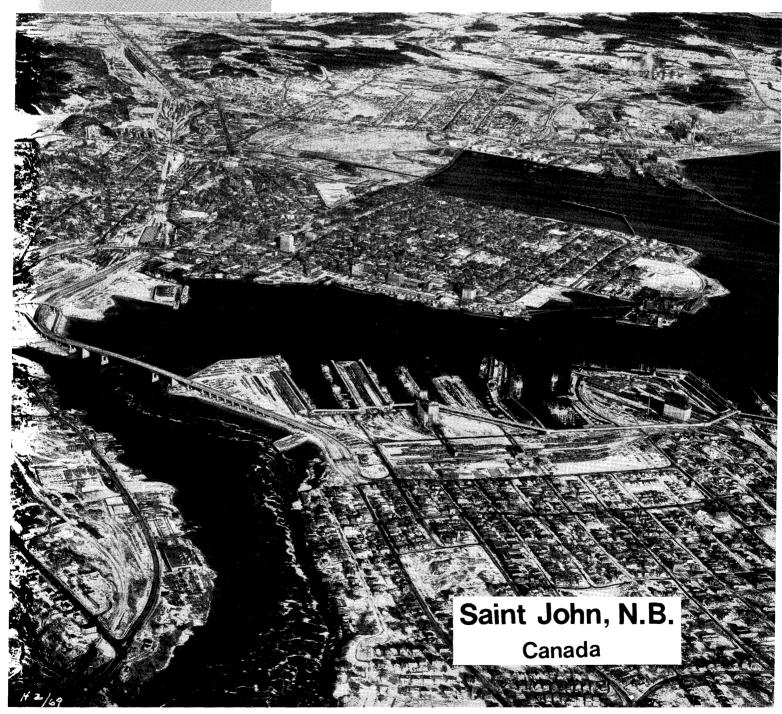


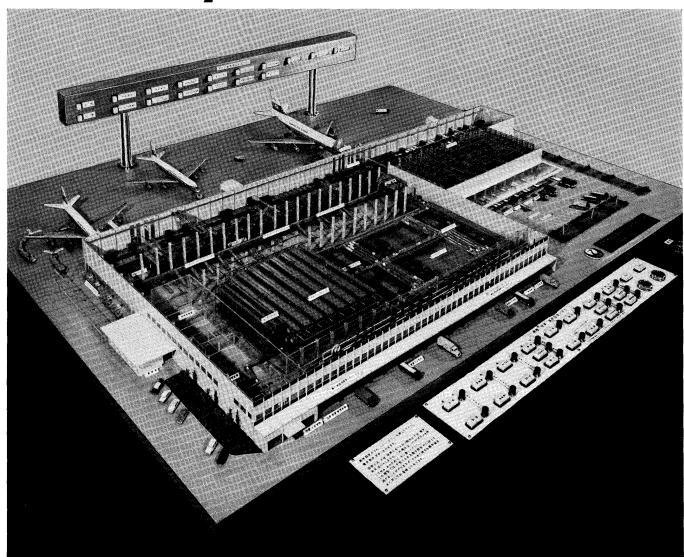
# PORTS and HARBORS

June, 1970 Vol. 15, No. 6



**MONTREAL CONFERENCE IAPH JUNE 1971** 

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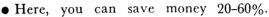
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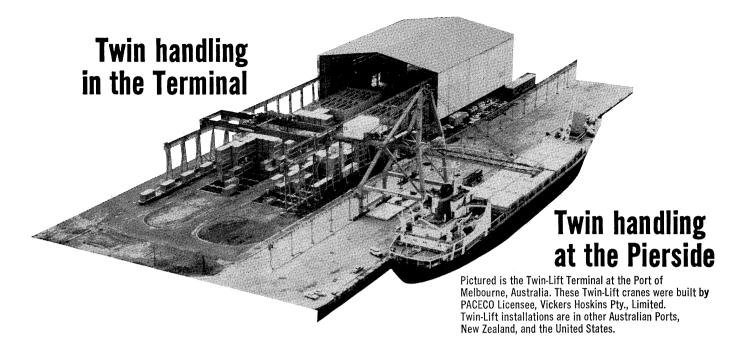
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# PORTS and HARBORS

Published monthly by

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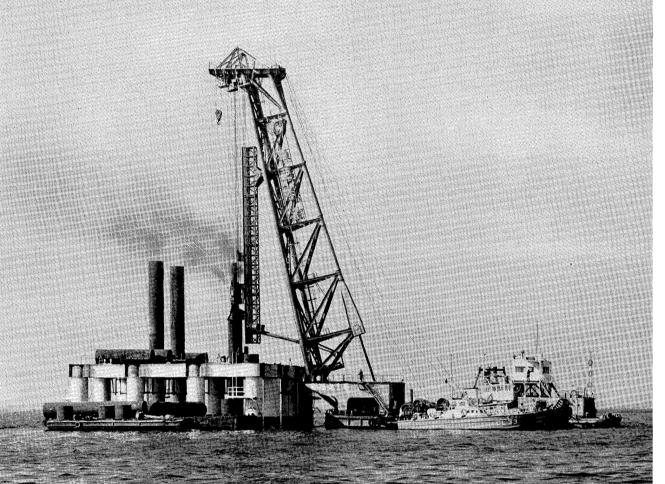
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Downtown Saint John, N. B., Canada, main harbour in foreground, Courtenary Bay in backgorund. See also text on page 21

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# PORTS and HARBORS

#### Forum on Port Problems:

# The Port Authorities' Role In Port Security

Address by Mr. H. A. Mann Chairman, National Harbours Board

At the Conference on the Formation of an International Association of Port Police Boston, Massachusetts, U.S.A.

March 11, 1970

Mr. Chairman, Honored Guests and Gentlemen,

I am pleased to be here today to take part in the Conference on the formation of an International Association of Port Police. The interest of the National Harbours Board of Canada in port policing and security and, more particularly, its international aspects, is demonstrated by our strong representation at this Conference.

I would like to take this opportunity of thanking Mr. Edward J. King, Executive Director, Massachusetts Port Authority, and Captain Robert E. Herzog, Massachusetts State Police in charge of security at the Port of Boston, for hosting the Conference.

At the symposium held in Toronto, Ontario, in 1968 I told you something about the reorganization of the National Harbours Board Police and Security Force; I mentioned also at that time that the Government of Canada was looking at the reorganization of its many harbours and ports.

This look at Canadian ports is part of an overall look at the role which should be performed by our Federal Department of Transport. An exhaustive study of this was completed by a Task Force recently and sweeping changes are in the making in all sectors of our federal transportation administration. What

will emerge will be a Ministry of Transport with functional Administrations for Air, Surface, Marine and Arctic Transportation as well as a Research and Development Administration.

Of possibly the greatest of your group is an indication of where we intend to go with our ports. As you may know, we—like many countries —have been jogging along on a port administration structure which is an amalgam of historical factors, political expediency and shy attempts at rationalization. This is no longer good enough today. My own organization which administers many of Canada's most important international facilities, has been urging changes and has made its recommendations for a few philosophy and a new structure.

Basically what will emerge is a new Central Ports Authority whose prime function will, within the projected Canadian Marine Transportation Administration, be that of having an overview of the total needs of the Country. This national body will deal with policy and the assessment of priorities. Regional interests will be represented on the national authority but not necessarily on a full-time basis. There will be local authorities at the major harbours charged with the day-to-day management of the ports on the principle of maximum cost recovery



Mr. Howard A. Mann

and with the duty of keeping themselves competitive.

To use the words of Canada's Minister of Transport in a speech in Montreal only yesterday, March 10: "Under this principle of a Ports Authority then, we could integrate the harbours which are at present administered by the National Harbours Board, the Commission Harbours which have been reporting to the Minister of Transport and many of the public harbours which have been managed by the Department of Transport".

I think we can look forward to exciting days in Canada's transport administration. Our own organization has, as I have said, been part of the thinking and shaping process which has gone on and will continue to go on in the admittedly complex field of port administration. Many of our people and the people now working in Harbour Commission ports and public harbours will find an expanded field for their skills which have, after all, provided Canada with its many modern ports.

Port Security, of course, is one of the areas of skills which is extremely important.

The last time I had the pleasure of meeting port police officers was about two years ago. At that time many of you who are here today got together at a meeting hosted by our good friends of the Port of Toronto to explore methods of closer co-operation between international port police forces.

It was just about the time when our organization, the National Harbours Board, had recently adopted a new concept and structure for its Police and Security Force. I could only tell you at that time what we were hoping to achieve under this new concept.

Today, two years later, I can give you—with almost immodest pride—a progress report on what has been achieved. In these two short years the unification and professionalization of our NHB police has gone on with great vigor. A new pride pervades our force, a pride of being professionals, free from petty interferences, able to do a proper job of law enforcement. We, on the management side, have thrown our full support behind the restructing of our port policing methods.

Judging by the complimentary remarks now being heard about the National Harbours Board police, this restructing has been successful. That it has been so, is due to the men who have done the work, the commanding officers of our port police forces under the leadership of the Board's Director General of Police and Security, Don Cassidy. They are all here and I want to pay tribute in public and before their peers to Director Hobbs, Port of Montreal, Director Ciunyk, Port of Vancouver, Director Dollard, Port of Quebec, Director Taylor, Port of Halifax and Director Fraser, Port of Saint John.

We think that the organization we have built has some merit and I thought it might be useful if I looked at the port policing concept from the management side today.

What is the role of the Port Authority in port security?

It is the Port Authority's duty to take all reasonable and economically justifiable measures to preserve the peace and to prevent the commission of illegal acts on its property. In order to achieve this end we maintain our own police force of duly sworn peace officers to patrol and guard our property, to investigate incidents of illegal nature which take place on our property, to prosecute offenders and to co-oper-

ate with various police agencies as may be required in order to gain added security, exchange of information, and assistance during emergencies.

The Director General of Police and Security has the responsibility for the administration and direction of all Police and Security operations throughout our ports.

At the major ports we have senior police officers with authority to initiate action as considered necessary in order to ensure the adequate protection of persons and property. The port manager and the senior police officer at each port consult on matters relating to the protection of property and persons using our harbours.

The senior police officer at a major port may have one or more smaller ports under his care for police purposes. Consequently, we have five field officers at the Ports of Halifax, Saint John, Quebec, Montreal, and Vancouver with a police service on a system basis available to smaller ports.

The members of our Force have all the powers, authority, protection and privileges of a police officer under the Criminal Code of Canada, i.e., to preserve and maintain the public peace.

