costs could be carried by the interested departments and transferred to the Ministry of Transport as revenue, or could be included as special allocations in the budgets of the Ministry. This would enable Ministers to determine and measure the role to be played by transportation with respect to national unity, regional and resource development.

The financial management system would concentrate on more effective capital and operating budgets in order to establish realistic revenue and costs programmes and greater financial viability.

(c) Personnel—The Ministry would include a variety of personnel concepts, practices and patterns of authority. These varying conditions can be accommodated within the Ministry system through a utilization of the power to delegate authority from the Public Services Commission of the Treasury Board to the Ministry and the Heads of each of the operational units.

Canadian National Railways, Air Canada and Northern Transportation Company Limited, being outside the Public Service, will continue to exercise freedom in their personnel policies, but policy issues or public interest matters will require continuing close consultation with the Minister in the light of the Government's general policies. Administrations and Authorities, although largely made up of Public Servants, will be exposed to the normal forces of the commercial environment and will need a capability to be responsive and adaptive to changing conditions. A high degree of authority will therefore be delegated to the Heads of Administrations and Authorities allowing them to make managerial decisions on many day to day matters but subject to Ministerial direction on all policy issues. Other units within the Ministry such as the Transportation Development Agency would be closely related to the central planning process of the Ministry.

These differing personnel systems highlight the need for an integrated approach to personnel which will result in the identification, development and mobility of managers throughout the Ministry. Integration of management development and greater commonality among personnel policy and practices will lead to a stronger organization.

General Implications

The adoption of a policy requiring transportation operations to be self-sustaining will require a system of charges more directly related to the services provided. Apart from the impact of this change on the private sector, there will be an interaction with various aspects of international transportation modifying or constraining the content and timing of the changes to be made. Similarly, changes in the balance of costs between some components or some transportation modes will be constrained by interaction with transportation problems at provincial and municipal levels of government. Effective means will be established for consulting other levels of government or interested parties when important changes are contemplated.

Federal transportation services which can and must respond to user needs can be expected to give more satisfaction to the user. User-oriented services would assist in identifying and eliminating duplication and redundancy, thus lowering the total cost to the nation of transportation services. A Ministry oriented toward both influencing and responding to change will provide a better national focus for the interests and activities of other levels of government, industry and the public in all aspects of transportation policy, development and usage.

MAY 1970
The Evolution of Harbour Activity in Canada
An Address by Louis R. Talbot, eng.
Vice-Chairman of the National Harbours Board
to the Rotary Club of Quebec, Que.
February 3, 1970

Like a person who gives an account of a mandate entrusted to him, I shall speak to you about the evolution of harbour activity in Canada, and of the dynamic changes which continually take place in this economic activity which is so important to your city, your Province and all of Canada.

A rapid glance at the statistics on the Port of Quebec shows that for the period 1958-1968, the last year for which we have official statistics, there has been a 72% increase in cargo traffic. During this time domestic cargo remained at the same level, while inbound and outbound export cargo increased by 176%. These figures indicate that the role of the port has changed. For example, the same company which handled about 180,000 tons of coal for domestic consumption in 1958 was handling 664,500 tons of concentrates and other bulk from the mining regions for export in 1968.

Grains of all categories which totalled about 14½ million bushels for export in 1958 doubled this amount in 1968. Exports of newsprint increased by 77%. By applying the same rate of growth for known traffics; by adding estimates for new traffic created by the movement of containers and the presence of at least one refinery in the port, we can estimate a traffic of about 20 million tons in the next ten years. I must assure you that with rapid changes in technology, it can become a very hazardous pastime to make predictions on maritime traffic for a period exceeding five years.

A number of important decisions such as the development of port facilities at Beauport Flats, the promotion of bulk traffic, a new appreciation of the channel and the access to the port, the possibility of making the port a deepsea port adapted to international traffic, the lease of the grain elevations to private enterprise to ensure that the port would assume its proper role in the export of Canadian grain and the transshipment of American grain—all these accomplishments allow me to say that things have been stirring and will continue to do so.

What are the main challenges facing the port administration?

First of all there is the increase in the size and tonnage of ships.

Oil tankers of 300,000 tons capacity are in operation or on order in naval shipyards. The refinery under construction on the south shore requires an oil dock specially adapted for 100,000 ton tankers. These tankers have a draft of about 50 feet. The largest tanker to dock on the East coast of Canada at present time is the “Imperial Ottawa” which has a capacity of 110,000 tons and a draft of 38’-3¾”. It “tops off” its cargo at Imperial Oil’s refinery at Halifax and finishes unloading at Portland, Maine, where the oil is then transferred by pipeline to Montreal. There is now under construction on the East coast in the Strait of Canso for the Gulf Oil refinery an oil wharf which will be able to receive tankers having a capacity of 312,000 tons. These giant tankers have a draft in the order of 90 feet and Point Tupper is one of the rare sites on the Atlantic coast which can accommodate these tankers.

France and Japan already visualize the construction of tankers of the order of 500,000 tons and the technology in the design of these superships overcomes all the obstacles which might hinder progress in this direction.

There is another class of ships which is of interest; that of bulk carriers. At the port of Vancouver, the Board is involved in a development programme at Roberts Bank which anticipates the possibility of building from 33 to 40 berths for bulk carriers having a draft of 65 feet.

The first site leased by a subsidiary of Kaiser Resources will be in use in 1970. At this location, which is an extension of the Port of Vancouver, we have had to work in close cooperation with Canadian Pacific. Six coal trains will carry six million tons of coal a year to the terminal for shipment to Japan. These “Unit Trains” will take 72 hours for their round trip from the Sparwood mining area. The cars are loaded and unloaded without being uncoupled. The unit train crosses the Rocky Mountains and for each train of 88 cars with a capacity of 105 tons of coal, 11 diesel locomotives will be required for the most rugged part of the journey between Beavermouth and Stoney Greek. The railway’s programming is coordinated with Kaiser’s coal loading equipment at the dock which, also, must be geared to the rotation of the 105,000 ton bulk carriers which will move the coal of Japan. At a later date these bulk carriers may have a capacity of 150,000 tons.

The role of the port has undergone drastic changes during the last ten years. Instead of being a place for the storage of incoming or outgoing traffics it is becoming the spring-board for exports with infrastructures and superstructures which are adapted to the new transport technology.

Closer to Quebec, at Sept-Iles, the Iron Ore Company has built new facilities for shipment of iron ore in bulk carriers having a capacity of 150,000 tons.

This increase in the size of bulk
carriers and tankers cannot be treated lightly. The era of new criteria for the transport of bulk cargos is with us. If we consider the movement of grain one must look at Rotterdam with its traffic of 156.9 million tons in 1968. The largest ship to dock at Graan Elevators Maatschappij (G.E.M.) N.V. in 1963 arrived from New Orleans with a cargo of 35,664 tons. In 1968 the “Thara” arriving from Port Cartier carried 69,830 tons or 2,327,600 bushels of wheat and soya beans. The “Thara” had a salt water draft of 43~11” when it left Port Cartier. This Rotterdam company, which unloaded 1394 ships and handled 350 million bushels of grain in 1967 planned the construction of new installations and transfer facilities to receive ships having a draft of 62 feet in the new extension of the Port of Rotterdam. Transportation economics envisage the shipping of bulk commodities in ships of larger capacity.

At this time there are on the St. Lawrence River three large international grain firms which are customers of the Canadian Wheat Board engaged in the sale of Canadian grain on world markets. The ship channel or the access to the elevator at Quebec by ships of larger tonnage with an equivalent reduction in transportation cost would appear to be important factors which can have some effects on Canada’s position in the sale of grain on world markets. From this point of view, the problem of dredging the access channel to the port assumes a character of well-night major importance.

These remarks would be incomplete if I failed to mention this magic box called the container.

Think of this box measuring 20’ by 8’ by 8’ which you see on semi-trailers which travel along the highways of the Province. There are also containers measuring 10’ or 40’. In Canada, we have had these containers at the Port of Vancouver since 1955.

The first ship, the “C.J. Rogers” of the White Pass Yukon Company, was replaced in 1965 by the “F.H. Brown”. Another twin ship was placed in service in 1969. For some time, on the East coast, the “Cabot” of Clarke Steamships has been providing a container service from Montreal to St. John’s, Newfoundland.

In Canada the major container revolution took place in November 1968 when the first ship of Manchester Liners Ltd. began its service to the Port of Montreal. This company presently has three container ships in service. A fourth is on order. A second container crane will be installed in 1970. Each ship has a capacity of 500 containers. These ice-reinforced ships have a speed of 20 knots. To round out the system, besides the 500 containers on board, there must be ashore on each side of the ocean another 500 containers, or a total of about 6,000 containers for four ships and an investment of about 31 million dollars. The time of travel port to port is estimated at six and a half days, and the time in port at Montreal or at Manchester to load and unload all cargo can vary between 36 and 48 hours, which is one-fifth of the time required for a ship loading or unloading general cargo using conventional methods. The system endorses the port to port formula, that is, only one port on each side of the Atlantic.

All the technology has been applied to ensure the efficiency of the system which allows for the shipping of merchandise from point of origin to destination in a fraction of the time required by conventional methods. We are very happy with the initial success of this undertaking.

After an exhaustive study, the Canadian Pacific chose Quebec as its terminal port for its container service. The company has on order in British shipyards three container ships, the first of which will be delivered in August 1970. Here again a total of about 6,300 containers and a quasidentical investment of about 30 to 35 million dollars. In 1971 the port installation at Wolfe’s Cove will be completely transformed. According to our estimates, each week, there will arrive a container ship which will unload and load 700 containers in 48 hours. Containers will be immediately placed by straddle carriers on railway cars built especially for the transport of containers, routed through the tunnel which Canadian Pacific Railway had built in 1931 for passenger trains, and then despatched to new marshalling yards at Lachine. The container will either be broken up in Montreal or re-routed from Lachine to western points or the U.S. Mid-West.

The new transport modes and handling methods in ports oriented to the movement of general cargo require specialized facilities with characteristics which are different from those of traditional berths, notably very large storing areas, which lead to the concept of port planning in completely different way. A traditional berth 650 feet long and 320 feet deep with a shed of 75,000 square feet can ensure the transfer of 100,000 to 150,000 tons of general cargo in transit per year. A berth for container ships having a length of 650 feet with a back-up area having a depth of 1150 feet can ensure the transit of 700,000 to one million tons per year. It is therefore estimated that one-half the land area and one-seventh the length of wharves will be required to serve a port adapted to container ship traffic.

A preliminary estimated of the capacity of the Furness Terminal at Montreal and the Canadian Pacific Terminal at Quebec establishes the possibility of handling cargo by containers equal to eight times the capacity which would obtain with conventional berths and methods.

At the present time I can say that the system for moving containers in Canada is perhaps more refined and more efficient than it is on the North American coast of the United States. For example, in New York the container is placed on a semi-trailer and driven to a marshalling yard located five miles from the port. Both the container and the semi-trailer are then placed on the railway flat car and forwarded to their destination. This method of delivering the container once it has reached the port is more expensive than the Canadian method. The possibilities for routing containers from the ports of Quebec and Montreal towards Western Canada and the American Mid-West are considered as being very good. The interplay of competition between the several land

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modes will supply us with more concrete answers within the next few years.

All these changes in technology do not come about without creating, as Mr. V.O. Marquez, President of Northern Electric Co. Ltd., says, the reverberation syndrome. What does this expression “reverberation syndrome” mean? Well, in this syndrome, it is noted that a course of action initiated at a specific period in time, and aimed at solving a then-current problem, generates, at a later date, unforeseen, generally unpredictable and often undesirable consequences.

Some of these consequences, at a later date, present themselves to society as new and serious problems, which have to be solved. The solution to these new problems, in their turn, will trigger off further consequences, some of which will take the form of a third generation of problems to be solved. Happily, or unhappily, there is no limit to the series, once it has begun.

Among these reverberations there have been the detrimental effects of air pollution, congestion, disfigurement of your environment created by the advent of the automobile. Chemical insecticides were developed with a view of protecting crops against predatory insects. The possibility that these insecticides would generate reverberations which could cause dangers to society was unforeseen. The cycle of the reverberation syndrome becomes even shorter. It took half a century to note the presence of reverberations caused by the automobile, but it took only ten years to ascertain the reverberations from insecticides and even less to be subjected to reverberations from cyclamates and thalidomide.

As far as the port administration is concerned, it is inevitable that advances in technology and the introduction of new handling methods involving considerable changes will cause a reverberation syndrome which will influence the human factor in port activity. These reverberations will not take five or ten years to be felt, but they had already been well identified in 1968 by Fernand Suykens, Assistant Director of port activities at the Port of Antwerp, who said and I quote: (translation)

“1. Elimination of casual work or ‘decasualization’.
Much has been said and done already to avoid as much as possible work instability in ports. In fact, Decasualization has been one of the most important factors in procuring continued employment and the guarantee of a minimum wage for the workers. However, the major difficulty has resided in the unforeseen character of the ship’s arrival and its departure. It is the irregularity of ship movements, after all, which largely conditions the degree of port activity. The introduction of the container and of the unit load no longer gives the occasion to tie up a great part of the dock labour to the presence of the ship in port. The loading and unloading of containers can be done on a more continuous industrial basis, under steady working conditions, in an enclosed location propitious to better planning and increase in productivity, while the human security factor is much greater. Moreover, the work can be done in a more comfortable environment.

“2. Specialization.
A great deal of various new and very expensive pieces of equipment will be introduced. This means that present working methods cannot be applied to these complicated pieces of equipment and that a permanent qualified personnel will have to be trained for optimum utilization of these investments. The port labour force will thus be able to accomplish more work with less physical effort and under better working conditions.

The greater responsibility in the handling of these expensive production tools and the intellectual qualifications needed to thoroughly exploit them normally implies a rise in the level of salaries. This is economically possible because of the greater productivity per man/hour.

On the management side essential changes will also be important. The absence of employer-employee relations in the port industry, normal in other industrial sectors—which absence of relationship is due to the daily fluctuations of the labour force utilized by different employers—will be strongly felt as soon as work stability and social betterment make their effects apparent. Port employers will have to use modern management techniques after being transformed from firms supplying labour to ships into highly industrialized firms specialized in the transfer of cargo.

“5. Continuity of the work schedule.
Round-the-clock shift work is a tradition at Antwerp, as in other Continental ports. In the many ports where this system does not exist yet, the introduction of continuous work schedules for the highly expensive containerships will become imperative. The same considerations apply to the huge capital investment in specialized port equipment for the handling of containers. Overtime pay for work on Sundays and holidays, even if it is considerable, cannot be a barrier to the continuous process of handling containers. As important as they may be—taken individually—they remain without influence on the total cost of a mechanized handling system. The ports which do not anticipate the possibility of work on Sundays or holidays will have to reconsider their attitude.”