The officers and other ranks of the Force are, as I have mentioned, under the direction and control of the Director General. All subordinate ranks are subject to the lawful orders of a superior officer. There is and there must be a clear and indisputable chain of command straight down from the Director General. This chain of command does not go beyond him. His field officer at our ports is not subject to the order or direction of other port officers in relation to his duties as a police officer or to the deployment of his men or action to be taken in individual cases. His primary duty is to see that order is effectively maintained and that the law is impartially enforced.

In this he and the members of our Police Force have a dual responsibility: first they have their responsibilities as Police Officers under the law of Canada. Secondly, they have their responsibilities under the policies of the National Harbours Board for the policing and security of the property entrusted to its administration.

As Police Officers they are responsible for their actions to the elected representatives of the people, the Attorney General of the Province in which any of our ports are located. As NHB employees they are responsible through the Chairman of the National Harbours Board to the members of the Board itself who are appointed to their positions. As you will see, therefore, the members of our Police Force are subject to civilian control from two sources and without interference in their lawful duties as police officers.

The Force, while functioning on its own, provides a police service to our port managers and to other officials as and when required without pressure of any kind being exercised on its duties and responsibilities or on the decisions required to be made by its members.

A police force in order to function properly must be free of all influences in connection with the administration of justice, law enforcement, the progress and conclusion of cases requiring police action, both within and outside the Port Authority's jurisdiction, the selection of personnel, their discipline and promotion.

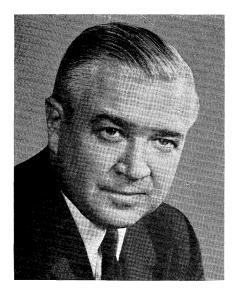
The services of our Police Force are available to those of our staff who operate the ports. At the same time the members of the Force are responsible solely to their supervisory officers for the performance of their duties.

Consultation on port operations requiring police services must commonly take place in an atmosphere of confidence between the Port Authority's officers and the senior officers of the police force.

The reorganization of our Police Force has meant that overall enforcement policies and the investigation of crime which present many difficulties are co-ordinated both internally and with other police forces.

The NHB Police Force depends greatly on the co-operation and assistance of port management for consultation on all matters relating to policing requirements; for the determination of whether policing and security services are adequate and for consultation on the security requirements in the planning and de-

(Continued on Next Page Bottom)



Mr. Austin J. Tobin

Since the biennial conference in Melbourne during March of last year, the Committee on International Port Development has been active in many areas and has several new projects under way. A quick review of those projects completed since March follows:

#### Military Sea Transportation Service Cam Ranh Bay, Vietnam

In March 1969, we received a request from Commander D. F. Dally, Officer-in-Charge of the Military Sea Transportation Unit at Cam Ranh Bay, Vietnam. He had been given the responsibility of doing some preliminary planning work for the organization of a civilian port authority in Cam Ranh Bay once the war is over, and military forces are withdrawn. We provided Commander Dally with material about the his-

velopment of installations so that police resources will be available when needed or removed if no longer required.

On the other hand, it is of vital importance that port management be kept informed by the police of matters of particular importance and of the issues involved as conditions of security may permit. It is also important that port management keep the police informed of matters which concern them. Briefings must, therefore, be as full and as frequent, at all levels, as circumstances allow.

I hope that these brief and, albeit, incomplete remarks will be of some use to you.

# Report on Activities of Committee on International Port Development

#### By Austin J. Tobin

Committee Chairman

To the I.A.P.H. Executive Committee, Singapore, February, 1970

tory and organization of The Port of New York Authority and also general background material on port operations and administrative procedures obtained from various sources, including the United Nations.

#### India Report

In Melbourne, Mr. Tobin reported in detail about the Indian Port Survey Team. At that time, Dr. Rao, the Minister of Transportation and Shipping in India, had requested that the team's final report not be made public. In April of last year, we received permission from the new Minister of Parliamentary Affairs, Shipping and Transportation, Mr. K. Raghu Ramiah, giving us permission to distribute the report. Subsequently, we forwarded copies of the report to all those who had requested it during the previous year—the head office of IAPH, the United Nations, both in New York and ECAFE in Bangkok.

### Federation of Industries of the State of San Paulo, Brazil

During the spring, we received a request from the Federation of Industries of the State of San Paulo, Brazil for a copy of a study on port costs prepared for the Economic Commission for Latin America presented at the first conference of the United Nations Conference on Trade and Development. After corresponding with the Economist Intelligence Unit in London, who had originally prepared the report, and after receiving clearance from UNCTAD, a copy of the report was obtained and sent to Brazil.

#### World Bank

At the request of the Personnel Division of the World Bank, we arranged an in-training program for Mr. Paulo Meira Camacho Crespo, a Brazilian United Nations Development Program Fellow. Mr. Crespo is the legal counsel for the Brazilian Transportation Policy Group and was interested in learning about the legal aspects of port operations. Mr. Crespo spent the week of June 9 in the Port of New York Authority Law Department and Marine Terminals Department. The following week, arrangements were made for him to visit the Port of New Orleans. In the case of United Nations Development Program Fellows, the World Bank frequently acts as Executing Agency.

### United Nations Conference on Trade and Development

The Committee received a request from UNCTAD to review a draft publication entitled, "The Role of the Freight Forwarder in Developing Countries." This draft publication was reviewed in detail by the Port of New York Authority Planning and Development and Port Commerce Departments.

### Chittagong Port Trust, East Pakistan

At the request of the Agency for International Development, the Committee provided general port organization material to the Chittagong Port Trust in addition to background material on IAPH. The Chittagong Port Trust is presently reorganizing their internal financial operations includ-

ing their budget and accounting procedures.

#### Kuching Port Authority, Kuching, Sarawak

At the request of Mr. Andrew Chan Nam Wah, the Committee forwarded, on several occasions, technical material and plans concerning container shipping and the design and construction of container terminals. The Kuching Port Authority is in the process of planning a new port expansion project which will include facilities for the smaller container ships operating on feeder services.

#### Port Authority of Thailand

Mr. Chalit Sawang Sagdi, Chief of the Port Operations Department, Port Authority of Thailand, requested detailed information on various computer techniques for PERT (Project Evaluation Review Technique) and CPM (Critical Path Method). The Committe provided Mr. Sawang Sagdi with the information requested and also sample training programs for these techniques.

#### Indian Port Management Study Team

At the request of the Agency for International Development, the Committee arranged a sixweek training program for a group of six Indian port officials in the Port of New York during the fall of 1969. These officials included representatives from five different ports in India with varying interests. Their six-week program included a variety of training in the Port of New York Authority, the Waterfront Commission of New York Harbor, the United States Coast Guard, the United States Customs Bureau, and several private stevedoring and steamship companies. As a part of their training, each individual spent 2-3 weeks actually working in a Port Authority department in a job related to their respective fields.

### American Association of Port Authorities

At the request of Roger H. Gilman, then President of the American Association of Port Authorities, the Committee helped to publicize the new streamlined vessel quarantine procedure which allows for substituting radio pratique in lieu of anchorage inspections for ships entering U.S. ports from overseas. The new system was tested in several U.S. ports at the end of 1968. It proved to be extremely successful but only one-half of vessel owners requested radio pratique when it was put into effect. For this reason, the American Association of Port Authorities put in effect a program to orient vessel owners and ship captains.

Several projects are currently under way and we have correspondence indicating the possibility of many new projects for 1970. In November of last year, Mr. Tobin sent a letter (copy attached) to all of the developing ports re-affirming the willingness of the Committee to cooperate in any way possible. Since then, we have received inquiries or acknowledgement from the East African Harbors Corp.; the Aden Port Trust; the Marine Department of the Government of Gambia; the Director of Marine, Labuan, Sabah, Malaysia; the Somalia Ports Authority; and the Kuching Port Authority.

In addition, the Committee is working with the World Bank on two training programs for United Nations Development Program Fellows. One is for Mr. Guarin, a member of the planning branch in the Division of Ports and Harbors of the Bureau of Public Works of the Philippine Government. Mr. Guarin will be studying general shipping management, the utilization of statistics for the improvement of shipping economy and, in general, planning of port facilities and shipping operations in the light of maritime economy. The other program is for Mr. Okoue Ibo, the head of the Construction Sub-division of the Port of Abidjan on the Ivory Coast who is interested in studying problems related to port construction and administration, programming maritime transport and port facilities, and port operations.

Also underway is a four-month training program for Mr. Akira Sakata at the Port of New York Authority, the Deleware River Port Authority, and the Maryland Port Authority. Mr. Sakata is an engineer with the Osaka City Port and Harbor Bureau and is receiving training in the planning of container terminals, inter-modal transportation systems, and management procedures and policies in the respective Port Authorities.

Another project first proposed by Lord Simon in September of 1968 is the possible joint participation of IAPH and ICHCA (International Cargo Handling Coordination Association), in cooperation with the Economic Commission for Africa, in a program of seminars for the African ports. There has been a great deal of correspondence concerning this project over the past year but I will not discuss it in detail at this time as it is a separate item on the agenda (IV-3) for consideration by the Executive Committee.

The Committee was bereaved by the sudden passing of Mr. Sidney A. Finnis last summer but at the same time welcomes his replacement, Alderman Sir Kenneth Brown.

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10 PORTS and HARBORS

### Highlights of Ministry of Transport, Canada

(Refer to Page 7, Ports and Harbors, May, 1970)

(For further details, refer to Mr. W. J. Manning, P. Eng., Director, Marine Works, Department of Transport, Ottawa, Ontario, Canada.)

## Ministry of Transport (Chart #1)

The accompanying charts have a threefold purpose:

- 1. They show some of the problems which face the federal government in the field of transportation.
- 2. They indicate the environment in which it must fulfil its transportation role.
- 3. They propose these solutions: clear objectives, recoverable financing and a Ministry system.

# Expenditures on Transportation Goods and Services (Chart #2)

This chart shows the significance of transportation costs in Canada in a single year (1968). (The figures are estimates).

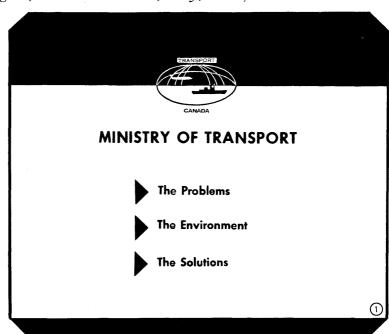
Canadians spent approximately \$12 billion.