(Continued on Next Page Bottom)
A Brief Description of Japanese Policy on Port/Harbour Construction in Recent Years

By Kisaburo Enomoto, Counsellor
Keihin (Tokyo-Bay) Port Development Authority
(FEBRUARY 1970)

I. Construction and Administration of Port/Harbour Facilities in Japan.

(a) Up to 1950 we did not have any special organization for port development. Construction and administration of port/harbour facilities in Japan was carried out rather ambiguously without either any special governmental law, or any definite principle, in other words, such had been performed either by the central government or by local administrative authorities such as prefectoral government or municipality where the port concerned was located, on mutual negotiations case by case.

(b) In 1950, "Port and Harbour Law" was instituted. This law provided fundamental principles concerning construction and administration of ports and harbours in Japan. Following this law, several special laws were established in order to provide some extraordinary treatment for the matters concerned, however, the "Port and Harbour Law of 1950" still maintains the fundamental principles.

(c) One of the fundamental principles is that port/harbour facilities should be offered to users for public use without any discrimination. Under this principle, port/harbour facilities are to be constructed mainly by local administrative authorities or in a special case, part of the facilities to be constructed by the central government after negotiations with the local authorities concerned.

(d) All the port/harbour facilities constructed under the above principle are to be put under the control of the local authorities which governs the district where the port concerned exists.

(e) As we mentioned in paragraph (b), a few special laws have been established since 1950. Among them, the following are rather important:—
"Beneficiaries to bear construction cost" Rule.
"Port Development Authority" Law.
(Our organization—Keihin Port Development Authority—was established in accordance with the latter)

II. Main points for the "Port and Harbour Law of 1950."

(a) Construction and administration of port/harbour facilities should be put under the responsibility either of the Port Office especially established for the purpose or of the local authority which governs the district where the port is located. As a matter of fact, only one Port Office was established in Niihama since 1950, but this is a very exceptional case. All other ports in Japan are under the administration of local authorities.

(b) "Local Authorities" consist of the following two groups;—
Group (1) Municipality (City), Town, Village
Group (2) Prefectures (including Tokyo and Hokkaido)

(c) Central Government classifies all the Japanese ports into 3 classes and extend different subsidy to each classified port. They have been classified as follows;—
(1) Extraordinary Important Ports:
17 ports — Muroran, Chiba, Tokyo, Yokohama, Kawasaki, Niigata, Shimizu, Nagoya, Yokkaichi, Osaka, Sakai-SEN-hoku, Kobe, Himeji, Wakayama-Shimotsu, Shimonoseki, Tokuyama-Kudamatsu, Kita-kyushu

(2) Important Ports:
84 ports (all existing now)

(3) Local Ports:
954 ports (all existing now)

(d) Central Government supervises the construction and administration of all port/harbour facilities. For the purpose of the above, Central Government has divided all the ports in Japan into 6 sections and established 6 Local Bureaus such as Hokkaido Development Bureau and 5 Local Offices, each Local Office supervises the ports of a section. These 6 organizations are under the direct supervision of the Ministry of Transport (MOT) —Central Government.

(e) The ratio of subsidy given by Central Government to the authorities concerned on the basis of the whole construction cost is as follows;—

<table>
<thead>
<tr>
<th>Extraordinary</th>
<th>Important</th>
<th>Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>Break Water Fairway</td>
<td>Anchoring Area</td>
<td>Berthing Facilities</td>
</tr>
<tr>
<td>100% or less</td>
<td>50% or less</td>
<td>40% or less</td>
</tr>
<tr>
<td>Berthing Facilities</td>
<td>75% or less</td>
<td>50% or less</td>
</tr>
<tr>
<td>Transport Facilities in Port Area</td>
<td>75% or less</td>
<td>50% or less</td>
</tr>
<tr>
<td>(Railway/railway sidings etc.)</td>
<td>75% or less</td>
<td>50% or less</td>
</tr>
</tbody>
</table>

NOTE:
(1) Subsidy should be extended by Central Government without any interest and refund.

(2) Such facilities as loading/discharging machines and bonded sheds on the wharf should be constructed by port administrative organizations (local authorities) on their own account and charges; no subsidy is given by Central Government for the construction of such facilities.

(3) Various fees charged by the local authorities on ships entering the port or on users of the port facilities should be within the limitation that the fee is reasonable in view of covering only the construction cost of the facilities concerned except Break Water, Anchoring Area, etc. because the refund of the latter's cost could not be expected.

(f) Financial Sources for Construction Cost

(1) Subsidy extended by Central Government
General national budget

(2) Fund raised by local authorities
General local budget and issuance of Bond (Bond should be issued under the Central Government's supervision).

(g) The present construction of port/harbour facilities is being performed under the Third 5-Year-Programme (1969 to 1973) with the budget of ¥1,030,000 million or $2,860 million. This amount includes the subsidy extended by Central Government, the fund of the local authorities (including issuance of Bond) and the budget of the Port Development Authority (Port Development Authority will be mentioned later).

III. Recent Trend of Port and Harbour Construction since "Port and Harbour Law of 1950."

The recent remarkable changes in the Japanese policy of port and harbour construction since the "Port and Harbour Law of 1950" can be summarised as follows;—

(a) The construction of "Mammoth" ports is resulting in the introduction of "Beneficiaries to bear construction cost" Rule

With reference to the "Beneficiaries to bear construction cost" Rule, mammoth factories of oil industry, steel-mills, etc. have recently been constructed in the coastal area, and many mammoth vessels call the ports located near the factories. In view of the above, it would be unreasonable that only the Central Government and local authorities pay the construction cost, therefore the companies which utilize the port concerned are to bear the construction cost on the basis of the ratio of benefit which the users accept.

(b) The establishment of "Port Development Authority" such as Keihin/Hanshin Port Development Authority has been promoted with the aim to cope with containerization and at the same time, to solve the shortage of conventional liner berths. Regarding "Port Development Authority", port/harbour facilities have been constructed as a whole at the expense of Central Government and local authorities for public use for many years as we described in the aforesaid. However, it has recently become clear that exclusive use of port/harbour facilities is more efficient than public use of them in view of the operation of liner vessels, especially container vessels.

In addition to the above it is found that local authorities have an insufficient ability to finance the costs for construction of port/harbour facilities. For these two reasons mainly, it was decided to construct necessary liner berths as well as container berths with the financial partly from exclusive users of the port/harbour facilities concerned.

IV. Port Development Authority (P.D.A.)

In October, 1967 an organization was established in Tokyo and Kobe each—Keihin/Hanshin Port Development Authority—

(a) Project of P.D.A.:
Under the 7-Year-Programme starting 1967 the following berths are at present under construction by these two organizations;

Keihin (Tokyo Bay) Port Development Authority

<table>
<thead>
<tr>
<th>Container Berth</th>
<th>Liner Berth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokyo</td>
<td>11</td>
</tr>
<tr>
<td>Yokohama</td>
<td>6</td>
</tr>
</tbody>
</table>

Hanshin (Osaka Bay) Port Development Authority

<table>
<thead>
<tr>
<th>Container Berth</th>
<th>Liner Berth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kobe</td>
<td>9</td>
</tr>
<tr>
<td>Osaka</td>
<td>7</td>
</tr>
</tbody>
</table>
Some of the planned container berths were already completed and leased exclusively to some container vessel operators.

(b) Particulars of berths constructed by the P.D.A.:

**Container Berth**
- Length of Wharf: 250 m, 300 m
- Depth of Yard: 300 m, 350 m (including APRON)

**Liner Berth**
- Length of Wharf: 200 m
- Depth of Yard: 90 m (including APRON)
- Shed: 6,000 m²
- Depth of Water: 10 m

(c) Financial status of the P.D.A.: The estimated amount required by the two P.D.A.'s for their present whole project totals ¥182,000 million or around $500 million. In accordance with the budgetary performance in Japan, the budget for the two P.D.A.'s for the construction in 1970 is assessed every year by the Ministry of Finance and shown in the general national budget. Then, their annual budget for each year since their start is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Keihin P.D.A. (million ¥)</th>
<th>Hanshin P.D.A. (million ¥)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1967</td>
<td>2,500</td>
<td>2,500</td>
</tr>
<tr>
<td>1968</td>
<td>5,000</td>
<td>5,000</td>
</tr>
<tr>
<td>1969</td>
<td>6,500</td>
<td>7,000</td>
</tr>
<tr>
<td>1970</td>
<td>9,000</td>
<td>9,250</td>
</tr>
</tbody>
</table>

The annual budget shown in the above is actually financed in the following way:
- 10%—To be given by the Central Government to P.D.A. as capital without interest out of the Government annual budget.
- 10%—To be given by the local authorities concerned (Tokyo/Yokohama municipal authorities for the Keihin P.D.A. and Kobe/Osaka municipal authorities for the Hanshin P.D.A.) to both P.D.A.’s on the basis of the amount to be spent in each area within the year, as capital without interest out of their annual budget.

40%—The organization issues Bond with an annual interest of 7.2% and Central Government (Ministry of Finance) accept the whole amount of the same.

40%—The organization issues Bond with an annual interest of 7.5% and exclusive users accept the same on the basis of the actual construction costs of the berths which the users have been allocated through Public Subscription conducted by the P.D.A.

(d) Main items of “rent” for a berth:

1. Depreciation reserves for the whole facilities.
   (Terms and Duration are different with respect to the individual facilities, for example, wharf: 50 years, C.F.S. Shed: 30 years and Crane: 15 years).

2. Expense for interest paid to Bondholders
   (The amount of Bonds is 80% of the whole construction cost).

3. Expense for repair (estimated)

V. Central Part of Japan

A few months ago, an authorized committee working as an advisory body for the Ministry of Transport has expressed their official view, “It seems to be necessary to construct the following berths for exclusive use in Nagoya and Yokkaichi” (both ports are located adjacent in the central part of Japan).

<table>
<thead>
<tr>
<th>Port</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nagoya</td>
<td>2</td>
</tr>
<tr>
<td>Yokkaichi</td>
<td>0</td>
</tr>
</tbody>
</table>

Although the total amount required to complete the whole project is not fixed yet, the budget for the first year was recently assessed by the Ministry of Finance as ¥2,400 million. This amount will be financed in the following way:
- 10%—To be financed by the Central Government to the company without interest for 10 to 15 years as a loan.
- 10%—To be given as capital of the company by the shipping companies who will associate with each other in the company.
- 30%—To be financed by the Central Government to the company through Bond issued with interest.
- 40%—To be financed by city banks on commercial basis.

Reportedly it was understood the company will be organized in May or June this year and the first 2 container berths in Nagoya will be put in service in 1972.

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The "Linerail"

A New Facility for Handling Unit Loads

(Reprinted from "French Technical Bulletin" No. 4, 1969)

Most handling work consists of travelling motion in one plane or another in order to move or convey loads from one point to another.

The linear electric motor built by Société Merlin-Gérin and presented their disadvantages.

Generale armature of all the linear d'Interet runs normally and Societe Merlin­ Economique Linerail of the travelling motion in one plane or equipped, was intended and was capable of finding a wide range of applications in this field. Its essential feature is that it generates directly a travelling motion and not a rotary motion as do conventional electric motors.

The "LINERAIL", the industrial prototype of the handling equipment version presented by Groupement d'Intérêt Economique Linéaire formed by Compagnie Générale des Convoyeurs and Société Merlin-Gérin, is the first to use the linear electric motor.

The "LINERAIL" is a device designed for handling unit loads essentially comprising independent self-powered bogies carrying the loads and travelling on an overhead rail under the action of their own linear electric motor.

It can be likened to both the electrified monorail with a suspended load and the conventional overhead conveyor. In common with the monorail, it possesses self-driven bogies, but since the latter are each equipped with a linear electric motor, there is no longer the problem of the adherence of the rollers on the rail. The circuits can therefore include quite steep gradients.

In common with the overhead conveyor, it can follow circuits with curves in all planes, though the self-powered and independent bogies are no longer attached to a chain, cable, flex or any other means of mechanical traction. They will have a distinctly higher speed than the trolleys of conveyors and the speed may vary from one bogey to the next.

This equipment, which offers a considerable degree of operating flexibility, therefore combines the advantages of the electrified monorail and the overhead conveyor, without their disadvantages.

From the technical standpoint, the "LINERAIL" essentially consists of two distinct elements, though they are nonetheless interdependent: a track, beneath which run a variable number of bogies which are both carrying bogies and driving bogies.

The track

The track consists of a metal box beam semi-enclosed at the bottom, leaving a free passage for the loading arm of the bogies.

This box beam, which has an approximately square cross-section, is relatively small. For instance, for unit loads of about a hundred kilograms, its outside dimensions are only 20 x 21 cm. Built from standard 4 metre elements assembled end-to-end, it weighs 28 kilograms per linear metre and has a strength of one ton per metre.

All the guiding, lift and electricity supply elements of the bogies lie inside the track beam and are thus completely protected against the action of external agents and any shock that may damage them.

The two webs of the lower face of the beam form roller paths for the bogey rollers, which are guided along the circuit by horizontal rollers resting against the beam. The sides of the beam carry the conductors which feed the bogey motors via contacts. Lastly, on the top of the guide beam there is a continuous copper plate which forms the single armature of all the linear electric motors of the bogies.

In view of the compactness of the elements of this track and in view of their lightness, a circuit can quickly and easily be set up without needing powerful hoisting facilities. Indeed, all that need be done is to attach the track elements by hooking them on to hanging posts, brackets or the eaves of buildings by the securing attachments they are equipped with and making the necessary electrical connections.

The circuits built in this way can be single circuits or branched circuits. They can follow any configuration, with curves with a minimum radius of one metre and fairly steep gradients, depending on the power of the bogey motors. On track sections on a gradient, there are no longer any problems of mechanical adherence, the linear electric motor then forming a veritable "electromagnetic rack".

As with the overhead conveyor, the circuits can be provided according to requirements with various devices such as switch points and manual, electrical or indexed regrouping units, halts, loading and off-loading stations and sidings, only to mention a few.

The bogies

The bogies can be likened to miniature electric tractors of extremely simple design. These bogies essentially consist of a carrying frame with its loading arm, four rollers and two lateral guiding rollers all mounted on roller bearings, and lastly the inductor of the linear electric motor.

To ensure that the linear electric motor runs normally and smoothly, the air gap, being the space between the inductor of the bogies and the armature attached to the top of the track beam, must remain constant in all circumstances. To keep this air gap constant, the inductor is mounted on springs which pull it towards the armature, while the four small rollers resting on the latter prevent any contact between the armature and the inductor.

The least powerful linear electric motor of the simplest version of the "LINERAIL" bogies has been designed to provide a thrust of about 2 kilogrammes, enabling unit loads of about 100 kilogrammes to be conveyed. The travelling speeds that this motor provides are infinitely variable from 0 to 3 metres

(Continued on Page 18)
The "Linéral", a unit-load handling facility. The independent self-powered bogies of the "Linéral" which are equipped with a linear electric motor, can run on all circuits, from the simplest to the most highly branched. On the experimental circuit, which includes curves and frog points, the bogies can run in either direction at variable speeds. Below: a bogey crossing a switch point. Note the rubber bumpers on either end of the bogey.

(Société Linéral)
per second. In view of one of the features of the linear electric motor, there is never any problem of braking, since this is brought about by reversing the supply phases.

From this elementary bogey, more sophisticated versions can be designed providing solutions to special problems. A speed regulating device can be placed on the bogey. The frame can be equipped with a fender and the latter with a proximity sensor enabling the bogey to be slowed down or even stopped when it comes within a given distance of another bogey.

Likewise, electronic devices can be provided which will enable different speeds to be pre-selected according to the section of circuit considered. Other devices will enable the bogies to be kept at constant speed both when carrying a load or unloaded and when climbing or coming down a gradient or on a horizontal track section.

For carrying heavier loads, several solutions can be considered. Obviously, it is possible to increase the power of the linear electric motors. However, this would mean increasing their length and necessarily that of the bogey. A problem could then arise with the curves, which would have to be made more gradual. Another solution consists in coupling together two or several bogies by a swing beam enabling them to carry a common unit load.

Operating possibilities

Thanks to its flexibility and possibilities, many different applications are possible, ranging from the simplest to the most complex.

For simple handling between two fixed points, only a single track is needed, and the “LINERAIL” then operates as a shuttle. The relatively high speed of the loaded bogies, which enables them to cover 90 metres in 30 seconds, in most cases renders a return track superfluous, as the speed of the bogies which are free of load can sometimes be yet higher. Manifestly, a single track will entail less capital expenditure and take up less space in the premises.

On the other hand, by increasing the number of switch points and regrouping units, the circuit can be branched very considerably to serve all stations, premises and workshops. Owing to their particularly simple design, the switch points can be crossed without the bogies losing any speed at all.

However, the circuits can also be closed and can then be run in two ways. The bogies could run on this circuit synchronised, each invariably having the same speed over the same sections of track. On the other hand, they could not be synchronised, with each bogey having its own speed, which may or may not differ from that of the others. In this case, the fenders could be equipped with relays or proximity sensors to slow down or even stop the bogies and prevent them from colliding. This represents a simple regulating method taking into account all the eventualities that could occur when operating a complex circuit branched to the extreme.

These are only a few among many other examples of the operating possibilities of the “LINERAIL” which in its present form provides the widest sectors with a new solution for all handling problems relating among others to production, storage and warehousing and the conveyance of products of all kinds over any distance.

However, from the inherent principle of the “LINERAIL”, namely using independent self-powered bogies equipped with the linear electric motor, other handling equipment can be contemplated which will provide a solution to special problems through their different design.

Indeed, by means of a relatively simple modification to the structure of the bogies, they can be converted to run no longer beneath an overhead rail, but this time above a rail comprising two distinct rails, whether laid directly on the ground or on some infrastructure.

Two solutions are adopted, depending on the particular case, for these new bogies.

The inductors of the linear electric motors could be made free to move, and secured to the bogies as is the case for the “LINERAIL”. The single armature will consist of a plate of copper lying between the rails. The inductors will be supplied by an appropriate catenary, conductor rail or other device.

On the other hand, the inductors on the linear electric motors could be fixed and then mounted between the rails at varying intervals. The armature will be attached to the lower part of the bogies. Since the inductors will be supplied by fixed electric cables, this will be a simpler solution, though it will increase the number of inductors required for the bogies to be invariably in contact with one of them. This might therefore call for higher initial capital expenditure. However, the number of inductors will be fewer whenever the bogies are joined into sets of various length, since the interval between two inductors will be greater.

The choice between these two solutions will, in fact, depend mainly on the characteristics both of the circuit and of its operating mode.

As with the “LINERAIL”, the circuits on which these new independent self-powered bogies will run may be simple or extremely branched comprising curves of low radius, gradients, switch points and regrouping units. Likewise, it will be possible to divide them into sections or sectors for automatic or non-automatic control of the travelling speeds. In other words, all the possibilities offered by the “LINERAIL” circuits can be provided with these circuits.

Obviously, these new bogies could even if required be provided by their users with all the necessary facilities and superstructures up to the most elaborate which enable them to meet the characteristics of the various loads they will normally have to handle or convey.

The adaptability of these various items of equipment to an extremely high or even total degree of automation also makes them valuable aids to automation for among others, transfer machines, luggage conveyance in large international air terminals, overhead travelling cranes and associated plant such as transfer stackers or automatic surfacing machines, only to mention a few.

A whole family of more or less specialised handling equipment is thus being evolved, all equipped with linear electric motor.
Customs Convention to Facilitate
Through International
Transport of Goods

International Container Bureau

(Note of meeting held at 30/32 St. Mary Axe, London EC 3 on Wednesday, 5th November, 1969, to consider the Customs Co-Operation Council’s proposed International Customs Transit (ICT) Convention.)

Mr. J. P. R. Bishop-in the Chair
A list of those present is attached.

1. Should the transport industry support ICT?

The principles of the proposed ICT Convention were discussed.

It was generally agreed that the initiative taken by the Customs Co-Operation Council (CCC) to formulate the Convention should be welcomed. However, some members expressed their concern that the provisions of the Convention might conflict with those of existing Conventions e.g. the TIR Convention and TIF-Convention. Nevertheless, it was appreciated that the ICT Convention would be optional; shippers, forwarders or carriers would not be compelled to use it and could, if they so wished, continue to use existing Customs transit procedures.

The view was expressed that the CCC should finalise the new Convention quickly.

2. How close should the ICT operation correspond with the transport operation?

3. Who should choose whether and where to commence an ICT operation?

(These items were taken together)

It was pointed out that under the TIR Convention customs control had to commence at the start of the transit procedure e.g., at the port of entry in the case of containers entering Europe from overseas. However, under the ICT procedure this was not necessary as the ICT Convention recognised the need to facilitate the repaid movement of containers and therefore provided that the procedure could commence at the point where it was most convenient. It was agreed that, particularly in cases where the transport operations involved a maritime leg, the ICT procedure seemed to be adequate since it would facilitate Customs clearance at the port of entry. It was considered that if the provisions of existing Conventions were to be applied, containers could well become subject to congestion delays at ports of entry.

For movements involving a single means or mode of transport within Europe, the ICT procedure might not be so ideal as existing and proposed transit procedures (e.g., the TIR or TIF CONVENTION and EEC’s Transit Procedure) would be just as easy and, possibly, simpler to use. On the other hand—as far as operations within the Common Market are concerned—operators of the partner countries are bound to comply with the procedure of the transit communataire.

It was generally agreed that shippers, forwarders or carriers should be permitted to decide where to start the ICT procedure and that any attempts to restrict the flexibility of the Convention in this respect should be resisted.

4. On what documentation should ICT preferably be based?

(This did not permit consideration of this item)

5. Should there be one or more guaranteeing chains?

It was recalled that only one organization until now, namely, International Bureau of Chambers of Commerce had indicated its willingness to set up a guaranteeing chain. It was appreciated that satisfactory guarantee arrangements to protect the interests of customs were an essential part of the ICT convention.

The main problem in setting up a chain was that the guarantor had to insure against risks which could not be readily determined as drafter, the Convention provided no limitation of liability for such risks. It was considered that these risks were increasing in combined transport operations and the view was expressed that, to make risks insurable, customs authorities would need to accept the principle of some limitation of liability.

In discussion, it was felt that whilst fully supporting the initiative of the IBCC the possibility of more than one guaranteeing chain being set up by different organisations should not be precluded.

6. Future action

It was agreed that a draft note of the meeting would be circulated to participants. Subject to any comments received, it was decided that the note would be submitted to the CCC as the considered views expressed by the FORUM.

It was also decided that a brief report of the meeting would be made available to the Plenary Session of the ICB to be held the following day.

7. Remark

The IATA which was also invited to participate in this FORUM, much to its regret, could not join the meeting.
New Standard Shipping Note Will Speed Up Exports

London, 9th February—The new standardised London Shipping Note announced by NEDO last month is to be introduced in April next as a further step in the current attack on hold-ups to exports. The new note, to be introduced on April 1st, 1970, has been initiated in view of the necessity to improve and standardise shipping documentation to assist goods from the country's 25,000 exporters to pass quickly to their destination.

The introduction of the new standard shipping note follows investigation of the delays which can occur in the issuing of Bills of Lading. A joint investigation by the Port of London Authority and the major shipping interests using the Port, which followed discussions in the UK Committee for the Simplification of International Trade Procedures (SITPRO), of which Lord Thorneycroft is chairman, concluded that the root cause of delays lay in the inadequacy of information accompanying goods arriving at the docks for shipment.

The main feature of the new shipping note is that it is a 6-part set, which gives the standard information requirements for many facets of the movement of exports. This new note is aligned to the format published by the Board of Trade Joint Liaison Committee on Documentation (JLCD).

The new note will be available, free of charge, to shippers on application to the P.L.A. from March 9th. From April 1st it will be required to accompany all exports delivered to P.L.A. docks, with the exception of containerised exports through the E.U.R and O.C.L./A.C.T. systems at Tilbury Docks. Its use will be obligatory and, after a three-month introductory period, a charge will be made to cover additional costs involved where cargo is inadequately documented. Furthermore, failure to produce the new standard shipping note with cargo will entail the risk of delay both to goods and port cargo.

Description of the new Standard Shipping Note

The new Standard Shipping Note is a six-part set on "no carbon required" paper. All six sheets are identical in layout. The first four sheets have the bottom right hand corner cut off, to help the dock checker to detach the 5th sheet, (Carman/lighterman's receipt), quickly after the cargo has been unloaded at the export berth or ship.

The distribution of the six sheets is as follows:

- for P.L.A. use
- for Shipping Company's use
- for Carman's use
- for Shipping Company's use
- for P.L.A. use
- for P.L.A. use

Completing the new Standard Shipping Note Set

Exporters, Shippers, or their agents, who complete the note should endeavour to enter all the information called for in the appropriate boxes.

"Exporter/Shipper"—where possible the name of the shipper should be entered.

"Export Services Charges to be paid by"—care should be taken to ensure that the firm named will accept an invoice for these charges rendered by the P.L.A. or a Shipping Company. (Not required for exports tendered by waterborne conveyance)

"Forwarding Agent/Merchant"—if no forwarding agent or merchant is involved please write "none"

"Dimensions of packages"—this information may either be entered under its own heading or under the details as to "Number and kind of packages. Description of Goods" if it is more convenient to spread these latter details under the two headings.

"P.L.A. Scale"—this refers to the P.L.A. charges scale based upon the volume/
**STANDARD SHIPPING NOTE**

**STANDARD SHIPPING NOTE**  

**FORWARDING AGENT/SHIPPER**

**FORWARDING AGENT/SHIPPER**

**PORT OF DISCHARGE**

**MARKS & NUMBERS**

**NUMBER & KIND OF PACKAGES**

**DESCRIPTION OF GOODS**

**DIMENSIONS OF PACKAGES**

**P.L.A. Scale**

**GROSS WEIGHT**

**CUBE**

---

**NOTICE**

- The F.L.A. Account for Export Services Charges will be endorsed by a copy of this Shipping Note.

- A Shipping Note MUST NOT supersede for goods transferred from one vehicle to another vehicle.

---

**SPECIMEN COPY - ONLY.**

---

**FOR PORT USE ONLY**

- **Regn. No.**
- **No. pack. received.**
- **Condition.**
- **Signed.**

---

**NAME OF COMPANY PREPARING THIS SHIPPING NOTE**

**SIGNED**

**DATE**

---

**MAY 1970**

---

**21**
Maryland Port Authority
Annual Report
Fiscal 1968/1969: Setting the Stage

No annual report can possibly capture the real excitement of events and developments that appear, on the surface, to be mundane and commonplace but which, in reality, bring an organization dramatically closer to its goals. Fiscal 1968-69 was a year filled with such events and developments for the Maryland Port Authority.

Put in theatrical parlance, 1968-69 was a year of setting the stage for the curtain that will go up in 1969-70; the inauguration of a complete container facility built as such from the drawing board up, and the completion of the Port of Baltimore’s largest pier. The massive scenery of the drama that is world trade was being readied for opening night.

It was the acceleration of technical changes in the maritime industry and the growth of world trade that continued, as ever, to challenge the Authority. Indeed, the ebb and flow of these events along the Baltimore waterfront continue at such a rapid and inexorable pace that it is difficult to contain them within the chronological confines of an annual report.

They defy the restrictions of time. Thus, it is as important to look to the future as it is to the past in reporting on the activities of the Authority. The development of waterborne commerce, which is the Authority’s responsibility, is a progressive and dynamic function, and the Authority has used all of the powerful means at its disposal to meet the challenges it faces.

Along with the ever-increasing demands of competing for its rightful share of world trade for the Port of Baltimore, the Authority has had to give priority attention to the historic technical innovations created by containerization and the potentials of intermodal shipping.

This new and sophisticated tech-

Cost will be as follows:

- per 100 packet 4/6d.
- " 200 " 7/6d.
- " 300 " 9/d.

Use with one-run systems

Users of aligned documents on a “one-run” system should note that the new shipping note set can be used with spirit duplicators. If a standard mask for the existing P.L.A. shipping note is used with a J.L.C.D. Master, it should be adapted so as to include the details for the “cude” column.

A limited quantity of ‘loose’ sets will be available and firms requiring supplies of these should make an early application clearly stating that ‘loose’ sets are required. ‘Loose’ sets should be re-assembled to the correct alignment when completed and the sheets should be stapled together so as to ensure that they arrive at the docks as a secure set.

Yours faithfully,
William Caunter

PORTS and HARBORS
nique for the handling of general cargo through ports has had a shattering impact on development and promotional programs in all of the major harbors of the world. Baltimore, located in the busy North Atlantic trade route range, has been caught up in the whirlwind of this change. But Baltimore, unlike Dorothy of "The Wizard of Oz," knows where it is going.