Of this amount, about \$10 billion went for direct transportation costs represented by auto, bus, truck, rail, air, water and pipeline.

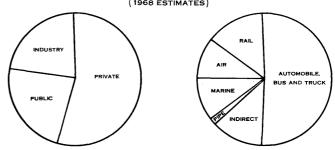
The remaining \$2 billion went into indirect transportation costs: on-site movement of people and goods, transportation inside plants, garbage removal, and also the cost of packaging goods for movement, etc.

Note that slightly more than half the total transportation costs are in the private sector—largely automobiles. Industry expenditures on transportation make up about one quarter of the total. The balance comes from the various levels of the public sector.

It is interesting to note that Canada's transportation bill adds up to about 20% of the \$60 billion gross domestic product (the gross national product less indirect taxes and foreign transactions).



### EXPENDITURES ON TRANSPORTATION GOODS AND SERVICES (1968 ESTIMATES)



TOTAL TRANSPORTATION EXPENDITURES 12 BILLION
GROSS DOMESTIC PRODUCT 60 BILLION

TRANSPORTATION EXPENDITURES = 20% G.D.P.

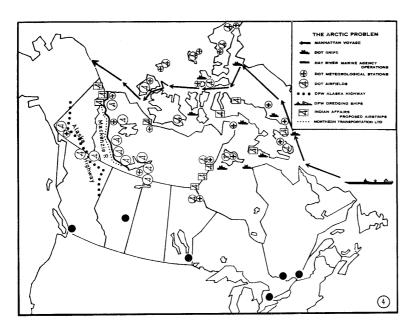
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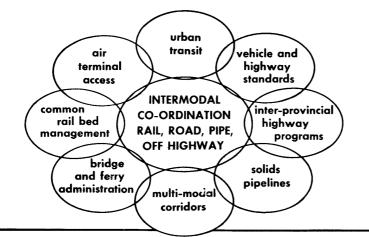
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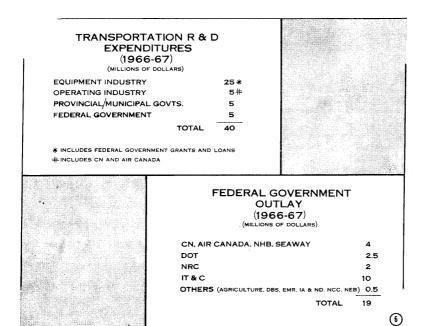
OUTT

JUNE 1970





SURFACE TRANSPORTATION PROBLEMS



# A Marine Problem (Chart #3)

Here we have an indication of the current involvement of several marine organizations in the St. Lawrence Seaway—Great Lakes System.

Four federal groups operate and maintain our great inland water route. These are the St. Lawrence Seaway Authority, the National Harbours Board, the Department of Transport and the Department of Public Works (not shown on the chart). Local Harbour Commissions are also operated throughout the system to meet the requirements of the area in which they are situated.

# The Arctic Problem (Chart #4)

This chart illustrates the present complexity of federal government transport problems in the Canadian Arctic. We have DOT, Indian Affairs and Northern Development, and Public Works departments coping with the difficulties of terrain, distance, weather and high cost operations. These activities are at present controlled from Vancouver, Edmonton, Winnipeg, Toronto, Ottawa and Montreal.

# Surface Transportation Problems (Chart #5)

This chart demonstrates the great variety of modes of surface transport. This poses a major national problem requiring **intermodal** coordination. There is a need to coordinate the activities of provincial and municipal governments in the surface transportation field.

The federal government is now taking the lead in developing motor vehicle safety standards.

The Trans-Canada Highway program demonstrated the need for federal coordination of a national highway system. Solids pipelines have emerged as a realistic and practical form of transportation. The accommodation of several modes of transportation in a single corridor is possible by careful long range planning. It would reduce

(5)

real estate, construction and maintenance costs.

DOT, National Harbours Board, St. Lawrence Seaway, CNR and Department of Public Works all operate ferries and bridges and segments of highways at substantial deficits. It will require uniform management to lower such deficits.

Common rail-bed management is a new concept of ownership by a single agency of rail right-of-way.

Air terminal access involves the transportation problems which must be resolved in cooperation with the provinces and municipalities when constructing a large international air terminal such as for Montreal and Toronto.

Urban transit problems must be taken into account in the planning and development of inter-city links.

#### **Transportation Reserch** and Development (Chart #6)

This chart is an example of a national problem involving the public and private sectors where the federal government must show leadership because the industry involves 20% of the gross domestic product.

The \$40 million now spent on transportation research and development comprises about 0.4% of direct transportation expenditures products and services. Much of this represents federal government grants and loans to the transportation equipment industry.

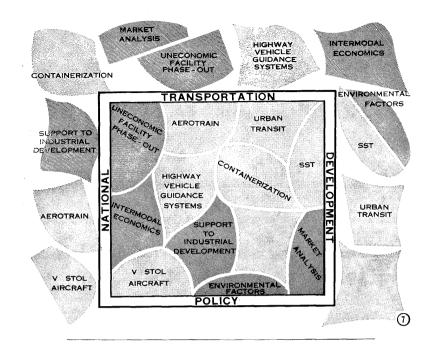
By comparison, the national average for R and D is 1.3% of the Gross National Product.

Most of this transportation expenditure on research and development is dispersed among many government departments.

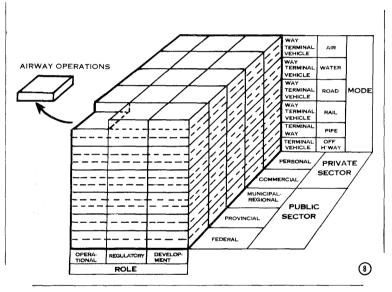
#### **Transportation Research** and development's Complexity (Chart #7)

This chart illustrates the complexity of bringing all the technological and economic aspects of transportation R and D into the framework of a single, unifying policy under an overall leadership.

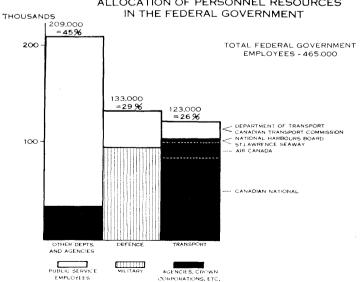
Research and development must



#### NATIONAL TRANSPORTATION FRAMEWORK



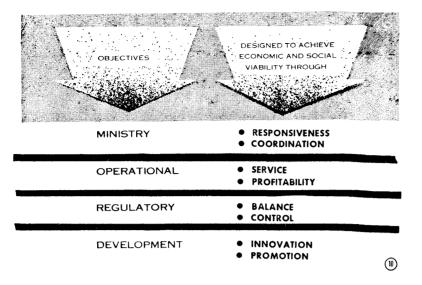
ALLOCATION OF PERSONNEL RESOURCES



JUNE 1970

(9)

#### MINISTRY OF TRANSPORT



#### MINISTRY OBJECTIVE

TO ENSURE THAT NATIONAL TRANSPORTATION

POLICY INFLUENCES AND RESPONDS

TO THE OBJECTIVES AND PROGRAMS

OF THE PUBLIC AND PRIVATE SECTORS.



#### **OPERATIONAL OBJECTIVE**

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.



be promoted in the universities as well as in industry.

We must examine, and base our program, on the long-term social and economic problems.

# National Transportation Framework (Chart #8)

This chart illustrates the scope of national transportation activities. Its vertical dimension shows six modes of transportation (air, water, road, rail, pipe and off-highway). Each is subdivided into way, terminal and vehicle components.

For the pipelines, vehicles do not exist. "Way", of course, is not applicable to off-highway vehicles such as snowmobiles, hovercraft, mobile farm equipment.

The second dimension (depth) identifies five areas of the private and public sectors in which transportation activity takes place—personal, commercial, municipal-regional, provincial and federal.

The third dimension (horizontal) of this block diagram classifies the transportation activities or roles as operational, regulatory and development.

The front face of the block depicts the area of federal transportation activity. It is currently involved, in varying degrees, with all modes of transportation in the operational, regulatory and developmental roles.

# Allocation of Personnel Resources in the Federal Government (Chart #9)

Of all federal government employees numbering about 465,000, some 26% now come under the Minister of Transport. Thus from the standpoint of personnel, the Ministry is comparable in size to the Department of National Defence (which comprises 29% of the total).

Here is the approximate break-down:

Canadian National Railways	85,000
Air Canada	16,500
National Harbours Board	2,200
St. Lawrence Seaway	1,800
Canadian Transport	
Commission	500
Department of Transport	17,000
•	123,000

14 PORTS and HARBORS

It should also be noted that more than 85% of the federal Transport "family" is made up of Crown corporations.

#### The Four Objectives of the Federal Ministry of Transport (Charts #10, 10a, 10b, 10c, 10d)

These charts summarize features of the four objectives of the federal Ministry of Transport.

A primary objective of the Ministry is to respond to the transportation needs of the public and private sectors. Such transportation would support social, economic or national security programs.

In many cases, because of provincial, municipal or private interests in the field of transportation, the Federal Government may play a coordinating role.

The operational objective covers the extent to which the Federal Government should operate transportation services.

It is intended that such services will be financed by the users or beneficiaries of the services, wherever practicable.

A regulatory objective is aimed at maintaining economic stability within the transportation industry by balancing the quality and quantity of transportation services against public needs for such services, and by balancing the cost of new technology against social benefits, such as increased safety.

The regulatory objective also is concerned with the control of standards for transportation facilities, vehicles and vehicle operation, in the interest of efficiency and public safety.

The development objective is concerned with innovating or making things happen, and promoting and guiding research and development activity to best serve national purposes.

# Recoverable Financing (Chart #11)

At the present time federal transportation expenditures are largely covered by general taxation. As the chart shows, such expenditures

#### REGULATORY OBJECTIVE

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 WAY,
VEHICLE, TERMINAL AND OPERATOR PERFORMANCE
ARE ESTABLISHED AND ADEQUATELY MAINTAINED.



#### **DEVELOPMENT OBJECTIVE**

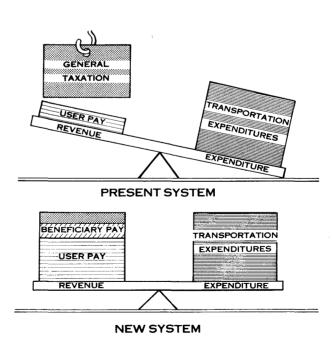
TO ENCOURAGE AND PROMOTE

CONTINUOUS IMPROVEMENT, INNOVATION,

GROWTH OR PHASE-OUT OF MODAL

AND INTERMODAL TRANSPORTATION.