During the past fiscal year, the Authority has moved with all possible speed to create the facilities and operating conditions that would make Baltimore attractive for the handling of container ships and their cargoes.

To the north and to the south, other ports have been working at the same intensified, even feverish, pitch.

In Baltimore, work continued on what has been classified as the "interim container program." At the end of the fiscal year that program was nearing completion. The contracts had been let for the construction of a 65,000-sq. ft. consolidation shed, the erection of a high-speed, bridge-type container crane, and the construction of five advance model straddle carriers to be utilized for the transfer of containers to inland handling and storage areas.

All these projects were in progress at Dundalk Marine Terminal, which has become the focal point for container handling in the Port and one of the most active container centers on the East Coast. Major container-ship operators such as the United States Lines, Atlantic Container Line, Hapag-Llyod Container Lines and Moore-McCormack Lines were using Dundalk as one of the major container transfer points in their international systems, giving Baltimore's maritime community reason to believe that the Port has become second only to New York as the East Coast's prime container destination.

The demands of these users steadily increased during the past year. Fortunately, the modern design of Dundalk permitted the Authority to offer the users installations which could handle their containers efficiently and economically, albeit they had originally been intended primarily for general breakbulk cargo. The built-in flexibility of cranes, transit sheds, and other shore-side gear provided a brief respite, for it was readily apparent that as the flow of containers mounted in volume, the facilities would have to be expanded and improved.

In consequence, the Authority has now set out on a major, $20 million program for the expansion of Dundalk Marine Terminal. This expansion will feature four new berths specifically designed for the handling of containers, with the most advanced shipside and backup equipment meeting all present and future criteria of containerization. This program was well under way during the past fiscal year.

The expansion site was filled and preparations were made for the construction of the berths themselves. The interim container program was nearing completion and was planned to be fully operational prior to January 1, 1970, with the total program to be functional by 1971.

It is generally conceded that the ports which capture a substantial portion of containerized cargo will assure themselves of a position as major general cargo ports—a role which Baltimore has played since its founding as an out-port for its hinterland's agricultural products and an in-port for manufactured products. In view of this, the Authority has placed priority emphasis on container facilities, but it has by no means neglected its responsibilities to other types of cargoes.

Thus, while the broad expanses of Dundalk echoed to the sound of jackhammers and riveters, Locust Point Marine Terminal was equally deafening as work continued on the development of additional modern facilities for the handling of breakbulk cargoes. The second major facility, known as Pier 4-5 Complex, was moving rapidly toward 50% completion, and two berths were placed in operation shortly after the end of the fiscal year. Equipped with two high-speed gantry cranes, these berths will also provide a substantial additional capability for the handling of export-import steel—a most important commodity flowing through the Port of Baltimore. Too, they are expected to contribute much to enhance Baltimore's reputation as a "project port," able to marshall entire factories in knockdown form for overseas shipment, a logistical feat rare in any port, but a Baltimore specialty, made possible by the Port's relative lack of congestion and superb shore-side facilities.

Elsewhere in the Port, plans were swiftly advanced for the modernization and expansion at the Clinton Street Marine Terminal, with construction expected to be well under way during fiscal 1969-70. This terminal, along with Locust Point, will provide the Port with the finest general and specialized cargo facilities of any port in the nation.

Nor was the Port's need for bulk cargo overlooked. During the period, negotiations were in progress looking to the installation of a multi-million-dollar installation at Hawkins Point for the unloading of alumina, the middle stage between raw bauxite ore and refined aluminum. Under construction by the Eastalco Aluminum Corporation, the installation will serve the company's new $175 million aluminum refinery being built in Frederick County, Md. When complete, the Frederick County plant will provide 1100 or more new jobs for area residents.

In this respect, it should be noted that once again Baltimore's deep inland location was deciding factor in leading Eastalco to consider the Port, coupled with the excellent rail service available.

From all of the above it can be seen that the Authority was meeting the urgent demands for acceleration of port improvement and expansion outlined in its Decade for Port Progress issued in 1967 and approved and supported by the Maryland Legislature. Indeed, the program is presently well on schedule and by the end of the next fiscal year more than one-half of the projects included in the program will be substantially on the way toward completion.

Yet for all the purely physical improvements undertaken by the Authority and the private sector, the question remained: What is the Port of Baltimore's real worth to the State of Maryland? Is the money invested in the Port giving a fair return?

To find the answers, the Authority commissioned Drs. Stanley J. Hille
As Sir Winston Churchill once said in a not too dissimilar context, "Give us the tools and we'll finish the job." Fiscal 1968-69 saw the tools being delivered. The year ahead will see the tools in use—but the job will never be finished.

**Who Remembers The Gold Dust Twins?**

Only a few decades ago, the "Gold Dust Twins" was a household phrase, the trade name of a tremendously popular kitchen cleanser, the equivalent of any of today's "miracle detergents."

Then, almost overnight, the "Twins" vanished away and were soon forgotten. Why?

Because the manufacturers of "The Gold Dust Twins" simply refused to accept the value of advertising and promotion; the verity of the aphorism, "Out of sight, out of mind."

It is the function of the Maryland Port Authority's Trade Development Department to see that the Port of Baltimore never suffers the same fate as that of "The Gold Dust Twins," and to ensure that the Port is never out of the sight and minds of the men who move the world's trade.

At the same time, the Department, through its four offices in the United States and three overseas, must serve as the eyes and ears of the Authority, keeping a constant alert for new trends and emerging patterns while maintaining continuing contact with shippers and transportation executives around the world.

Fiscal 1968-69, with the growing challenge of containerization as the spur, saw an intensification and acceleration of the work of the Authority's Trade Development staff. Thus, key staff executives were dispatched to Europe and the Far East to ascertain the problems and desires of these areas with regard to container services, and to acquaint foreign shippers and traffic managers with the facilities the Port of Baltimore can offer now and in the near future.

One of the Department's most satisfying achievements during the year was the attraction to Baltimore of the Second International Container Services and Equipment Exhibition to Baltimore's Civic Center. This provided a spectacular vehicle on a worldwide basis for showing Baltimore and its potential for this explosive new transportation technique.

The Authority also sponsored special promotional receptions in Chicago, Pittsburgh and New York in connection with international trade meetings. In addition, the Authority sponsored regional meetings with the purpose of bringing together exporters and importers and acquainting them with the Port, and especially the advantageous rate structure in rail piggyback service available to them by utilization of the Port of Baltimore. Typical of these meetings were those conducted in Ohio and Michigan, two of the most important States in the Port's heavily industrialized hinterland.

Extensive efforts by the Authority, in conjunction with the Maryland Regional Export Expansion Council and the United States Department of Commerce, resulted in a series of monthly seminars to acquaint local business and industry with the advantages of foreign trade and to clarify some of the seeming complexities involved. A high successful Spring and Fall six-week workshop at the University of Baltimore supplemented the seminar program.

By no means the least important part of the Trade Development Department's job is the reception and briefing of foreign trade delegations visiting the Port. In a majority of instances, these visits are arranged by the Department's overseas Trade Development managers.

Similarly, the Department's domestic offices arrange tours of the Port for business and industry leaders from the areas they serve, and during the past year, as in previous years, it was no novelty for the Departmental staff to find itself briefing, through an interpreter in some cases, a delegation from a foreign company one day, and tackling the same job for a group of Illinois businessmen the next.

The past year saw major emphasis placed on the task of promoting the Port's swiftly expanding container facilities and services, of which Baltimore can be justifiably proud. It's little use to have fine shoreside facilities if there are no ships to use...
them, but at Dundalk the great container ships of no less than four major containerships operators, as mentioned earlier in this Report, tie up in regular service—United States Lines, Hapag-Lloyd Container Lines, Atlantic Container Line, and Moore-McCormack Lines.

Shippers in the United States and overseas know well that these lines would not be sailing into Baltimore if it were not an efficient and economical Port.

In sum, then, the Trade Development Department is the Port speaking for itself, and last year the word it spoke the loudest was "containerization," and the thrust of its message was that Baltimore is the prime container port on the U.S. East Coast, second only to New York.

The Slide-Rulers

The purely physical aspects of the job done by the Department of Engineering and Planning has been described in the introductory section of this report. Suffice it to say here that all construction projects proceeded at a brisk and orderly pace during the year just past.

What is of equal importance to the port's future is the department's long-range effort in the area of planning. Thus, late in the year, Henry Douglas, chief of planning, appeared before the Public Works Subcommittees of the United States House and Senate to testify to the need for completion of improvements to the Chesapeake and Delaware Canal to allow for its greater use by containerships. While the plea proved unavailing, the support from every sector of the Baltimore maritime community as well as the shipping lines serving the port was impressive testimony as to the correctness of the Authority position.

Much time and effort was devoted to finding a satisfactory location for dredged material resulting from routine maintenance of the port's ship channels, as the Kent Island Dump will shortly reach its full capacity. The task has proven a difficult one because of objections that dredged material from Baltimore harbor is a potential source of pollution and could affect the bay's ecology and perhaps threaten the state's seafood industry. It was finally resolved that a contained disposal area would have to be provided, and the Maryland legislature authorized the creation of a state debt of $13 million to this end. In the interim, a temporary disposal area has been established in the Poole's Island Deep area.

With a view to the superships of the years ahead, the Authority instigated a study by the U.S. Army Corps of Engineers to determine the feasibility of deepening the channels serving Baltimore. The Authority has taken the position that deeper channels in excess of 45 feet are needed to accommodate the larger vessels being used in the movement of dry bulk cargoes such as in-bound ores and out-bound coal. If they cannot be accommodated in the port, Baltimore stands to lose a significant amount of business. The department's planning section worked close with the Corps of Engineers during the past year, and the results were scheduled to be made public during fiscal 1969-70.

Where the port's interests were vitally concerned, the Authority took the lead in organizing opposition to projects potentially harmful to those interests. Thus it was successful in its effort to assure that the proposed second harbor tunnel be constructed at a deeper level than initially planned in order to allow for deeper ship channels. The Authority also voiced objections to any proposed route of the East-West Expressway through Baltimore which would adversely affect maritime operations, as would be the case with a suggested low-level bridge crossing the Inner Harbor.

Elsewhere in Maryland the port of Cambridge appears to have a bright future on its horizon. Operating revenues at the Cambridge Marine Terminals in fiscal 1969 was 49% greater than in fiscal '68. The surplus of revenue over operating expenses, excluding amortization payments, was approximately $30,000. The Delmarva Business Advisory Service of the University of Delaware was engaged to conduct a study to determine the feasibility of an adequate freezer warehouse. Such a facility is considered an urgent need by food service companies in the area. The study is expected to be complete by the end of the calendar year.

Plans and specifications for the proposed Crisfield Industrial Park were completed and submitted to the Federal Economic Development Administration. The need for a secondary sewage treatment facility, however, has delayed further progress until a contract for construction of the plant is awarded.

At the request of the Cecil County Economic Development Commission, the Department of Engineering and Planning prepared a study, the purpose of which was to determine the feasibility of a tankship dock to serve future petrochemical plants which might be located on or near the Chesapeake and Delaware Canal. The concept has been opposed by the Antipollution League of Cecil County, and to date nothing has materialized.

In the light of the overall responsibilities, the Authority could not approve of proposed conservation bills at the last State's Legislative Session. The Authority has been working diligently with conservation interests to prepare measures that would provide full protection to the seafood and wild life interest of the Bay while not unduly unhampering essential port development programs. It's the Authority's position that the recreational and commercial uses of Maryland's great waterway are compatible and that the State through the uniting efforts of all concerned can develop programs that will protect wild life and the important seafood industries while permitting carefully regulated commercial development in appropriate areas of the State's waterways.

From the above, it is clear that the Authority by no means confines itself to the welfare to the port of Baltimore alone, but is vitally concerned with all of Maryland's existing and potential ports, feeling that each will add its share to the overall economic impact of maritime activity to the general well-being of the State.

The decline of intra-Bay shipping with the advent of the motor truck peake ports virtually stranded. Where there is a potential for revitalization, as in the instance of Cambridge and Crisfield, the Authority expects to bend every effort to see
that potential realized.

Briefly summarized below is the status of Departmental projects during Fiscal 1968-69.

At the Clinton Street Marine Terminal, work was under way on roof repairs at Pier 1, a stevedores’ lounge, and paved storage area. Renovation of Pier 2 was in the planning stage.

At Dundalk Marine Terminal contracts were completed for flood-lighting towers in the container storage area, a 250-foot bulkhead extension at Berth 9, and test borings for Phase VII construction of the Dundalk Marine Terminal Extension Site.

Underway at Dundalk was work on a new stevedoring gear shed, a gantry-mounted container crane, a 65,000-sq. ft. consolidation shed to serve new container installations, and erection of five straddle carriers. All were expected to be operational by the end of calendar 1969.

In the design stage at Dundalk were new container berths 9 and 10, 11 and 12, ultimately to cost an estimated $8 million.

At Locust Point Marine Terminal, contracts were completed for two gantry cranes and certain phases of the Pier 4-5 construction, with other phases still underway. In the design stage were plans for a new transit shed for the Pier 4-5 complex to be built at an estimated cost of $1 million. In the planning stage was back-up storage paving for containers to serve the new complex.

Toward A Cleaner Harbor

The Maryland Port Authority is responsible for a number of services facilitating and safeguarding navigation in State waters.

One of the most important of these functions is the removal of floating debris which may be a fire hazard or a menace to navigation in the waters of Baltimore harbor. This is accomplished by the several facilities comprising a system for the efficient removal of such debris.

That’s phrasing it officially. Less officially, the system is made up of the harbor’s true workhorses; un ungainly, unglamorous, ugly little craft specifically designed to do a dirty job. Dirty but absolutely vital.

For solid debris, there is the PORT RETRIEVER, possibly the ugliest vessel ever set afloat. But its hydraulically-controlled, front-end loader can scoop up tons of floating debris for dumping into its accompanying scow.

Filled, the scow is towed to pierside by the minitug PORT LABOR. There the scow is lifted bodily from the water by a crane truck, deposited on a flatbed truck, secured, and so converts the flat-bed into a dump truck, to be hauled to a municipal dump. Empty, the scow is returned to pierside and lowered again into its natural element.

During the past fiscal year, these unlovely little vessels cleared more than one million pounds of flotsam and jetsam from the waters of Baltimore harbor; no small achievement.

The controlling and removal of oil pollution is the task of the PORT SERVICE, largest of the Authority’s maintenance fleet. The job of the PORT SERVICE was materially assisted during the past year by the receipt of some 3,000 feet of plastic boom, given to the Authority by the cooperative purchase of eleven Baltimore-based oil and asphalt companies at a cost in excess of $20,000. The jointed boom sections can be swiftly deployed to contain oil slicks and prevent them from spreading. Sections of the boom are stored for ready use at each of the fireboat stations in Baltimore harbor.

During the past year, the Authority, through its Port Operations Department, investigated 12 cases of oil pollution in Baltimore harbor, while the PORT SERVICE retrieved 3,900 gallons of oil from the water. The Authority was reimbursed a total of $4,900 in service charge fees for oil removal operations.

The Authority’s coastal telegraph and telephone station, Radio Station WMH, continued active during the period, with operation producing revenues totalling $27,967.

During the year, the Authority was prepared, but found it unnecessary, to carry out any icebreaking operations in the harbor or upper Bay.

Ice, although heavier than during the previous year, did not hamper navigation to the extent necessary to charter the services of the Curtis Bay Towing Company’s icebreaking tug, CAROLYN.

The Authority, through the Port Operations Department, continued to carry out enforcement of its regulations governing explosives and dangerous cargoes, and during the year processed 85 explosive permits.

As an indication of the effectiveness of the Authority’s “housekeeping” efforts in Baltimore harbor, it is interesting to note that an increasing number of privately-owned motor cruisers are using the marina at the head of the Inner Harbor. In years past, harbor waters were shunned by private boat-owners, lest the sleek hulls of their craft be soiled and dirtied by debris and oil scum.

Telling It Like It is

Telling it like it is is the mission of the Authority’s Communications Department. It is the Authority’s public voice, and bears a heavy responsibility to see that that voice speaks not necessarily loudly but, above all, clearly and effectively.

The Communications Department has the additional mission of involving the general public with the operations of Maryland’s ports, and it functions as a natural adjunct of the Authority’s Trade Development Department, each complimenting the other in the job of port promotion.

The Department continued its normal operations last year, maintaining close liaison with all the media, local, national, and international, the last of which required the preparation of numerous articles for publication overseas.

Aware that a flood of press releases can be worse than none at all, the Department continued its policy of confining its releases to people and events it considered truly newsworthy, and the consequence has been a generally excellent relationship with the media.

A significant innovation during the period was the decision to incorporate the Authority’s official Annual Report into the December issue of “The Port of Baltimore Bulletin.” This resulted in considerable savings in printing and mailing costs.

The Authority’s monthly “Sailing Schedule,” briefly suspended during the longshoremen’s strike, continued to be well received and very valuable to the Authority’s trade devel-
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major effort, this one to insure the broadest possible distribution of the Hille-Suelflow study of “The Economic Impact of the Port of Baltimore on Maryland,” scheduled to be released just after the year’s end. (Tragically, it must be noted that the department’s director, Mr. Joe A. Killian, died of a heart attack while hurrying to deliver a copy of the just-released study to a local newspaper.)

**Summing Up**

Fiscal 1968-1969 can best be described as a year of hard work, little drama, and plenty of achievement. The Authority’s programs were on, and in some instances ahead of, schedule, and that was what counted.

**An Unofficial Addendum**

Although, strictly speaking, it has no official place in the Annual Report of the Maryland Port Authority, some mention should be made of last year’s eminently successful season of passenger cruises sailing from the Dundalk Marine Terminal for five and ten day voyages to the Caribbean.

Since the Authority joined forces with the Chamber of Commerce of Metropolitan Baltimore to establish Maryland Cruises, Inc. (a non-profit joint venture) in 1962, nearly 20,000 passengers have sailed on holiday from the Port of Baltimore, and the 20,000th is expected to leave on the first cruise of the 1970 season.

Thus, in a limited way, Baltimore has once again become a passenger port, a role it ceased to play with the cessation of operations by the World War II, followed by the demise of the Old Bay Line.

Baltimore’s growing popularity as a cruise port is explained in large part by its convenience and economy. It draws much of its passenger traffic from the Washington area, from Pittsburgh and other Ohio cities, whose residents can have breakfast at home, drive in leisurely style over a network of superb highways and arrive in Baltimore for sailing time with plenty of time to spare, and no need for an expensive overnight stay in a hotel. More, they can drive their automobiles directly to dockside for unloading baggage and family, and then drive to a guarded parking area where the car may be left for the duration of their holiday. On their return, they simply reverse the procedure and arrive home in time for dinner.

**Master Plan**

San Diego, Calif., January 8—A detailed review, analysis and potential overhaul of the United Port District’s Master Plan is in the offering for 1970.

A close look at the District’s Master Plan with the intent of bringing it “up to date” was called for by Lorenz H. Ruehle (roo-lee) as he assumed the gavel as chairman of the Board of Port Commissioners for this year.

Representing National City on the seven-man Board, Ruehle noted that he was the District’s first chairman (1963) and had presided at many of the deliberations that shaped the Master Plan. He said the many changes along the waterfront, economic growth of the area and changing market conditions that affect the Port of San Diego’s maritime commerce demand a reassessment of the Plan.

“The Master Plan has been an effective and meaningful guide for the six years of its existence,” he said, “and has helped the Port maintain a proper balance between the commercial demands that are of such great economic value to our area, and the esthetics of the Bay that in another sense are equally as important.”

Most of the projects specified under the Master Plan at its adoption in December, 1963, have been initiated or completed, Ruehle said. He emphasized that all of the projects in the North Bay have been completed, and pointed to development of Harbor Island, the new Harbor Drive air terminal at Lindbergh Field and clearing of outdated structures on the Embarcadero as examples.

The 1970 Board chairman said he expects the Port staff to come up with recommendations concerning changes to the Master Plan in the near future and that major action on the Plan may be expected in January.
Commended

Commander Parmiter Commended

The contribution to IAPH of Condr. G. V. Parmiter, R. N., who had retired from his position of Chief River Manager, Port of London Authority end of November 1969 to emigrate to New Zealand, was commended by a resolution unanimously adopted by the Executive Committee Meeting in Singapore in February last, as follows:

"In recognition of Commander Parmiter's great meritorious service rendered to this Association in connection with the Inter-Governmental Maritime Consultative Organization by acting as the liaison, the Executive Committee decided at their Meeting held on the date of 12th February 1970 at Singapore to direct Secretary-General of this Association to send Ports & Harbors to Commander Parmiter for his life time."

Meanwhile, Condr. Parmiter is already in New Zealand at his temporary address. In acknowledging Mr. Toru Akiyama's information on the above in March last, the Commander wrote that he was finding New Zealand quite delightful, and that he was busy buying some 7 acres of tract in Kerikeri on the Bay of Island.

Travelers

- On March 23 evening, 6.00-8.30 p.m., a cocktails was held by Brem-\-er Lagerhaus-Gesellschaft in Hotel Okura, Tokyo, where Mr. Gerhard Beier, Vorstandsvorwitzender, Dr. Rolf Fastenau, Vorstandsmitglied, and Mr. S. Tsuyama, President, Daia Shipping Co., Tokyo, received the guests.
- Mr. Beier announced that Mr. S. Tsuyama was formally appointed as the representative in Japan of Brem-\-er Lagerhaus-Gesellschaft.
- A 25-man Belgian Economic Mission to Japan is scheduled to visit Japan April 25 through May 8. The group will first visit Osaka and Expo '70, then Kobe, Nagoya, Yokohama and Tokyo.
- The list of the Mission members is topped by Mr. L. Delwaide, Alderman of the Port of Antwerp, followed by Mr. R. Vleugels, General Manager of the Port of Antwerp, Mr. R. Coucke, Inspector-General, Belgian Overseas Trade Bureau, Mr. R. Lhonneux, President, Antwerp Chamber of Commerce and Industry, and many bankers, shipping and stevedoring executives, and other business men.
- Mr. Hubert J. Van Houtte, economic secretary of the Embassy of Belgium in Tokyo, visited Dr. Hajime Sato, IAPH Deputy Secretary General, at his office for comments on the long lists of Japanese guests to be invited to receptions and information meetings scheduled in Yokohama and Tokyo.
- On March 23, 1970, members of Export Cargo Transportation Sur-vey Team of India called on Dr. Hajime Sato, Deputy Secretary General, at the IAPH Head Office, to obtain desired information.
- The team was headed by Mr. P. S. Thiagarajan, Manager of Operation & Research Group, India. The members were, Mr. K. C. Joshi, Deputy Secretary, Ministry of Transport and Shipping, Mr. Sat Prakash, Joint Director, Planning Commission, Mr. D. D. Borwankan, Joint Director, Railway Board, Mr. B. S. Gupta, Assistant Commercial Manager, Indian Air Lines, and an adviser, Dr. R. J. Watkins, Vice President, Survey Research Corporation, U.S.A. The group was accompanied by Mr. A.K.S. Nair of the Embassy of India in Tokyo.

Seaway Opening

Ottawa, February 26, 1970—The St. Lawrence Seaway will, this year, be open to navigation as of April 1, a date equaling the early-opening set in 1966.

In a joint announcement of the 1970 opening and closing dates for the waterway, all of which are necessarily conditional upon weather and ice, the St. Lawrence Seaway Authority and its United States counterpart, the Saint Lawrence Seaway Development Corporation, have informed shipping interests that Montreal-Lake Ontario Section will remain open from April 1 through December 10, with the possibility that navigation in this section may be continued beyond that date on a day-to-day basis.

The Welland Section, linking Lake Ontario and Lake Erie, will also open on April 1 with a scheduled closing date of December 22.

The Canadian canal and lock at Sault Ste. Marie will be open to navigation on April 4, with a scheduled closing date of December 12. (The St. Lawrence Seaway Authority)

Passenger Terminal

Callao—The National Ports Enterprise (ENAPU-PERU), has informed that in the middle of this year, construction a Modern Terminal for Passengers will begin at the Port of Callao, at an approximate cost of S/. 10 million.
This Terminal will have adequate and necessary installations that will permit to attend 4 berths. These berths will be built in two periods, first the berths 5A and 5B and in the next period the berths 4A and 4B.

This work plans the construction of a modern building in front of the berth 5A and a warehouse adjacent.

The dock of passengers of the ship will be linked with the second floor of the building, by a direct ramp bridge; which will permit the transit of passengers from the ship to the lobby or vice versa.

This new system will offer facilities and comfortabilities, and at the same time will grant security and protection to the visitors or passengers in front of the daily routine labor of the port.

The building, which will be furnished with first class furnitures and of a modern architectural design, will count with all the necessary services, installed at the First and Second Floor (Mail, Cables, Telephones, Cafeteria, etc.) the terrace will function as observatory zone like the airports that will permit to appreciate in a view all the Port.

The project is actually in the period of public bid, adjudication, acceptance, and sign of the contract.

We estimate that all this procedure will be over by the month of June of the present year.

The ENAPU-PERU, considers that in accordance to the plans scheduled, the modern Terminal should be completely ready, and put into service by the month of June of the coming year.

Projections

The planned work is considered as very urgent, for the Port of Callao, for security reasons, attention to passengers, facilities on service of luggage, and more flexibility on passenger operations, traffic and cargo movements.

The class of the work, as well as the biggest of the investment, will place the Port of Callao, among the ones that render best services and facilities to the sea-transportation and undoubtedly will increase the tourist currents by sea-way.

( call, Lima, Empresa Nacional de Puertos del Peru)

**1969 Tonnage**

Beaumont, Texas:—The Port of Beaumont’s 1969 tonnage was well over the one-million mark despite the protracted longshoremen’s strike early in the year. The following statement, released jointly by Ray A. Coale, President, Board of Port Commissioners, and John H. Groh, Port Director, sets forth the details:

During 1969 all facilities of the Port of Beaumont handled a total of 1,321,257 tons of cargo, compared to 2,162,827 tons in 1968.

Due to the longshoremen’s strike, the grain elevator and the Carroll Street general cargo facilities (Ship Berths 8, 9, and 10) were shut down from January 1 to April 13, 1969, and the Main Street general cargo facilities operated during that time only on military cargo, mostly at Ship Berths 2 and 3, with Ship Berths 1, 4, 5, 6, and 7 shut down. (“Welcome Aboard”, Jan-Feb, 1970)

**I.A.P.P.**

Boston, Mass., March 10: — Waterfront lawbreakers have been causing losses estimated in the millions every year at North American ports. But they are about to feel the impact of new stepped up security operations in the ports of the United States and Canada as a result of a new police organization being formed in Boston today and tomorrow.
San Francisco, Calif.—California ports complimented the U.S. Army Corps of Engineers for fostering development of harbors and channels with an award to recently-retired Brig. General William M. Glasgow, South Pacific Division Engineer. Receiving the commendation from Lawrence L. Whiteneck (left), chairman of the California Marine Affairs Conference, was Mrs. Glasgow (General Glasgow was absent on a new East Coast assignment). Lt. General Frederick J. Clarke (right), chief of the Corps of Engineers, took part in the recent San Francisco World Trade Club ceremony. (Marine Affairs Conference News Release, Feb. 3, 1970)

About 50 port security officers from the two countries and Puerto Rico are expected to organize the International Association of Port Police during their session at the Hotel Sonesta at Boston-Logan International Airport.

The gathering is being hosted by Massport and Troop F of the Massachusetts State Police, stationed at Logan. In addition to its law enforcement duties at the airport, the troop has been providing security at the waterfront facilities owned by Massport since April 1968.

The two-day organization meeting is an outgrowth of previous discussions of the problem of waterfront security by law enforcement officials and a symposium on the problems of cargo protection and port security held in Toronto in December 1968.

During the session, the law officers will follow up on recommendations of a steering committee formed at the Toronto symposium. Scheduled speakers include Edward J. King, Massport executive director; Captain Herzog; Don Cassidy, director general of ports and security of the National Harbours Board of Canada (NHBC); Howard Mann, NHBC chairman; Thomas F. Jones, director of law enforcement of the Waterfront Commission of New York Harbor; and George M. Murphy, chief of police of Oneida, New York, second vice president of the International Association of Chiefs of Police, and executive secretary of the New York State Chiefs of Police.

Formation of the association is scheduled to take place Wednesday during a business meeting scheduled to last all day.

New Chairman of NFTA

Buffalo, N.Y.:—William E. Miller of Lockport has been appointed by Governor Rockefeller to be chairman of the Niagara Frontier Transportation Authority. Mr. Miller replaces Charles R. Diebold who resigned because of private business commitments. In appointing Mr. Miller to the post, Governor Rockefeller said, "He will be of inestimable value to the members of the authority." He has been a member of the authority since its inception in 1967.