RECOVERABLE FINANCING



DEFICITS MILLIONS WAY 431 TERMINALS 307 738 5 YEAR TOTAL 1308 101 549 785 478 460 264 TERMINAL TOTAL

COSTS

CAPITAL OUTLAY

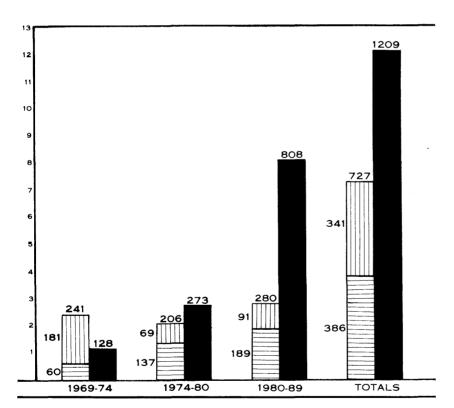
CAPITAL OUTLAY

OPERATING COSTS

OVERHEAD
REVENUES

AIR ADMINISTRATION
CAPITAL AND OPERATING COSTS
VS
REVENUES
1970 - 74
(MILLIONS OF DOLLARS)

12



COSTS

CAPITAL OUTLAY

OPERATING COSTS

REVENUE

MONTREAL AIRPORT AUTHORITY

CAPITAL AND OPERATING COSTS
VS
REVENUES

( MILLIONS OF DOLLARS)

heavily outweight the revenues.

The objective is to reduce such subsidies by adopting policies whereby the direct users (such as commercial carriers) or other beneficiaries (including other government departments) would pay for transportation services provided.

This would bring income and expenditures more in balance.

However, some expenditures will still have to be charged against taxation for the foreseeable future, where recovery of costs cannot be done for a variety of reasons.

# Air Administration (Chart #12)

This chart is an example from the Air Administration which shows the magnitude of the recoverable financing problem.

It covers the 5-year projection 1970~74.

Revenue figures include returns from the new air ticket tax.

Note the excessive deficit in the airways (way) system (\$431 millions).

Note the deficit in the airports (terminals) system \$307 millions) although revenues exceed operating and maintenance costs. This is because of the high capital costs.

This deficit amounts to approximately \$150 million per year for the five years.

# Montreal Airport Authority (Chart #13)

This chart shows a 20-year, costrevenue projection for the Montreal Airport Authority (Dorval and St. Scholastique).

Note that the heaviest capital expenditures are in the years 1969-74, but the building program is spread over the full 20 years.

In cash terms, in 1969 dollars, the surplus will be \$482 millions over the 20 years.

The Montreal Airport Authority is but a segment of the total air system. It and others like it could contribute to the long term economic viability of the entire system.

(13)

#### Comparison of the Departmental and Ministry Systems (Chart #14)

This chart shows the organizational arrangements under the old Departmental and new Ministry systems.

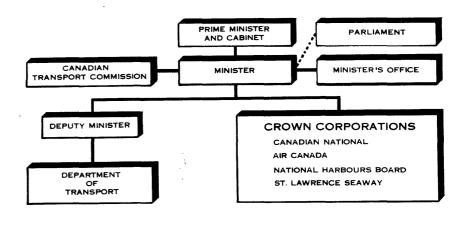
#### Departmental System

- a) Deputy Minister is a deputy for the Department of Transport only.
- b) The Minister does not have a staff to plan and coordinate the total federal transportation activity.

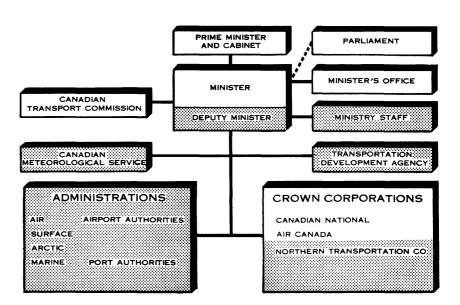
#### Ministry System

- a) The Minister is the senior corporate executive as well as the person responsible to Parliament
- b) The Deputy Minister is a deputy for the entire federal Transport "Family".
- c) Staff executives are provided to help manage the complex.
- d) A Transportation Development Agency will provide a national focus for transportation research and development.
- e) The Canadian Meteorological Service is separated from the Air Services of the DOT and is made an independent agency within the Ministry. It will now provide balanced services to meet the meteorological needs of the total national economy.
- f) The CTC, CN and Air Canada will continue to carry out their present roles.
- g) Four operating administrations are being created. They are Air, Surface, Arctic and Marine.
- h) Airport Authorities (such as Montreal) and Port Authorities (such as Vancouver) will operate with a high degree of autonomy within their respective Administrations.
- The National Harbours Board and St. Lawrence Seaway Authority become part of the Marine Administration.
- j) The Northern Transportation Company Limited will move from the Department of Indian Affairs and Northern Development to the Department of Transport.

#### **DEPARTMENTAL SYSTEM**



#### MINISTRY SYSTEM



(14)

JUNE 1970 17

# Port of Houston Port Safety

By H. S. Bonney

International Relations Representative Houston, Texas, U.S.A.

Foreword

The Port of Houston consists not only of the Harris County Houston Ship Channel Navigation District, but also of private wharves for public hire, private grain elevators, oil refineries, steel, paper, cement and chemical plants, and scores of other firms and industries. Each of these facilities is but a part of the entity known as the Port of Houston, which stretches for 25 miles along both sides of the Houston Ship Channel from Morgan's Point on Galveston Bay to the head of deepwater navigation at the Turning Basin, five miles from downtown Houston.

As with all ports which are growing rapidly the Port of Houston does have its share of problems. In recent months, much has been said on the possible shortage of fire protection and hazards of navigation, pollution by industry, and potential dangers in explosive cargoes. However, many of these statements of a seemingly negative vein actually have come from Houston maritime and industrial people who are loyally dedicated to the continuing progress of their port and who, in their various statements, have been attempting only to exercise the proverbial ounce of prevention so that there will never be a need for the pound of cure.

The truth is that the safety record of the Port of Houston can be most favorably compared to that of any other major port in the nation and, in fact, is far better than most. This article is an attempt to show what has been done, what is being done and what is being planned for the future for the safety of the port.

—J. P. TURNER
Executive Director,
Harris County Houston
Ship Channel Navigation District

"At one time the Port of Houston was strictly a daytime operation," says big and bluff Pat Neely, president of the Houston Pilots and himself an experienced hand of many years' standing at guiding the big ships up and down the Houston Ship Channel.

"But," continues the amiable Irishman, "now it's a 24-hour, round-the-clock job." In this he is referring to the fact that there is navigation day and night along the 50-mile length of the Channel, from the open Gulf to the Turning Basin where the Port ends less than five miles from the main Houston business district.

Neely, who takes great pride in his fellow pilots' capabilities, makes no bones about the need for improvements in widening and deepening the Channel, but he strongly insists that the nation's third largest port takes a backseat to none when it comes to its safety record.

"I would match our safety record here in this port with any other port having comparable traffic and with comparable physical limitations," he says emphatically.

The Houston Pilots have a standing complement of 42 pilots. Qualifications for entry into it are among the most stringent in the maritime world. The need for this is obvious, Neely says, since there is an average in-and-out of 24 ships per day, or roughly one an hour.

With the ships getting even bigger and carrying more cargo, each of the pilots is actually aware of his responsibility in both lives and money. Therefore, a potential pilot must pass not only various Federal and state tests but also must have many years of marine experience behind him before the Houston Pilots

vote him in. Even then, he serves a minimum apprenticeship of one year and is closely watched by one of the more experienced pilots who accompanies him on each trip.

Houston Pilots have an average of 12 years experience on the Houston Ship Channel in taking ships in and out. The top 20 men have an average of more than 15 years each.

Neely asserts that the advent of the portable VHF radios some four to five years ago, in which the Port of Houston was a pioneer in the Gulf, was one of the single biggest boons in safety for the Port and its ships.

"This bridge-to-bridge communication is one of the greatest things pilots ever had," he says. "This, in itself, has reduced incidents between ships to almost nothing."

One of the Channel's biggest hazards is the barge tows, with a ratio of some three or four for each ocean-going ship. Although not yet required by law, about half the tugboats servicing the Port of Houston tows have already voluntarily installed their own bridge-to-bridge radio equipment, and the others are expected to do so in the near future.

Another hazard of the past—sharp bends in the Channel which are difficult for the big ships to negotiate—has nearly been eliminated through straightening over the years by the U.S. Army Corps of Engineers, the responsible party for keeping the waterway dredged.

The Corps of Engineers, in fact, presently is making a survey of the Channel for further widening and deepening below Washburn Tunnel. This survey follows a Corps of Engineers hearing held in Houston in January, 1969, at the request of the Navigation District and other concerned Port of Houston maritime members.

However, Houston maritime interests, including the Navigation District, pointed out during the early 1969 meeting that the Federal Government, through U.S. Customs, was receiving many times more in revenues from the Port of Houston than it was spending on its upkeep.

A statement was made at that time that the U.S. Customs intake of \$50,355,141 for the year 1968, alone, was equal to approximately

three-fourths of what the government had spent on the Port during its entire 55 years of existence.

The "watchdog" of the Port, that concerns itself with all areas of safety, is the Port Safety and Advisory Council. This organization has a non-political function, is non-profit and numbers among its 200-plus membership some of the most influential in the shipping business.

Strictly an advisory body, the PSAC nevertheless has been instrumental in instigating many new and vital programs for the safety and welfare of the Port of Houston, some of which included establishing an anchorage for ships waiting in the gulf to come into the Houston Ship Channel, assisting in the usage of walkie-talkies between ships, helping remove certain obstacles in the Channel and improving navigational aids.

The prepared list of suggested safety procedures given to an entering ship's captain by the boarding Houston pilot was also a PSAC innovation. The card handed the ship's master, printed in his own language, requests compliance in speed limitations and other safety rules.

Liaison between the PSAC and Texas State Highway Department officials is also resulting in the installation of FM-VHF radios on intracoastal bridges.

To provide for continuous, uninterrupted liaison with Houston's Coast Guard, the PSAC, when it was first formed a decade ago from two smaller, overlapping safety organizations, made it an organizational and constitutional policy that the commander of the Houston Coast Guard Station, the traditional Captain of the Port, would serve as permanent secretary of the safety body.

The PSAC's present chairman is Arthur Stout, general manager of Todd Shipyards (Houston Division). Under his leadership, and that of the immediate past chairman, Captain James Baker, assistant manager of Lykes Bros. Steamship Company's West Gulf Marine Division, work has progressed on a study to determine the necessity of a ship-reporting system that could locate any ship on the Channel at any time. The concensus of the PSAC pre-

sently is that some such system is necessary.

Among systems being studied are ones such as that used by the Port of London where radar tracks vessels for 62 of the 90 miles from open sea to the port. Radar systems, by their nature, are expensive and almost prohibitively so unless backed by Federal financing.

Another system being considered is similar to the one in use along 250 miles of the St. Lawrence River where the Ports of Quebec and Montreal are located. This is part radar (Montreal) but is mostly Computer-Assisted Marine Control where unmanned radio devices detect ships, their directions and speeds. This information goes directly to a central computer which analyzes any possible dangerous situations, such as narrow passages between ships or tows. The human monitor of the computer can then radio the vessels well in advance and advise them what steps are necessary to thwart the danger.

Another system is a manual tracking and reporting system such as is being tested in San Francisco. This involves sightings of vessels, their positions and speeds by individuals, and reports from the ship itself, all of which goes to a central agency which, again, can radio a ship's pilot of a dangerous situation.

Both Stout and Baker, who now serves as chairman of PSAC's study committee on monitoring Ship Channel vessel movement, emphasize that the above sample systems all began small and worked into systems that were adaptable to the peculiarities of each individual port. The implication seems to be that any workable system for Houston's Port and Channel would have to begin small and grow into a complete vessel movement monitoring program through trial and error procedures, using other ports' experiences as a guideline.

Fire protection is another major concern of the Port Safety and Advisory Council and the study committee in this area is headed by Captain W. L. Farnsworth. Farnsworth, who also is head of the National Cargo Bureau, inspecting agent for companies insuring ships and cargoes, states that the PSAC has recommended since 1962 that another fireboat be acquired to aug-

ment the present one, CAPTAIN CROTTY, which is owned and operated by the Navigation District.

In the past year the Texas State Legislature became involved in the Port's fireboat protection and a bill was introduced which originally gave the responsibility to the Harris County Houston Ship Channel Navigation District, which voluntarily had accepted it, but which was changed in committee to the City of Houston. Later, a decision by the State's attorney general declared the bill unconstitutional.

The crux of the fireboat responsibility situation, as with many other facets in the operation of the Port, insist many long-time Port veteran users and the Houston Chamber of Commerce, is that there is no centrally delegated body, or Port Authority, authorized under law to speak or act for the entire Port structure. They say some such authority should have been given to the Navigation District when it was created by statute by the State Legislature in 1914.

Another vital matter is landside fire protection for the wharves, industries, buildings and ships lining the 25-mile stretch from Morgan's Point on Galveston Bay to the Turning Basin.

Here, a little-publicized group has developed what amounts to a volunteer fire and disaster organization which goes under the self-explanatory name of Channel Industries Mutual Aid (CIMA).

Houston Coast Guard Commander and Captain of the Port Al B. Rose has singled the organization out for praise as "a fine example of cooperation and coordination by the Houston Ship Channel industry."

CIMA's basic function is self-protection from potential fires and other disasters where barges and deep-draft vessels operate. Presently headed by Truett Smith of Humble Oil's Baytown facilities, it has existed since 1955 when it quietly formed a formidable firefighting team of men and equipment from amongst all its members, each of whom is pledged to come to the aid of any stricken segment of the Port of Houston.

Since each plant or industry has its own fire protection equipment, according to its size and financial ability, the entire Port is, for all practical purposes, protected by a phalanx of trained and cooperative firefighters, many of whom are specialists with ambulances, fire trucks, first aid personnel, foam equipment and boats at their disposal.

Additionally, at strategic CIMA points along the Ship Channel are located radios with direct contact with the Houston Coast Guard Station and each other. In case of emergency, Coast Guard personnel alert all CIMA firefighting stations and serve as a central headquarters for coordinating the volunteers' efforts. The radios used for this are tested on a daily basis.

The various industries' firefighting teams practice on a regular basis and once a year the entire CIMA membership works together in a mock disaster to check out their equipment and personnel efficiency.

CIMA maintains a close communication with Houston and other Channel community fire departments as well. Recently, a suspected fire on a dock at Todd Shipyards resulted in firetrucks arriving at the scene within five minutes.

Many of the tugs plying the Houston Ship Channel have their own firefighting pumps and hoses and, on the rare occasions when their services have been needed, they have been in the thick of the action.

Three tugboat captains, for example, were honored with Coast Guard citations for assisting in rescue operations when the M/V CHRISTIANE collided with a gasoline barge and caught fire in 1967, the Port's last major accident. The tugs pushed the flaming barges away from the CHRISTIANE and then returned to play water on the blazing hull of the stricken cargo ship and to pick up a number of men who jumped overboard.

Houston Coast Guard Station personnel have many responsibilities, the majority of them dealing with safety. White-clad Coast Guardsmen subject each ship entering the Port to a rigorous inspection. Their objective: to discover if the ship's engineering standards and/or cargo pose any threat to the Port. If so, the ship is ordered out.

Coast Guard Commander Rose, usually affable and easy-going, isn't

so when it comes to Port safety, whether it concerns navigation or fire

In the past year he has tightened up on existing regulations and instituted others, especially in the area of dangerous cargo which most often is in the form of petrochemical liquids. The amount of such cargo being carried by Port of Houston ships has increased many times in the last decade.

Commander Rose says that while the increasing demand for such exotic products has been of immense benefit to the booming economy of Metropolitan Houston, the maritime industry cannot afford any laxity in shipping and loading procedures, whether it be in the tightening of all the bolts on loading hose flange connections, or in neglecting to connect landside fire hoses to the ship's water system.

Rose, whether in his capacity as secretary of the Port Safety and Advisory Council or as Captain of the Port, with all the weight of the Federal Government behind him, has consistently hammered away at the Houston maritime industry to continue improving its loading methods, navigation procedures, communication and fire protection.

He has been personally interested and active in effecting solutions in all these areas.

Thus, the safety of the Port of Houston is being zealously pursued from a number of different directions and by various maritime interests who all have a vital interest in keeping the Port free of hazards and potential disaster.

These interests—pilots, industrialists, tugmen, steamship operators, the Coast Guard, the Navigation District and the city, county and state are all fully aware of the need for constant vigilance in the matter of Port safety. Many of these interests have spoken out strongly in the past on this need, and where there has been laxity in the past many have criticized.

But over recent years, with the forming of the Port Safety and Advisory Council and the Channel Industries Mutual Aid, these divergent interests have come together to work in harness and unison for a common goal, rather than each one seeking his own particular objective.

The result has been an harmonious program which has given the Port of Houston a splendid safety record, despite the fact that there are potential dangers always present as is only natural in a Port serving the petro-chemical capital of the world and lined with five major oil refineries.

With their determination and the success of their past experience, these dedicated interests have Houston's port safety in their hands, and they seem to be capable hands, too, which will grow even more so in the future.

#### **Port Safety Council**

Los Angeles, Calif., April 1:—In an effort to promote greater navigational safety for all shipping, both commercial and military, in Los Angeles and Long Beach harbors, a Port Safety Council has been formed to carry out the new program.

One of the major steps toward providing ship movement information of all vessels in the area was the inclusion of the Navy Pilots with the existing agreement between Los Angeles and Long Beach pilots.

Agreements were also expanded to include operators of all ships not taking pilots, including Navy ships and operators of all towboats and tugboats moving barges or ships under flat tow.

The Los Angeles and Long Beach pilot station will, through the use of an intricate teletype system, be advised of all imminent arrivals, departures and berth shifts, and they in turn, will report such information to other vessels who have interests in such activities.

The Port Safety Council considers that the exchange of ship movement information will forewarn conning officers of potentially dangerous situations and lead to timely preventative actions.

Heading the new Council is Capt. Lionel H. de Santy, port warden of the Port of Los Angeles, as chairman.

Others represented on the Council are Los Angeles—Long Beach pilots; Marine Exchange; Operations Officer, U.S. Naval Base; Port of Long Beach; and the Captain of the Port, U.S. Coast Guard. (Port of Los Angeles)

### Port of Saint John, N.B.

#### National Harbours Board Canada

In 1604 Samuel de Champlain, the great French explorer of eastern Canada, sailed into what is now Saint John Harbour. He was impressed with the mighty river and the anchorage at its mouth. Champlain named the river for the Saint's day on which he discovered it, and sailed away.

Twenty-seven years elapsed before the French king granted what is now the Province of New Brunswick to Sieur Charles LaTour. LaTour built a fort at the river's mouth and carried on continual warfare with his counterpart D'Aulnay Charnisy, governor of the present Province of Nova Scotia across the Bay of Fundy. When LaTour was away in Boston looking for assistance from the English, Charnisy attacked the fort defended by Lady LaTour and a small garrison. The gallant lady finally surrendered when her enemy promised to spare the lives of her soldiers. When the surrender was completed however, Charnisy hanged the entire garrison and Lady LaTour died, it was said, of a broken heart.

Charnisy died shortly after, and LaTour marrying his late enemy's widow, became governor of all of Acadia.

Even in that far off time the mouth of the Saint John River was the export point for timber for the French navy.

In 1758 the area came under British rule, and a few families from the New England colonies settled near the site of the new Fort Frederick. These people carried on a fisheries and traded with the Micmac Indians.

In 1783 a great social upheaval laid the foundations for the present city and port. Having succeeded in their long revolutionary war against Great Britain, the American colonies gained their independence. Immediately the new country expelled the citizens who had been disloyal to their neighbours during the war.

Known to the British as "Loyalists", these people came north in great numbers. On May 18, 1783, three thousand "Loyalists" landed on the same spot where Champlain had stepped ashore one hundred and seventy-nine years before.

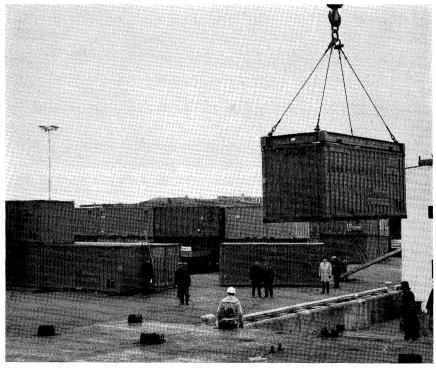
Within three years the settlements of Carleton and Parrtown became the first incorporated city in Canada under the name Saint John. The mouth of the river soon bristled with piers and the inlet called Courtenay Bay on the opposite side of the rocky town site became the centre of shipbuilding in eastern Canada.