The new chairman was the Republican nominee for Vice President of the United States in 1964. As a political leader, Mr. Miller served with distinction in the House of Representatives for nearly 14 years and simultaneously compiled an unbroken string of political triumphs and achievements virtually unequaled by anyone in public life. While a member of Congress and a prominent member of the House Committee on Judiciary, he played a major role in the guidance of legislation affecting both the courts and security of the nation. (Port of Buffalo Progress Bulletin)
Matson Container Terminal

Los Angeles, Calif.—Another major step in the development of the Matson Container Terminal at the Port of Los Angeles was taken today (January 28), with the awarding of a construction contract for a one-story shop building and a four-story office and observation tower.

The Los Angeles Board of Harbor Commissioners awarded the contract to Fred A. Arnold, Inc., of Los Angeles, in the amount of $1,385,339 which was the lowest of six bids.

The Matson Navigation Company, which will lease the new facility when it is completed, reviewed and concurred in the plans for these buildings.

Construction of the new structures, as a part of the overall project, is to be completed within 210 calendar days. (Port of Los Angeles)

Barkerding Goes Swinging

New Orleans, La., February 13—A trade development trip to key Oceania and Far Eastern points, featuring a planned expansion of the port's permanent sales and trade promotion staff in that territory, gets underway February 13 with the departure, en route to Sydney, Australia, of Robert R. Barkerding, Sr., Executive Port Director and General Manager. Considerable publicity will also be given to the port's 30-year CENTROPORT USA master plan.

Barkerding will be met in Sydney by Allen V. Junkin, the port's Far East trade director who operates from Tokyo, and following activities in Sydney the two will proceed on an itinerary which includes calls in Melbourne, Singapore, Hong Kong and Tokyo.

Barkerding described the points to be visited as “outstanding and vital markets and distribution centers for trade via New Orleans”, and added that the appointment of a new trade development representative for the port to serve both Australia and New Zealand will be announced while he is in Australia.

“It is possible,” he added, “that we will also announce expansion of our Tokyo staff while we are in Japan, which is necessary to keep pace with the increasing trade between the United States and countries in the Asian and Far Pacific range.”

Meetings have been scheduled with steamship officials, exporters, importers and key government representatives at each point of the trip. While in Japan, Barkerding will confer with Masao Anzai, president of one of Japan's leading industrial firms, concerning the Japan-Louisiana Association, a businessmen's mutual understanding and trade promotion organization formed in New Orleans last year when Anzai toured the South as head of a Japanese economic mission. Governor John J. McKeithen and Mayor Victor H. Schiro are honorary chairmen, and Barkerding serves as founder chairman of the group.

Barkerding will be a featured speaker and panelist before the Second Far Eastern International Transportation Conference of the National Defense Transportation Association on March 10, at the Hilton Hotel in Tokyo. Attendees will be composed of high officials of U.S. steamship and air lines, port authorities, and their Japanese counterparts.

A total of 19 per cent of the port's foreign commerce tonnage and 17 per cent of its value was conducted with the countries to be visited, according to 1968 Department of Commerce figures.

Twenty-three steamship lines offer scheduled sailings between New Orleans and the Far East.

Japan leads all world nations in both tonnage and dollar value of imports and exports via New Orleans, with over 2.1 million tons and 325 million dollars. Australian trade with New Orleans totals 175 thousand tons valued at 55 million dollars, while New Zealand accounts for 13,000 tons valued at 4.3 million. New Orleans' trade with the Philippine Islands totaled $1,500,000 ton valued at 32 million dollars. Trade between Hong Kong and New Orleans totaled 43,000 tons valued at 16 million dollars, and Singapore had 15,000 tons valued at 5 million dollars. (Port of New Orleans)

Telegraphic Request

New York, N.Y., Mar. 5—The following telegram was sent today by Austin J. Tobin, Executive Director of The Port of New York Authority to J. Curtis Counts, Director of the Federal Mediation and Conciliation Service:

"J. Curtis Counts, Director
Federal Mediation and Conciliation Service
Washington, D.C.

Negotiations between tug boat operators and Local 333 A.F.L.-C.I.O. have failed to end 34-day strike. Cargo and passenger vessels are suffering considerable delay and risk of damage in efforts to supply the public with essential commodities. As the agency responsible for promotion of tonnage and commerce for the Port of New York, we earnestly request you offer your personal services to the bargaining parties. I believe your personal participation would aid in early settlement.

Austin J. Tobin
Executive Director
Port of New York Authority"

Container Service

Portland, Oregon, March 9: — The Portland (Oregon) Commission of Public Docks has asked the Federal Maritime Commission to hold public hearings on an agreement filed with the FMC by six Japanese steamship lines which have formed into three groups to provide containership service to the U.S. West Coast.

Basis for the Dock Commission's hearing request is the Japanese lines' statement in the agreement that they intend to "inaugurate a full containership service in the trades between Japan and Oregon and Washington ports". The Dock Commission is dubious that the Japanese lines intend to provide service to Oregon ports. Such service will be provided to Puget Sound, it was announced late last year. It is to present arguments to secure service to Portland that the public hearing has been requested.
Andrew J. Cook, Chairman of the Dock Commission, responded to recent newspaper reports that Portland has lost the Japanese containership trade. “No final decision has been made in Japan”, he said. “Certain recommendations have been made on the planning levels to Presidents of the six Japanese lines. These executives are studying the matter closely and the door has not been closed on Portland.”

Cook said the Dock Commission proposes to take every step open to it to seek a favorable decision. “This is why we are asking the Maritime Commission for the hearing”, he said.

He noted that the Dock Commission’s efforts to secure containership service extend back more than two years. Thomas P. Guerin, Commissioner General Manager, and Curtis A. Smith, Operations Manager, have made several trips to Japan for direct talks with the lines’ officials and staff.

“Portland has invested heavily in container facilities,” Cook said. “Our newest terminal, which is now ready for service, cost about $8,000,000 and is the most modern on the Pacific Coast”. He noted that the Commission has purchased two Japanese-built container cranes, one of them almost four years ago, and has planned and built for high-speed, efficient container handling and ship turnaround capability.

The Dock Commission’s efforts have been supported strongly by all levels of business and government. On one trip last year, Guerin was accompanied by Mr. Leland Johnson, a Vice-President of the Portland Chamber of Commerce. Shippers have confirmed their use of Portland as a port of entry for heavy incoming movements of Japanese merchandise destined for local and overland markets. Similar confirmation has been given for vital backhaul tonnages.

Mr. John M. Fulton, former Dock Commission Chairman, now Director of the Oregon Department of Transportation, has given his active support to the Dock Commission’s efforts. Oregon Governor Tom McCall has cabled to Presidents of the Japanese lines and to the Japanese Ministry of Transportation. Similar support has been given by Oregon’s Senators and Congressmen, and by the United States Department of Transportation.

Strong support has been expressed by the Mayor of Portland, the Chamber of Commerce, on behalf of labor through the AFL-CIO and the longshoremen’s union (ILWU Local 8), and by shippers and receivers of heavy volumes of Japanese tonnage.

Cook said that all will continue to express their support and he pledged the Dock Commission’s continuing effort to secure the trans-Pacific containership service. (Portland Public Docks News Release)

**Rail Line Merger**

Portland, Ore., February 3:—The merger of the northern rail lines as approved by the United States Supreme Court will vastly strengthen Portland’s position as a major seaport, Andrew Cook, Chairman of the Commission of Public Docks said today.

“The merger not only adds another line to Portland, the Milwaukee, but opens Portland to more fully competitive rates with Puget Sound ports on the northern routes,” Cook said. “Portland will continue to be served by more transcontinental railroads than will any other port on the Pacific Coast, thereby giving shippers greater flexibility of routing and car supply.”

Cook pointed out that under past practices, although the SP&S railroad is jointly owned by Great Northern and Northern Pacific, those northern lines preferred to move freight on their own “long haul” lines directly between inland points and Puget Sound rather than to split the revenue with the other line when freight was routed via Portland over SP&S tracks with connections at Spokane and Pasco. The merger will give Portland “long haul” status on the northern routes, Cook said, eliminating an artificial and technical but very real problem for Portland in the matter of ocean borne, overland cargoes.

“Portland’s historic seaport position as a key transportation and distribution center will have been materially enhanced when final operations stages of the merger are accomplished,” Cook said.

The Dock Commission chairman congratulated the presidents of the affected lines, John M. Build of the Great Northern, Louis W. Menk of Northern Pacific, and William G. Quinn of Chicago, Burlington and Quincy; and N. S. Westergard, SP&S vice president, for their un­tiring efforts in bringing about the merger. (Portland Public Docks News Release)

**Big Container Crane**

Savannah, Ga., March 6:—Right on schedule, the giant crane for the Georgia Ports Authority’s new container facility arrived dockside March 6th at the G.P.A.’s Savannah terminal.

The shipment arrived on board the M.V. LICHTENFELS from Bremen, Germany and consisted of 199 pieces weighing a total of 1,530,738 pounds.

The Container Crane, the largest in the U.S.A., was purchased from the Kocks Pittsburgh Corporation in Pittsburgh and built by Kock’s parent company in Bremen, Germany.

The crane will be erected on the Authority’s new $5 million container facility at the Garden City terminals in Savannah. It will take, according to a GPA spokesman, approximately ten weeks to erect the Crane.

The high-speed Container Crane will have a capacity of 90,000 pounds at an extended reach of 113½ feet, either seaward or landward.

The gage of the gantry rails of the new crane will be 90 feet with a clearance under the boom of 107 feet. Lift above rail elevation will be 72 feet, and below rail, 58 feet. Diesel electric powered, the crane will have a full load hoist speed of 100 FPM, a trolley travel speed of 100 FPM and a travel speed of 150 FPM.

The container terminal will cover over 20 acres and provide paved
Two of the Georgia Ports Authority's gantry cranes unload a part of their big brother from the German freighter, M. V. LICHTENFELS. When all 199 pieces of the Container Crane are put together at the Authority's Savannah terminal, it will be the largest (over 15 stories high) in the U.S.A. GPA officials say it will take 10 weeks to assemble big Little Brother. (Georgia Ports Authority News Release)
ports of oil pollution were investigated. As a result five prosecutions were launched in the courts, of which four were successful. Prosecutions — under the Navigable Waters (Oil Pollution) Act of 1960—in three further cases alleging offences committed during 1969 will come before the Courts this month.

In respect to the number of reports received for the year, it has been established over many years that one single incidence of pollution is frequently the subject of several separate reports so that the total number of 112 reports cannot be taken to be 112 separate incidents of pollution.

In the Port of Melbourne, prevention of pollution and investigations of alleged offences are carried out by the Security Section of the Port Emergency Service, and since 1960, when the Navigable Waters (Oil Pollution) Act was passed by the Commonwealth and State Governments, prosecutions by port officers have been laid under the State Act instead of the Port Authority’s own regulations as in previous years.

On the question of pollution of all types, including oil, the Chairman of the Port of Melbourne, Mr. V. G. Swanson, said last month that the Authority was the recipient of trade waste from many industrial premises and installations outside its jurisdiction. The waste came by way of common drains, creeks and rivers—including the Yarra and Maribyrnong—beyond the port’s territory, and this made it most difficult for port officers to trace the sources of pollution.

Mr. Swanson said it was felt that the authorities responsible for areas outside the port’s territory could be more active in legislating for the prevention of pollution, and also in policing existing legislation.

He also felt that more could be done to prevent the discharge of matter which polluted rivers and streams passing into drains in areas under the jurisdiction of these authorities. Mr. Swanson said he felt that pollution should be prevented at its source and that pollution should be detected when it passed into drains rather than delay detection until the waste reached the port area.

He also felt that, in areas outside the Port Authority’s jurisdiction, legislation should provide for compulsory inspection pits in easily accessible areas on industrial premises, which would make it possible to inspect all drains leaving these premises and installations in the event of pollution, or incidences in which pollution was suspected.

(Melbourne Harbor Trust Port Gazette, Feb. 1970)

Road Network

Melbourne:—Work has started on the second stage of a major road development project in the Swan­son Dock-Appleton Dock area of the port, which will completely change the topography of this area into what could now almost be called a “closely settled” industrial complex.

Contracts for part of the second stage—amounting to approximately $163,000—were let at the beginning of the year, bringing the total road development cost to date to nearly half a million dollars over the past three years.

The character of the Swanson Dock-Appleton Dock area is changing rapidly in line with changes in the cargo handling activities at the two dock systems, as the cargo handling associated with containerisation and unitisation requires ancillary landbased terminals and depots to gain the maximum efficiency.

Prior to 1966, when Swanson...
Regulation had been partially reclaimed from former swamp land. The Appleton Dock system comprising 5 berths was the first major port development in this region and construction of this system was begun in 1954.

The development of container and unitload ships and cargo handling methods was much more rapid than could be anticipated, and the land area, with its new network of access road and link roads, is now of greater importance than the dock systems themselves.

The new and existing roads in the region are all port roads which were built, maintained, and controlled by the Melbourne Harbor Trust Commissioners—the Authority for the Port of Melbourne. Up to the present there are nearly 18 miles of port owned roadways, and the increasingly extensive road network in the port area is also included in street directories of the City of Melbourne. In line with the policy of the Commissioners all roads are named after serving and former Commissioners.

Two roads, Mackenzie road and Kermode road are named after former Chairmen and Commissioners. Kermode was Chairman and a Commissioner from 1934-40, and Mackenzie, Chairman 1940-60. Commissioners who have had streets named after them include one of the present Commissioners, Sir Charles McKay, who first joined the Port Authority in 1936. Others were Boyd, 1913-1941; Cowper, 1884-1905; Cummins, 1954-60; Dahlenburg, 1950-53; Gibbons, 1951-58; Mountain, 1883-1906; Oliphant, 1953-58; Phillips, 1958-63; Sudholz, 1953-56; Swanton, 1958-61; and Trevella, 1964-65.

One other road has been named after Sir John Coode, the prominent British engineer, who with the Commissioners of the newly-appointed Melbourne Port Authority in 1877 decided to bring out to Melbourne to advise and plan a comprehensive port development for the growing Victorian capital established only 42 years earlier.

Port facilities in the River Yarra and in the Port of Melbourne and Williamstown area of Port Phillip Bay at the time were no longer adequate to meet the demands of the growing volume of shipping and trade.

Many of the present layout of the Port of Melbourne is according to the original plan submitted by Coode to the Commissioners in 1879.

New port roads in stage two of the overall project which are scheduled for completion this year are the remaining portion of Coode road, Swanson Dock road, McKay road, and the remaining portion of Phillips road. (Melbourne Harbor Trust Port Gazzette, Feb. 1970)

**Container Terminal**

Sydney, 10th February:—The first ship to use the “Common User” Container Terminal provided by the Maritime Services Board at No. 4 Berth, White Bay, was the Farrell Line ship, “Austral Pilot” under the agency of Wilh. Wilhelmsen Agency Pty. Ltd. which commenced to load and unload containers there today.