The port grew apace, with the exports from the vast nearby forests and imports from all around the world. For a period around 1850 one quarter of the world's shipping tonnage was registered in Saint John.

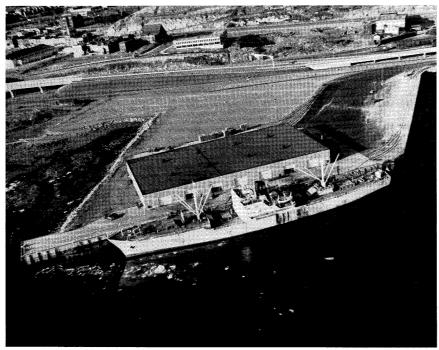
Iron ships and steam engines

created a new ball game in which the port was hard pressed to compete. The sun broke through again in 1895 when a change in the Federal government subsidy policy created the system of "summer" and "winter" ports on the east coast. Thus the big shipping lines, principally Cunard and Canadian Pacific, used the St. Lawrence River ports in the summer and Saint John in the winter when the St. Lawrence River was frozen over. This situation remained until the late 1940's when ice breaking methods on the big river forced all eastern Canadian ports to become all year ports. Although Saint John is still much busier in the winter than in the summer, continuing efforts are made by the National Harbours Board, the civic Port and Industrial Development Commission and the provincial government to encourage more summer business. The old slogan "Canada's Winter Port" has given way to "Canada's All Year Ocean Port".

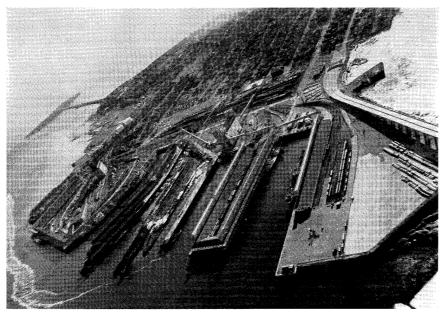
The ship building industry, dormant since 1900 except for war time periods, has snapped back in recent years. The Saint John Shipbuilding and Dry Dock Company Ltd., located on Courtenay Bay



Although Saint John's Container Terminal at Pier 1 will not be completed until 1971, a ship off-loads a full cargo of containers at the site.



Long Wharf at the north end of the main harbour. A large back-up area, paved and serviced and soon to be expanded.



The west shore of the main harbour, with the container terminal site in foreground.

where ships built of wood were constructed over one hundred years ago, has just completed the largest single contract ever let by the Canadian Navy.

Just outside the port limit at Red Head Point, the Irving Oil Company Ltd. is construction "Canaport," the first deep water oil terminal in Canada. Canaport will receive crude for Irving Refining Ltd., one of Eastern Canada's most

modern oil refineries.

Although one half of Courtenay Bay has been reclaimed behind a road bearing causeway, it is still the site of much port activity. In addition to two dry docks, one 1180 feet long with an entrance width of 125 feet clear, the east shore of the bay accommodates a paper mill, a fertilizer factory and oil storage sites. On the west shore of Courtenay Bay, the nine hundred foot Broad

Street Wharf serves both as a fitting out wharf and an oil bunkering pier.

Following the destruction by fire of all piers on the west shore of the main harbour in 1931, terminals one to fourteen were constructed. With 11,800 feet of piers, this modernized area handles the bulk of port business. On the harbour's eastern shore, Pugsley Terminals and Long Wharf are the newest additions to the port providing 3200 feet of docking space.

All piers in the harbour have transit sheds, with one exception, including 203,000 square feet of heated space.

The National Harbours Board has pursued the development of back-up space particularly at Pier 1 and Long Wharf. This effort has resulted in a tonnage increase notably in auto imports. It has also resulted in a decision by Associated Container Transportation to establish a container service to the port in 1971.

Thus the port will become the newest link in the ACT chain of fully intermodal container services from North America to the South Pacific. Modifications to the terminal at Pier 1 will create a container terminal second to none. The terminal will be operated by CP Rail and McLean Kennedy Ltd.

Bob MacGregor, ACT (Canada), commented on the place of Saint John in ACT's intermodal concept by saying, "Saint John will be part of a system that offers a great many advantages to shippers. A system that attacks nearly every cost of transporting goods. We believe that importers and exporters alike will find a great deal of benefit in studying their marketing and distribution methods with an eye toward adapting them to the intermodal system that we can offer through Saint John."

The Honorable Robert Higgins, Minister of Economic Growth, for the Province of New Brunswick said, "The new facilities will mean not only long term survival of a viable port..., but also that Saint John and the entire province will be more attractive for industrial location and expansion."

Selling the port of Saint John is a combined civic, provincial and federal effort. Spearheaded by the Saint John Port and Industrial Development Commission, a civic group, and the National Harbours Board, this effort has borne fruit over the last few years in more ways than one. Western citrus fruit exports have greatly increased the port's summer business and the tonnages of flour, grain and autos have improved as a result of port selling.

The port takes great pride in its cargo handling and security. A keen, dedicated work force has often received commendation for fast, safe cargo handling. The port is completely fenced for security and only authorized vehicles are permitted on the waterfront.

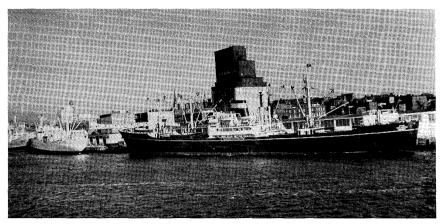
Long noted as a grain exporting port, Saint John has a grain storage capacity of 3,000,000 bushels and a ship loading capacity of 135,000 bushels per hour.

Canada's port authority, the National Harbours Board, took over ownership of the port of Saint John in 1936. Until that year the port was owned by the city and administered by a board of civic commissioners.

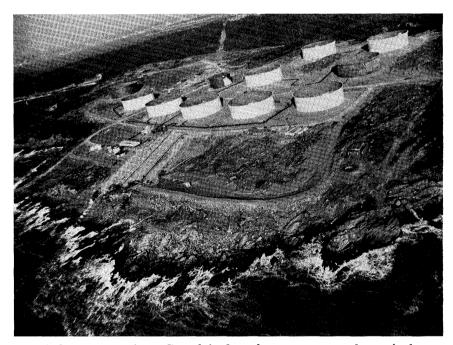
The Board has followed a continuing policy of modernizing and updating the facility on the harbour's west shore. These were the piers rebuilt in 1931. Piers 2, 3, 8, 9, 10, 11, 12, 13 and 14 have been modernized in every respect and provided with ample back-up space. Pier 4, nine hundred feet long, is the only harbour pier on the west side without a transit shed. Extensively used for cargo not requiring cover, the pier is the mooring location for the port's 65 and 100 ton floating cranes. Mobile cranes up to 100 ton capacity are available and can be used on any pier.

Piers 5, 6 and 7, having served the port well for eighty years are coming to the end of the road. Although still in use, plans are being formulated for their replacement.

It is Pier 1 however that has received the most attention in recent years. In 1930 the area was an unused rocky promintory overlooking the small Navy Island. In the past five years extensive construc-



Three ships discharging at Pugsley Terminals.



Under construction—Canada's first deep water petrol terminal.

tion has created a twenty acre backup area, paved, lighted, completely fenced (in addition to the port's security fence), and having all required cargo and ship services.

All piers in Saint John West are served by road transport and CP Rail.

Following World War II, the most pressing need on the harbour was the replacement of piers on the east shore. Antiquated docks with names, the significance of which had long been forgotten (Reed, Digby, McLeod, Pettingill) were replaced by the extensive Pugsley Terminal.

One of the oldest dock sites on

the harbour, Long Wharf was replaced under the same name. This facility, completely heated, has a large soon to be expanded back-up area. All piers on the eastern shore are served by road transport and Canadian National Railways.

At this time a new ship and pier for the Digby, Nova Scotia ferry service are being constructed in Saint John. This ship will triple the passenger and cargo capacity of the service.

The city and port of Saint John look to the seventies with confidence, continuing to serve Canada through its place in world commerce.

# Public Meeting Urges Action on New York Port Cleanup

New York Chamber of Commerce News

New York, N.Y., March 4: — At a public meeting held today in the Great Hall of the New York Chamber of Commerce in downtown lower Manhattan, a wide spectrum of business and government representatives called for prompt cleanup of the Port of New York—a program currently stalled in Washington.

Jointly sponsored by the New Jersey State Chamber of Commerce and the New York Chamber of Commerce, the meeting was called to activate a study commenced seven years ago by the Army Corps of Engineers. This study, aimed specifically at ridding the New York harbor of costly and hazardous debris, has been held up in Washington for many months.

In a telegram to President Nixon, approved at the meeting, Thomas N. Stainback, executive vice president of the New York Chamber of Commerce, and Albert H. Acken, executive vice president of the New Jersey State Chamber of Commerce, requested the President's intervention towards implementing the cleanup project and "clearing the Bi-State New York Harbor of decaying shoreline and harbor debris-generating structures."

Implementation of the project promises to rid this harbor area of sunken wrecks and decaying waterfront structures which paralyze productive urban land use, cause health and fire hazards, generate harbor drift which damages small craft and litters beach, park and residential shorefronts, and disgrace the vista of this great harbor for both residents and visitors alike," the telegram stated.

The two business organization executives also pointed out in their telegram that "the project's benefit-to-cost ratio of nine to one fits it high in any listing of project priorities compatible with your goals for control of inflation."

In addition to Mr. Stainback and Mr. Acken, speakers at the

meeting included Austin J. Tobin, executive director of the Port of New York Authority; William J. Delaney, assistant director, Division of Motor Boats and Terminals, Development Economic istration of the City of New York; Frank J. Kelly, assistant chief, Bureau of Navigation of the New Jersey Department of Conservation and Economic Development; William E. Cleary, executive vice president, New York Tow Boat Exchange; and Ernest P. Bilhuber, assistant secretary of the National Association of Engine and Boat Manufacturers. Roger H. Gilman, director of planning and development for the Port Authority, presented a film on New York Harbor

Mr. Tobin traced how the harbor environment of the New York-New Jersey Region "has deteriorated to a deplorable state. The waterfront in many places is now a junkyard and, indeed, a graveyard for abandoned ships and barges."

He added that "If we are to hope for a relatively swift and lasting solution to such problems, we must look to a strong Federal leadership in correcting the nation's past mistakes. Local government simply does not have the capacity to do the job by itself."

Mr. Stainback pointed out that efforts to clear the harbor of debris had commenced almost seven years ago at meetings in Jersey City and New York on March 5 and 6, 1963. "At that time spirits ran high, and, symbolic of great civic and community support, the meetings resulted in the start of a study by the Armp Corps of Engineers, aimed at clearing the harbor's shoal waters of rotting hulks and its shoreline of decaying piers and other waterfront structures."

Tracing the history of the project, Mr. Stainback stated that the Army Engineers Waterfront Cleanup Study was completed over a year ago and presented at public meetings in New York and Newark in January, 1969. Shortly afterwards, he added, "a major hurdle was overcome with the acceptance by the States of New York and New Jersey of their willingness to provide the non-Federal financing and legal participation in the program which was required by the Army Engineers."

Mr. Stainback said that the report had been presented shortly thereafter to the Chief of Army Engineers in Washington and "as far as we can determine, is still being held somewhere in the Department of the Army."

Mr. Acken described what is assumed to be the basis for delay in Washington. After a variety of delays, word was received from Washington that action on the report was being delayed pending completion of a national study, he averred. "Eventually we received word that the national policy study, too, was being held up and of course with it the New York Harbor Study. It is at this point where we unhappily find ourselves today."

In his opening remarks Mr. Gilman of the Port Authority explained that the proposed Waterfront Cleanup Program covered virtually all the waters and shoreline of the Bi-State Port of New York. "It had as its objective the removal of 1,972 sunken vessels and the removal or repair of 331 piers and other waterfront structures. At that time\*, the Corps estimated the cost at \$28.8 million. The Federal cost was \$16 million and the non-Federal contribution, which the States of New York and New Jersey agreed to provide, was \$4.8 million. Another \$8 million was estimated to be the total expense to the owners of usable but rundown waterfront structures to repair them to the point that they would no longer generate harbor

Stressing the benefits of the proposed Program, Mr. Bilhuber of the National Association of Engine and Boat Manufacturers joined other speakers to stress the extreme danger to small craft of "driftwood, floating debris, half submerged piling, boxes, crates and all matter flotsam and jetsam."

\* January, 1969

#### Karachi Port Trust

# Extracts from K.P.T. Year-Book of Information, 1969

#### I. General Description

#### 1. Introduction:

The Port of Karachi is the only port serving the entire West Wing of Pakistan which has an Area of 3,10,236 square miles. It is the Chief Port of Pakistan and, besides being a port of call for both Ocean Going and Coastal Vessels, it is also the Home Port of the Bulk of Pakistan Merchant Navy Fleet and the Pakistan Navy.

The Port of Karachi is situated on longitude 66°-58'-38" East and Latitude 24°-48' North. The maximum shade temperatures of 98°F was observed on 16/17 and 19th of October 1967 and the minimum shade temperature of 50°F was recorded on the 9th and 10th February 1968. Maximum humidity of 100% was recorded on 2nd August 1968 and the minimum humidity of 17% was recorded on 27th March 1968. There was 11.47 inches rainfall from 1st July 1967 to 30th June 1968. The highest high tide of 11'-1" above Harbour works Datum was recorded on 8.8.67 and the lowest low tide Minuts 1'-5" below the "Karachi Harbour Works Datum" was recorded on 4.11.1967 and 1.12.1967.

#### 2. Anchorage area:

The available anchorage area in the Harbour is as under:-

Available 20' Contour 696.35

Within 27' Contour 483.47 Acres Excluding Entrance Channel.

Within 28' Contour 559.88 Acres Including Entrance Channel.

Within 29' Contour 466.16. Acres Including Entrance Channel.

Within 30' Contour 424.14 Acres Including Entrance Channel.

#### 3. Harbour Protection:

To protect the harbour against the Monsoons, storms and the siltation of seabed resulting from tidal action and littoral drifts which reduces the available depth of water in the entrance channel, Manora Break water

wall was constructed in 1873. The Break water wall is 1550 ft. in length and 24 ft. in width. The entrance channel is further protected on its Eastern Flank by the Keamari Groyne which is  $1_{72}$  miles in length. It was constructed in 1865 and prevents siltation due to tidal action and littoral drifts from the East side of the harbour.

The Manora Breakwater has been rehabilitated during 1967-68 at a cost of Rs. 50 lakhs. This has been achieved by strengthening the breakwater by an armouring of cement concrete blocks weighing 1 ton, 11 tons and 28 tons placed in a Pell-Mell manner.

#### II. Brief History

The early history of Karachi is shrouded in the mist of oblivion. Historians have tried to identify Karachi with Koraikal of 326 B.C. where Alexander's fleet first anchored in the Indian Ocean or with Daibul of the past where the first Muslim conqueror of India landed under the young General Mohammed Bin Qasim.

The first mention of Karachi as a Port is found in the "Mohit", an Arabic treatise on navigation relating to the West Coast of India and the Persian Gulf. Written in 1558, this Manuscript warns the sailors of the whirlpools in the Gulf of Jaked and advises them to seek safety in Karachi, if ever they found themselves drifting dangerously.

Detailed historical information is however, available since about 1839 and it appears that Karachi was then quite an established City. With a population of 14,000 and prosperous trade connections overseas, its estimated value of trade exceeded Rs. two millions a year. The Trade consisted mainly of imports, four-fifth of which came from Bombay. Silks and piece goods were main items of imports. However, over a hundred years ago, Karachi had no

pretensions to be called a port. A regular combat was necessary before the elements were harnessed to human needs. Landing facilities were almost non-existant. Behind Manora point, there lay a mass of islets and creeks and the main channel leading to the town was bounded by marshy banks and was too shallow to allow passage of boats at low water levels. China Creek was another circuitous channel which went winding through sandy island. Landing through this channel, officers and dignitaries had to be carried pick-a-back across the mud flats from the boats and the passenger's baggage was carried by bullocks. Sometimes the passengers and their baggage fell in the deep mire turning up funny faces at the port.

The development of the port is a saga of human endeavour and scientific planning. The deepening and extending of the main channel was started and a project was launched for joining the main land with Keamari by a mole or a causeway. This causeway was completed in 1854, and enabled wheeled traffic to approach the anchorage.

In 1860, orders were issued for the construction of Manora Break water, the Keamari Groyne, the Napier Mole Bridge, the Native Jetty (now known as Juna Bunder), the new channel and the China Creek stoppage.

Though much capital had been sunk in improving the Harbour, no wharves or jetties had been provided to accommodate ocean going ships. The Port was, in fact, merely an anchorage except that country craft could more easily sail up the channel to the West of Keamari and unload at a small wharf, subsequently known as the Juna Bunder situated a mile away from the main town.

The new wharves were constructed gradually, as detailed on next page, during the period ending 1914. They were constructed not only keeping pace with the expanding trade of the port but somewhat anticipating it. The great bulk of this trade was the export of wheat. By the end of this period, Karachi had become one of the largest wheat exporting ports of the world, having a record shipment of 1,380,000 tons in the financial year 1912-1913.

## III. Administration and Organization

#### 1. Administration:

Upto 1880, the Port of Karachi was managed by the Government of Bombay with the aid of a Master Attendant under the orders of Commissioner in Sind.

With effect from 1st March, 1880, the Karachi Harbour Board was constituted, presided over by the Collector of Karachi, with 4 other members. These members were appointed by the Government of Bombay on the recommendation of the Commissioner in Sind.

In view of the fact that the Harbour Board had not been regulated by any enactment, its authority was insufficient to enforce various provisions necessary for the proper control and management of the affairs of the Port. For this reason, the Government found it desirable that the affairs of the port of Karachi should be handed over to a local Corporation invested with full powers for proper management. A Bill was, therefore, introduced in the Bombay Legislature for the constitution of the Karachi Port Trust, provisions whereof were based partly on those of the Rangoon Port Commissioners Act 1879 and partly on those of Bombay Port Trust Act 1879. The Bill was passed into an Act called Karachi Port Trust Act of 1886.

Under the Act of 1886, the management of the affairs of the Port of Karachi and the duty of carrying out the provisions of the Act are vested in a Board of Trustees. The Board is a body corporated, has perpetual succession, and a common seal. The Board consists of 11 Trustees including the Chairman.

The Chairman, who is also the chief executive of the Port, is appointed by the Government. He is responsible for the day to day running of the Administration and holds office for such period as Government may prescribe. The Trustees have normally a term of two years.

The Board transacts all business in meetings. At least two ordinary meetings are required by the Act to be held in every month.

The Board is competent, subject to certain restrictions as to Government sanction, to construct and carry, out works, lease, sell or otherwise transfer any movable and immovable property which may have been vested in or have been acquired by it and enter into and perform contract. It is required to provide public landing places, wharves, quays, warehouses, sheds and appliances, for the shipment, landing and storing of goods and to render assistance to vessels.

Revenue is derived from charges levied for the use of the harbour, wharves, appliances, works, etc., and for the services rendered to vessels and goods.

The Board has power to raise money in the open market or otherwise, required for carrying out large capital works or for purposes of appliances.

All loans are at first charged on the income of the Board and on the property vested in it.

The Board is required by the Act to provide a sinking fund by half-yearly payments to that fund of such amount as will be sufficient to liquidate the loans on the expiry of the period of loans.

An estimate of Income and Expenditure is prepared by the Board every year and submitted to Government for approval.

The surplus of Income over Expenditure after making contributions to the various funds is utilized for financing the Capital Programme of the Port.

#### **Grain Hauling Rates**

Portland, Ore., March 3:—Proposed reductions in rail costs of hauling export grain to Portland, Oregon, and other lower Columbia River ports have been shelved. The Milwaukee Railroad, which applied for the rates, has decided it will not appeal the recommendation of an Interstate Commerce Commission examiner who said the lowered rail costs would not return a fair margin of profit to the railroad.

This brings to an end a eighteenmonth battle waged by the Portland Commission of Public Docks and the Portland Freight Traffic Association, supported by other business and civic interests. At issue was the proposal to lower charges for hauling grain to the greatly reduced rate of \$2.40 per ton to Puget Sound ports. This rate would have diverted almost 50 per cent of the Pacific Northwest's grain production away from Columbia River ports.