In announcing this today, the President of the Maritime Services Board, Mr. W. H. Brotherson, indicated that although the vessel is not a cellular container ship, the number of containers carried by it warranted the Board placing it at the Container Terminal to use the specialised facilities there.

He said that some sixty odd containers would be handled including some of the 40 ft. variety.

Mr. Brotherson explained that the Port of Sydney is the only Port in Australia to provide a “Common User” Container Terminal operated by a Port Authority.

He mentioned that the labour for the operation will be provided by Patrick Stevedoring Co. Pty. Ltd. on a contract basis with the Board as owner and operator of the Terminal.

He said that No. 4 White Bay, which embraces an overall area of 11 acres will offer an alternative to the adjacent terminal (Nos. 5/6 White Bay) operated by Seaboard Terminals Ltd. to the east of the Board’s terminal.

The equipment on the “common User” Terminal includes an ASEA wharf mounted crane with a capacity of 45 tons. The crane is capable of lifting two 20 ft. containers at a time or one 40 ft. container.

Four skeletal trailers with tow motors are employed together with a side loader for the movement of the containers between the various modes of transport.

The area will be served by gantry cranes each spanning 74 ft. and mounted on rubber tyres enabling them to be moved around the area and provide flexibility.

Each of the gantries is designed to allow of containers being stacked six abreast and up to three high and over 1,000 container can be handled at one time at the Board’s Terminal.

The mobile gantries, have been ordered and will be delivered ready for operation in September when the European cellular container ships are due in the Port of Sydney.

In making the announcement, Mr. Brotherson indicated that a great deal of work and organisation had been involved in setting up the “Common User” concept, but the Board was pleased to record that the problems had been overcome resulting in a unique facility by world standards and the only one of its kind in Australia. (The Maritime Services Board of N.S.W.)

**Ship Smoke Control**

Sydney, 30th January:—Regulations covering the emission of smoke from ships in port were gazetted today.

This was announced in Sydney by Mr. W. H. Brotherson, President of the Maritime Services Board, who said that the new Regulations are known as the “Port Authority Smoke Control Regulations, N.S.W.” Mr. Brotherson said that the Regulations will come into effect immediately.

He said they are designed to cover the emission of dark smoke...
from ships and are based on a standard known as the Ringelmann Scale.

He said that five standards are provided in the scale ranging from 0 to 4.

Standards 0 and 1 cover light coloured smoke, whilst 2, 3 and 4 cover varying standards of intensity of dark smoke.

Mr. Brotherson said that smoke which is light in colour and is covered by standards 0 and 1 is permitted under all circumstances but the Regulations prohibit the discharge of smoke darker than the standards shown in the chart as number 2 and 3 under certain defined circumstances whilst smoke of the standard of 4 in the scale is completely prohibited.

He said that the blowing of tubes is permitted only with the approval of the Board.

Mr. Brotherson pointed out that there are certain coal burning vessels which have operated in the port for an extended period and these will need to be specially considered by the Board. He said the Board will see that the spirit of the Regulations is preserved without causing undue hardship to the operations of these vessels for an interim period.

A minimum penalty of $200 is provided for a breach of the Regulations. (The Maritime Services Board of N.S.W.)

5 Container Cranes

Tokyo: — IHI has received a lump order from the Transocean Gateway Corp. (TGC) of the U.S. for five container cranes each with a 40-ton lifting capacity.

The TGC is a terminal company operating under the American Export Isbrandtsen Lines Inc., a well-known shipping firm.

Four of the five cranes ordered will be installed at the new terminal located in Staten Island, New York, which is used exclusively by Isbrandtsen Lines, while the one of them will be installed at the Isbrandtsen Lines' container terminal at Long Beach, California.

IHI clinched the order as a result of hard negotiation with TGC in competition with leading manufacturers of the United States and Europe.

The cranes are to be shipped from Japan and delivered to the above site from October, 1970 to March 1971. The installation of the cranes will be undertaken by local firms. (IHI Bulletin, February)

400,000-dwt Tanker

Tokyo: — IHI has concluded a provisional contract for building a 400,000-DWT class tanker with Gloebik Tankers, Ltd., London.

Globtik Tankers, Ltd. and IHI are to make a final decision on the tanker's specifications, and the formal contract is scheduled to be signed in the spring this year.

The 400,000-DWT tanker will be chartered on a long-term basis by the Tokyo Tanker Company, a Japanese shipping firm. It will be built based on the specifications of a 372,000-DWT tanker already ordered from IHI by Tokyo Tanker Company.

To be built at IHI Kure Shipyard, the ship is expected to be completed in the spring of 1973. (IHI Bulletin, March)

Penang Visited By President & S.G.

Penang:—The Penang Port Commission was honoured recently, by the visit of the President of IAPH Mr. V.G. Swanson and Mrs. Swanson and the Secretary-General, Mr. Toru Akiyama. Mr. Akiyama was accompanied by Messrs. Shigehiro Kusu and Takuji Nakani of IAPH Secretariat, Tokyo.

They were in Penang from 13th to 16th February, 1970 after attending the inter-conference meeting of the IAPH Executive Committee held in Singapore from 10th to 12th February, 1970.

Mr. and Mrs. Swanson and Mr. Akiyama, were met at the airport by the Chairman of the Penang Port Commission, Dato Laksamana Haji Md. Razalli and the General Manager, Inche Ismail b. Ngah Marzuki, on 13th February, 1970.

A crowded programme was drawn up for the guests by the Penang Port Commission. The programme included a tour of the Port installations both on the Island and mainland side of the harbour. Accompanied by the Chairman, General Manager and Heads of Departments, the guests were taken around the recently completed Butterworth Deep Water Wharves on the mainland. The 57 million Malaysian dollar project capable of accommodating five Ocean Carriers, is the latest and largest developed project undertaken by the Penang Port Commission. The guests were shown the two berths specially built for container traffic, and the extensive land reserved as marshalling yard for containers.

Mr. Swanson and Mr. Akiyama were impressed with the layout of the whole area, and commended the Port Commission for its far-sighted policy in providing for container traffic at the new Wharves.

Accompanied by the Chairman and General Manager of the Penang Port Commission, Mr. Swanson and Mr. Akiyama paid a courtesy call on the Chief Minister of Penang, Dr. Lim Chong Eu at his office. Later they called on the Governor of Penang, Tun Syed Sheh Barakbah and his wife, Toh Puan Sharifah Fatimah at their residence.

Mr. Swanson and Mr. Akiyama also had discussion with members of the Commission and senior Port officers on port development, particularly in this part of the world.

The guests were taken on a tour of the city and to many of the tourist attractions on the Island of Penang, such as the Snak Temple, the Aquarium and the Botanical Gardens. The tour included a visit to Penang Hill, 2000 ft. above sea level from which vantage point they had a bird's eye view of the whole city and harbour. (Penang Port Commission)
**Visit of IMCO Official**

Karachi: — Mr. Leighton of I.M.C.O. visited the Karachi Port on 18th November, 1969 and called on the Chairman, K.P.T. He explained the working and functions of the I.M.C.O. and discussed the problems of mutual interest.

The Chairman, K.P.T. outlined the Ports development programme and the future planning strategy. Mr. Leighton was gratified to learn from the Chairman, K.P.T. that the Karachi Port had trained Pilots from Somalia, and requested the Chairman if such facilities could be made available for training of Pilots from other under-developed friendly countries. The Chairman, K.P.T. agreed that K.P.T. would offer similar training facilities in the future.

During discussions with the Chairman, K.P.T. Mr. Leighton stated that the I.M.C.O. would be in position to provide training facilities for Pilots of Karachi Port for the handling of large mammoth tankers for the Port future Bulk Oil Terminal. Mr. Leighton assured the Chairman, K.P.T. that I.M.C.O. would offer training fellow-ship for K.P.T. Officers. Later, Mr. Leighton was conducted around the Port on board the tug "FIRDOUS" and shown the Port's new handling of large mammoth tankers for the future.

**ICHCA-U.K.**

London:—The implications of a predicted 40 to 60 per cent increase in world trade within ten years, the standardisation and simplification of cargo document systems and an address by the recently appointed Chairman-designate of the proposed National Ports Authority are the highlights of this year's International Cargo Handling Co-ordination Association conference in London.

To be held at the London Hilton on June 4th and 5th, the conference will have as its theme 'International Cargo Handling in the 70s'. It is being organised by the U.K. National Committee of I.C.H.C.A.

On the first day the conference will be opened by the Lord Mayor of London after which port, shipping and land transport experts will deal with the problems arising from the expected world trade increase before the end of the 1970s, in line with the U.K. Committee's aim to ensure that the implications of such an increase are fully realised by all concerned. The introductory paper will be given by Mr. P. E. Cangardel, President of the Union Industrielle et Maritime on the subject 'Growth of World Trade, 1970~80'. The other papers to be delivered on June 4th will be 'Developments in Australian and Far East Ports', by Mr. E.A.C. Howells, E.R.D., Chief Docks Manager of the British Transport Docks Board, Southampton; 'Developments in Sea Transport', by Dr. E.C.B. Corlett, Managing Director of Burness, Corlett and Partners Ltd. and 'Developments in Land Transport', by Mr. T.R.V. Bolland, Assistant Managing Director of Freightliners Ltd. Discussions will follow all papers.

On the morning of the second day, members of the Simplification of International Trade Procedures committee (SITPRO), introduced by the Rt. Hon. Lord Thorneycroft, P.C., will explain the findings and recommendations of their recently published report.

Mr. G.H.B. Cattell, Director, Manpower and Productivity Service, Department of Employment and Productivity and chairman of the National Modernisation Committee for the Ports Industry will sum up the conference.

On the evening of the fourth June, a formal dinner for all conference delegates will be held at the Hilton Hotel when the main speaker will be Mr. Peter Parker, M.V.O., Chairman-designate of the proposed National Ports Authority.

The conference is being arranged in association with the 4th International Container Services & Equipment Exhibition to be held at Olympia, London between 1st and 5th June, 1970.

**Container Terminal**

Glasgow, 4th March:—The rapid build-up of container traffic has prompted the Clyde Port Authority to seek Government approval for a £1½ million extension to the Clydeport Container Terminal at Greenock.

Plans have been made to extend the 850-foot quay by 330 feet, to add a further six acres to the 22-acre container parking area, and to provide a third container transporter crane and more straddle carriers so that two vessels may be berthed and worked simultaneously.

Hapag-Lloyd Container Lines are the terminal's newest customers.

Head-Donaldson Liners have three-weekly sailings to Canada, scheduled to become weekly in April through a joint operation with CP Ships in association with Manchester Liners.

Meanwhile, the Authority is negotiating for more services with a number of other container lines which are becoming increasingly aware of the advantages of using a deep-water terminal with sheltered, fog-free approaches in a port with an enviable record for good labour relations.

The increase in traffic will be further affected by the commissioning this summer of a Freightliner railhead bringing trains loaded with containers from any part of the country to within 200 yards of the berth. (Clyde Port Authority)

**Joint General Manager**

Liverpool, 6 February: — Mr. George W. Brimyard, Freight Manager, London Midland Region of British Railways, has been appointed a Joint General Manager of the Mersey Docks and Harbour Board as from March 1st next.

In November last it was announced that the Board had decided to divide the management structure under the Director General by appointing Joint General Managers, each with a specific area of activity. Mr. James H. Mundy, who has been with the Board for 40 years, and previously Assistant General Manager, was appointed Joint General Manager responsible for policy and administration and Mr. Brimyard will be responsible for commercial and operational activities.

Mr. George Welsh Brimyard, B.A.

**Corporate Planning Manager**

Liverpool, 2 January: — The Mersey Docks and Harbour Board are to form a Corporate Planning Unit and Mr. Andrew Davidson, their Personnel Manager, has been appointed Corporate Planning Manager.

The Board consider it essential that in view of rapidly changing trends in sea transport and the increasing capital intensiveness of port operations, it is imperative to take all possible steps to ensure that the Port's existing facilities are studied as part of the overall modernisation programme.

The Director General, Mr. Robert S.F. Edwards, C.V.O., C.B.E., said today, "The Board have taken this decision because Heads of Departments are already fully occupied and the Corporate Planning Unit will be free from day to day departmental responsibility. Their main function will be to plan ahead. The Port of Liverpool is in direct competition with every other British and European Port and its future depends on our ability to provide a first class service at competitive rates. This means that we have to take a very hard look at ourselves and see that our expenditure is made where it can be most effective and all unnecessary facilities phased out."

Mr. Andrew Davidson has been Personnel Manager since 1962. Previously he was an Assistant General Manager and for many years represented the Board in London. He is the son of the late Sir Jonathan Davidson, C.M.G., at one time City Water Engineer at Liverpool. Mr. Davidson was educated at Fettes College and was commissioned in the Liverpool Scottish in 1937. During the Second World War he served in Norway and with the Central Mediterranean Forces, attaining the rank of Major. (Mersey Docks and Harbour Board)

**Closing Railway Service**

London, 2 March:—The Port of London Authority have announced that after close of work on Friday, May 1st conventional rail services direct to individual berths in the Royal Docks and the India and Millwall Docks will be withdrawn.

A special link will be retained for heavy lifts of up to 25 tons gross weight to the heavy lift berth in Royal Victoria Dock.

On and after May 4th wagon load traffic for these docks will be dealt with by a alternative services which British Railways Board will provide. They will be advising customers about facilities which will make use of road haulage between the docks and a suitable railhead.

National Carriers Ltd., in collaboration with B.R.S. (Parcels) Ltd., will continue to provide services for small and middle weight freight.

Freightliners Ltd., operate daily services between main industrial centres of Great Britain and their London terminals and will, by arrangement, provide road haulage services between these and the Royals and India & Millwall Docks.

The PLA have suffered heavy financial losses on their conventional rail system for some years now
and these can no longer be justified. The well established transition to the movement of cargo by container systems and the development of the freightliner system are resulting in ever decreasing tonnages over the conventional dock railways.

The closure of the PLA's rail network will enable them to develop the docks to cater more efficiently for the modern methods of cargo handling. (news from PLA)

Shareholders' Meeting

Manchester: — The Manchester Ship Canal Company announce that the net surplus for the year 1969 is £1,843,097 after:—

1) bringing back provisions no longer required from the revenue of earlier years totalling £624,233 (including £310,000 in respect of taxation);

2) providing £574,726 for depreciation, £404,263 to major maintenance equalisation accounts and £700,000 for taxation;

3) meeting interest charges of £701,840;

4) setting aside £53,520 to the sinking fund for redeemable loan capital.

At a meeting which took place this morning the Directors resolved to recommend to the Shareholders at the Ordinary General Meeting to be held on February 27 the following dividends:—

5 per cent on the Preference shares

11 per cent on the Ordinary shares plus a special payment of 1.685 per cent out of the amount brought forward from 1968 and which would have been paid if dividend restriction had not been in force.

The balance of the surplus has been set aside as follows:—

£200,000 to a dividend equalisation account

£966,344 to general reserve.

Because of a new form of accounts prescribed by the Minister of Transport no strict comparison can be made with figures for 1968. If the provisions brought back from earlier years to the revenue account for 1969 are subtracted the comparable net surpluses were 1968 — £836,638; 1969 — £1,218,864. (The Port of Manchester, February 9)

Container Port

Le Havre:—Due to the arrival of the ATLANTIC CAUSEWAY, December 5th, 1969, the Port of Le Havre is now the port of regular calls of five major world companies specialized in container transport: the American companies Container Marine Lines, United States Lines, Sea-Land and Moore McCormack as well as the European consortium Atlantic Container Line which owns the foresighted vessel. The units of these five companies actually ensure 25 calls monthly. We must add to these transatlantic lines the services between France and Ireland ensured by the France Ireland Line and Palgrave-Murphy.

Thus is won the wager that the Port of Le Havre Authority undertook several years ago concerning this controversial means of transportation now accepted as an irreversible fact.

The adaptation of the Port of Le Havre to this traffic includes three stages:

1st stage — Foreseeing as soon as 1966 beyond the realities of today, the Port of Le Havre has installed at “Quai de la Floride” a berth suitable for coasters and for large vessels equipped with their own gear.

2nd stage — The construction of the “Quai de l’Atlantique”, equipped in view of transatlantic and coastal container traffic only, was begun at the same time in the extension area of the “Bassin de Marée”. The quay offers a length of 800 m permitting the berthing of three large vessels, a storage area of 12 hectares and modern equipment including essentially four 40 t gantry cranes.

3rd stage — Finally, in the new canalized zone of the port (bassin Sud-Est) a 1,200 m quay will be built serving an area of 50 hectares. The first of the four berths could be completed in 1971, simultaneously with the world’s biggest marine lock, giving access to this quay.

In 1972 seven berths for container-carryers will be in use and will permit the Port of Le Havre to confirm and to reinforce its rank in the European Market concerning the traffic in question.

Standardized Container Traffic at Le Havre

1966 1,600 units
1967 6,600
1968 17,600
1969 31,200

Principal Realizations of the Port in Favour of Transatlantic Container Traffic


December 27, 1968 — First call of a container-carryer of the United States Lines AMERICAN LANCER who inaugurated at the same time the berth n°1 of the “Quai de l’Atlantique”.

October 12, 1969 — First call of a Sea-Land container-carrier the MOSTANGEN.

November 14, 1969 — The MOSTANGEN inauguates berth n°2 at the “Quai de l’Atlantique”.

December 5, 1969 — First call of an Atlantic Container Line vessel, the ATLANTIC CAUSEWAY, inaugurating the links to allow access on board to merchandise transported by lorry, for which the A.C.L. vessels have also been constructed.

February 27, 1970 — For the first time, the “Quai de l’Atlantique” is completely occupied by three big container carriers, the MOSTANGEN inaugurating berth n°3.

April 15, 1970 — First call of a Moore McCormack container-carrier the MORMACSEA. (expected)

N.B.: This chronology does not take into account the conventional vessels adapted to container traffic. (Port of Le Havre Authority)

Record Year 1969

Bremen, February 2—1969 was indeed a record-breaking year for the Ports of Bremen/Bremerhaven.
For the first time in their history the total amount of cargo handled exceeded 20 million tons. The 10-million-ton mark was passed in 1955 and the 13-million-ton mark in 1960. The calculation shows 20.74 million tons—an increase of 1.75 mill. tons or 9% compared with 1968.

Furthermore it has been calculated that there was also a remarkable increase in the turnover of general cargo by more than 8% to a total of 11.15 million tons. This development is partly due to the fact that the amount of container traffic increased to 73,311 containers of the 20’, 35’ and 40’ types (117926 on 20 feet basis), which is equivalent to 8208457 tons. These figures exceed even the optimistic estimates made at the beginning of last year. The achievements of 1968 (46,873 containers with 464,553 tons) have been exceeded by 56% with regard to the number of containers and by 76% with regard to the tonnage. By the introduction of the full-container service of the Seatrain Lines, Inc., on the US route at the end of 1969 and of the liner service of the Australian Container Service starting in August of this year the amount of container traffic will be increased still further, so that we can expect a total of more than 90,000 containers by the end of 1970.

As one of the directors of the Company emphasized, the Bremer Lagerhaus-Gesellschaft will make due allowance for this development in container traffic as well as in conventional transport and has made plans for further investments. On the one hand the Ports of Bremen/Bremerhaven have been trying to strengthen their leading position in container traffic by building new specialized berths and facilities on the open sea in Bremerhaven; on the other hand there will be an extensive expansion programme in the field of conventional cargo handling. Above all these investments are intended for the expansion and modernization of the present shed facilities. The expansion of the shed No. 20 in the Neustadt Docks by one further sec-

tion to a total area about 33,300 square metres is to begin in spring 1970. It is also planned to start enlarging the consolidated cargo distribution shed, “Weserbahnhof”, by about 6,000 square metres to nearly 19,000 square metres. The reconstruction of shed No. 17 in the “Überseehafen” is also to be started at this time. These investment projects should probably be completed by approximately the beginning of 1971. In addition to this the Bremer Lagerhaus-Gesellschaft will put two further floating cranes with a lifting capacity of 100 tons into operation in February and April of this year.

After completion of these building projects the Ports of Bremen/Bremerhaven will be in a position to offer shippers as well as shipping companies an even quicker service and will be able to adapt themselves very easily at any time to the development of both freight and shipping traffic.

**Total amount of cargo handled in the Ports of Bremen**

**Total amount**

- 1968: 18,985,800 t
- 1969: 20,740,100 t

**General cargo**

- 1968: 10,361,700 t
- 1969: 11,145,900 t

**Bulk cargo**

- 1968: 8,624,100 t
- 1969: 9,394,200 t

**Container traffic**

- 1968: 20'=23,898=204,128 t
- 40'=22,975=260,425 t

Total=46,873=464,553 t

- 1969: 20'=28,696=266,085 t
- 40'=44,615=554,760 t

Total=73,311=820,845 t

(Ship via Hamburg, December)

### Port of Nacala

Lourenço Marques:—The man is fortunately still living and is therefore able to follow the rising progress of Nacala, who in the last quarter of the century, with the same clear sightedness that was well indicated in his wide activity in the Port and Transports of Moçambique, worked most for the construction of the Port of Nacala. Not always properly understood, and having to fight against big interests which concerned themselves with other areas, which neither on a long nor short term basis could in any way be substitutes for an exceptional port like Nacala, he waited patiently, but not without a struggle, for the right moment. This came when Dr. Vieira Macha-
Port of Nacala, Expansion Plan

The truth, however, is that Nacala took its time to get started, although it was fully evident that it was the port par excellence of the North of Moçambique, just as Beira was that of the centre and Lourenço Marques that of the South, without here taking into account the vast hinterland which any of them serves.

The references to the bay of Fernão Veloso, which is separated from the Indian Ocean, by the peninsula of the same name, have always been enthusiastic, even in far off days.

With a length of 13 kilometres and width more or less of 5 kilometres, it covers an area of about 6500 hectares, having a wide entrance of more than 1000 metres and depths of water to the order of 60 metres.

It is a magnificent port, completely sheltered, and they were, the men of old who alluded to it so frequently, it being strange however that it was never used as a port of call by the early Portuguese navigators.

Engineer Pinto Teixeira had even more reason when, foreseeing the development of Niassa and the countries in the interior, he realised clearly that it would have to be the port to be utilised in the future and he did everything to see that those who had the last word would so declare.

It was the Minister, Dr. Francisco Vieira Machado, referred to above, who nominated the commission to study the port, putting at its head Eng. Viriato Canas, who presented the general plan and project in 1941.

Later on, Engineer Miranda Guedes was entrusted with a new study, which he presented in 1953.

In the meantime, with some basic arrangements promoted by the C.F.M., it was possible to open the Port to navigation in 1951 and in 1952 statistics show that the port already handled 67,149 tons of cargo.

This reached 176,094 tons in 1958. By 1964, already in different conditions, cargo handled was 185,078 tons and the total reached 500,000 tons in 1968.

With the connection of the Moçambique system to the Malawi Railways, which will be commissioned into service in July of 1970, a greater traffic of cargo will flow to the Port of Nacala, from Malawi as well as from the district of Tete. (Boletim Portos, Caminhos de Ferro e Transportes de Moçambique, August, 1969)

S/S “Montenaken”

Lourenço Marques:—The Compagnie Maritime Belge (Lloyd Royal) has commenced a regular service between Europe, South Africa and Moçambique.

The “Montenaken”, which inaugurated this service, was in the port of Lourenço Marques in the middle of this month, and Miller, Weedon and Salm, the Agents for the Owners in the capital, took advantage of this to hold a reception on board. People connected with this activity were received on board, where the ladies struck a note of refined elegance. (Boletim Portos, Caminhos de Ferro e Transportes de Moçambique, August, 1969)
Container Traffic

Barcelona:—Several numbers of this Bulletin have included short notes on the progress of our facilities for container traffic and the evolution of this traffic in recent years. In view of the importance of this subject, we wish to devote this number mainly to a general summary of the matter and to express all that has been done and is being done in this field in the Port of Barcelona.

Small size container traffic had been operated for a long time with the Canary and Balearic Islands, but the generalisation of the system on the basis of the large ISO containers dates from 1966 only, when the first regular line was established with the Port of New York through the American Export Isbrandtsen Line.

From that time up to date, traffic of this nature has grown extremely rapidly and we frequent hear of the opening of new lines. Currently we have two regular lines, the Isbrandtsen above and the Fabre Line.

The former uses vessels with on board unloading facilities, converted merchantmen of the Export Challenger, Export Champion type, etc. and the latter uses medium sized cellular container transporters such as Meta Reitz, Willi Reitz and Ede Reitz.

To cover this traffic, we have arranged two provisional terminals, one situated in the angle formed between the Poniente Sur and Costa Wharves, which has already undergone 3 extensions and currently can handle 350 20 ft. containers. This terminal is served by 3 wharfside, modern, speedy 15 ton cranes which can unload 96% of the 20 ft. containers:

For the Fabre line, we have arranged another provisional terminal on the Poniente Norte Wharf with a capacity for 160 containers where unloading is performed by the on board facilties these vessels have. During the first eight months of 1969, these two lines have moved a total of 8,000 containers, representing a volume of transported tonnage of 84,000 tons. If we compare these figures with the tonnage handled in 1968 (48,000 tons in 7,000 containers) and with the tonnage handled in 1967 (42,000 tons in 6,000 containers), we can see the quick growth of this system. Independently of the above, up to date this year 103,000 non unified containers of different sizes have been shipped on mixed cargo vessels.

The progressive acceptance of this system is shown by the announcement that as from January 1st next, the Sea-Land Company will be making a weekly voyage with 40 or 50 containers picked up or left by a vessel in the Genoa Terminal and also the announcement that as from March 1st, the MacAndrews Co. will be making a fortnightly sailing with 100 containers for Barcelona as base port for transit to Tarragona and Valencian.

In the coastal trade, the Spanish companies have not been left behind and thus the Naviera Mallorquina will very shortly be installing a terminal on the Clock Wharf with a capacity for 350 containers, in fractional multiples of the ISO size. These will be carried in two 80 m. long vessels now under construction specially for this type of transport. It is expected that this service will come into operation during the early months of 1970.

One very definite example of the extremely rapid growth of this type of cargo is the channelling of footwearexports. One single North American chain creates an annual movement of 1,000 20 ft containers for the Port of New York.

The Port Authority of Barcelona, in its wish to provide the necessary facilities for the channelling of this traffic, decided to build a special wharf as a container terminal. This will have a capacity for 1,200 20ft. containers, with a section for refrigerated containers, 214 linear metres berthing and 14 m. water depth.

The shed for the formation or emptying of containers will measure 40,361 sq.ft. and the terminal has three railway sidings, refrigerated container section, etc. Work started on this terminal on April 11th, 1969, is currently progressing at full speed and is expected to be finished for the first half of 1971.

We reckon that it will very likely be necessary to extend container transport connections with the use of roll-on/roll-off ferries and also the conversion of cargoes unshipped by one or the other type into mobile units suitable for TIR transport and vice versa.

A result of the above is the planning of a 15 Ha. complex alongside the container wharf under construction. This complex includes berthing for 6 ferryboats, a compound for TIR goods with 269,070 sq.ft. covered storage space and parking for 350 trucks, a passenger terminal, for home and international traffic, cargo consolidation and break-down warehouse outside the Customs area, ancillary facilities such as hotel for truck drivers, servicing station, etc.

All these facilities together, budgetted in 350 million pesetas, will provide a port unit of the most modern type, capable of receiving and channelling enormous amounts of traffic because of the ease of connection with the motorways already being built by the State and the future centralised goods station in Barcelona. For handling the containers on land, we have currently 4 straddle carriers, two mobile cranes and one transfer gantry crane, all belonging to the Port Authority, apart from forklift trucks and side loaders belonging to private stevedore firms.

Currently we have a tender open for the acquisition of a 50 ton, 34 metre reach gantry crane for quick discharging of cellular vessels. The delivery of this crane will coincide with the commissioning of the container terminal currently in construction.

Through the provisional facilities and the final ones planned and under construction, the Port of Barcelona offers home and international transport systems the necessary facilities for channelling an extremely high tonnage. (Puerto de Barcelona, Boletin Informativo, Sept. 1969)
Your new CONTAINER PORT—S. ATLANTIC is almost ready

In May, containerized general cargo movement to and from the United States will benefit from the speedy and efficient handling Savannah's new container facility will provide. This 20-acre paved terminal features new, double rail marginal berths, service by major rail and truck lines and a container crane larger than any in the U.S. and faster than any in the world. The Port of Savannah, long the leading general cargo port on the U.S. South Atlantic, will soon become the leading container port for the region. Route your container shipments through Savannah and enjoy the savings.

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Georgia Ports Authority's new container facility at Savannah is scheduled for completion in May.

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