Late in January, an Interstate Commerce Commission examiner found that the proposed rate would not have been profitable to the Milwaukee Railroad, and the Great Northern, and Northern Pacific Railroads, which had joined in the rate reduction request. The examiner also found that the rates were unreasonable and unjust because they would divert grain tonnages that previously were competitive to both Puget Sound and Columbia River ports to Puget Sound only.

In late February, the Milwaukee Railroad announced it would not protest or appeal the examiner's recommendations. This acceptance of the ruling means the former rates will remain in effect and the threatened diversion of grain will not occur.

Thomas P. Guerin, General Manager of the Commission of Public Docks, hailed this as a significant victory. "Once again the Columbia River ports have prevailed in protecting the historic grain rate pattern which has made this area the second greatest grain exporting center in the nation", he said.

He noted there are three grain elevators at Portland, including the largest elevator on tidewater west of the Mississippi River which is owned by the Commission of Public Docks. Other elevators are located at Kalama, Vancouver, and Longview, Washington, and at Astoria, Oregon.

Total grain exports from the Columbia River in 1969 reached 3,657,616 short tons (121,920,650 bushels). Primary foreign markets were Japan, Korea, India, Pakistan, Formosa, and the Philippines.

Guerin praised the effort of the Portland Freight Traffic Assn., and the Commission's legal counsel, White, Sutherland and Gilbertson, for preparing the evidence and carrying the case before the Interstate Commerce Commission to its successful conclusion. (Portland Public Docks News Release)

26 PORTS and HARBORS

# Orbiter Probe

#### **IAPH News:**

#### IAPH Observer at IMCO

In connection with the IMCO Sub-Committee on the Carriage of Dangerous Goods — 17th Session, Mr. T. A. McLoughlin, of the Dock and Harbour Authorities Association, London, wrote on April 17 to Secretary General, Mr. Toru Akiyama, essentially as follows:

Mr. R. F. Payne of the Port of London Authority attended this Session as an observer on behalf of your Association. He tells me that the major item was the reference to the Sub-Committee by the Maritime Safety Committee to study the handling of dangerous goods in ports. This had arisen due to a request for a model code for use by ports in undeveloped countries and a request by the Netherlands for some uniform system by which shipping with substantial quantities of more hazardous goods had to give advance warning of arrival.

The dual nature of the request lead to some confused comment on the question of the application of existing rules regarding bulk petroleum, explosives and the like. He made a general plea that such commodities normally required specialist berths and that ports that possessed such berths had appropriate regulations. The major difficulty was in fact receiving advance information regarding the miscellaneous hazardous cargo received from conventional vessels.

There was general agreement that there was a need for a standardised code of practice and that it should be based on the I.M.C.O. code but the point was also taken that there were substances that were hazardous from a port handling point of view that were not included in the code.

Despite this general agreement it was obvious that none of the national delegations were prepared to involve themselves at this stage in the very detailed work necessary to clarify the I.M.C.O. Code into degrees of hazard within each classification.

The Chairman finally ruled that each delegation would consider the question and the matter would be further discussed at the next meeting of the Sub-Committee.

I know that I.M.C.O. are considering a Code for the Handling of Dangerous Goods in Harbours and I have asked that your Association be consulted.

#### **Travelers**

• Commander E. H. W. Platt, Chairman of Committee on Large Ships, (Director and Assistant General Manager, BP Tanker Co., Ltd.) was in Japan on business over March and April. On Monday, April 2 afternoon, he called on Mr. Toru Akiyama, IAPH Secretary General, in the Head Office. Mr. Gengo Tsuboi, Japanese member of Committee, and Mr. Shigehiro Kusu, IAPH Under Secretary, sat by. • On Tuesday, April 7 afternoon, Mr. R. W. Boulton, Personnel and Industrial Relations Officer, Fremantle Port Authority, Western Australia, and Mrs. Boulton visited the IAPH Head Office. They were brought by Mr. Kisaburo Enomoto, Counselor, Keihin (Tokyo Bay) Port Development Authority. Presently Dr. Hajime Sato, IAPH Deputy Secretary General, greeted them. The pleasant days spent together in Fremantle in March 1969 were cheerfully reminisced among them. The couple were on a long vacation cruise of the South Pacific and Japan.

• Mr. J. A. Lyall, Assistant General Manager of Northland Harbour Board, Whangarei, New Zealand, called on Mr. Toru Akiyama, IAPH Secretary General, on April 27 afternoon in his business office and stayed for half an hour. Later he dropped in at the IAPH Head Office in another section of Tokyo to see some of the IAPH staff members there. Mr. Lyall was on a globecircling inspection tour of ports. In Japan he planned to visit the Port of Kobe before departing.

#### **Book Review**

#### **UNCTAD/GATT Book**

"The Role of the Freight Forwarder in Developing Countries" (International Trade Centre UNCTAD / GATT publication), Geneva 1969. Format  $58 \times 230$  mm., 140 pp. Price: US\$5 or SF 21.

The handbook is essentially designed for use by new companies entering the freight forwarding business, and for trainees entering the freight forwarding profession, in developing countries. It gives a simple introduction to the subject of freight forwarding, and indicates further reference sources and reading material for those wishing to deepen their knowledge.

#### Containerization

CONTAINERIZATION: A BIBLIOGRAPHY JULY 1968 — DECEMBER 1969, published by Transportation Center Library, Northwestern University, 1810 Hinman Avenue, Evanston, Illinois 60204. (Ref. P. & H. January 1969, page 25, article captioned "Bibliography")

Compiler's Note: The following publication has just been published by the Transportation Center and may be obtained from their Publications Division, 1818 Hinman Ave., Evanston, Ill. 60204.

CONTAINERIZATION: A BIBLIOGRAPHY JULY 1968-DECEMBER 1969 lists approximately 1200 references on containerization, including coverage of developments in all modes and listing foreign as well as United States materials. An address appendix lists addresses of periodicals and publishers. It supplements an earlier Transportation Center publication, BIBLIOGRAPHY ON ECONOM-ICS OF CONTAINERIZATION, which included approximately 1000 references for the period January 1965-June 1968. The new bibliography is available at a cost of \$3.00; the earlier bibliography, at \$2.00. Combined orders are \$4.50. (March 1970)

This bibliography supplements and updates the Bibliography on Economics of Containerization, published in late 1968, which covered the period January 1965-June 1968. Materials published between July 1968 and December 1969 have been included in this edition, together with a few earlier references of substantial value which reached the library too late for inclusion in the earlier bibliography. Because of the increasing amount of material in the library's collection relating to technical as well as economic aspects of containerization, it was considered that the title Containerization was more descriptive of the contents of this bibliography than was the earlier title.

Most, but not all of the materials listed are in the library's collection; the library does not, however, have copies available for purchase. The addresses of the publishers appear in the ADDRESS APPENDIX on page 42.

#### "Rolling Corridor"

Société Merlin Gérin and the French Coal Board are developing a new system for handling coal, ores and all bulk products.

Linear motors attached to the circuit propel small wagons simply by the effect of their moving magnetic field and these wagons, interconnected by flexible couplings, form a train without a locomotive which is entirely devoid of problems of adhesion.

This train, which is a veritable

rolling corridor, changes without any difficulty from low speeds for loading and unloading to very high speeds during conveyance and the return trip empty.

A rolling corridor several kilometers long is to be built in a French mine, where it will start service towards the end of 1970. (French Technical Bulletin)

#### Seaway Traffic Report

Ottawa, April 10, 1970:—The 1969 St. Lawrence Seaway Traffic Report, released today, shows a decrease in cargo moving through both sections of the Seaway, due largely to strike action affecting iron ore shipments, and a substantial dip in the volume of wheat and other grain movements.

However, St. Lawrence Seaway Authority officials feel the 1969 drop, coming on the Seaway's 10th anniversary, should not be considered a permanent reversal from the 10-year trend.

Cargoes on the Montreal-Lake Ontario section of the Seaway decreased by 14.5 per cent, with 26.1 per cent less tonnage upbound and a 5.7 per cent increase downbound compared to 1968. Bulk cargoes, at 33,959,000 tons, comprised 82.8 per cent of St. Lawrence traffic, a decrease of 15 per cent from the previous year.

In the Welland Canal section of the Seaway, a decrease of 4,542,000 tons was registered. Cargo tons were reported to be down by 26 per cent upbound, while an increase of 7.1 per cent was recorded downbound. There were 341 less vessel transits compared to the 1968 figure. Bulk cargo accounted for 88.4 per cent of the total traffic, and general cargo for 11.6 per cent.

For both sections combined, 60,-816,000 tons of cargo were carried on vessels through the Seaway system in 1969, with a total of 9,094 ship transits. Of this sum, domestic carryings came to 46,070,600 tons (Canada-U.S.A.), while foreign traffic was responsible for 14,745,400 tons. Ocean-going ships carried 24.2

per cent, and lakers 75.8 per cent of the cargoes compared with 23 per cent and 77 per cent respectively in 1968

Principal commodities through the St. Lawrence locks were iron ore, wheat, manufactured iron and steel, corn, fuel oil and soybeans, accounting for 69.5 per cent of traffic. In the Welland section, iron ore, bituminous coal, wheat, manufactured iron and steel, corn and soybeans accounted for 73.4 per cent of total traffic. (The St. Lawrence Seaway Authority)

#### PACECO Unloader

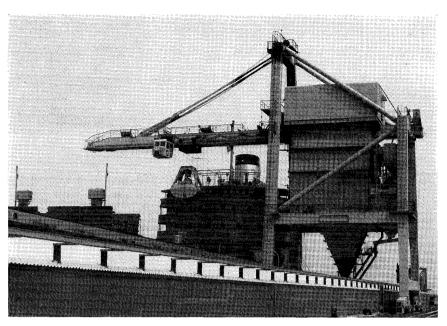
Alameda, Calif., April 21:— Handling powdery alumina, the basic raw material in the production of aluminum, seems easy when handled by highly automated equipment like the new PACECO Unloader at Maryland Port Authorities' Hawkin's Point Marine Terminal, Baltimore.

The new 105-ft. high Unloader was specially designed by PACECO to expedite the supply of alumina for the new Eastalco production facilities near Frederick, Maryland. It is capable of unloading 1,000 tons of material per hour without loss of the powdery material in the form of dust. This is accomplished with an elaborate dust collecting system, dust enclosure over the hopper, and sealed clamshell bucket.

The PACECO Unloader, in semiautomatic cycles, transfers the alumina from the ship to a belt which conveys the material to two 30,000 ton capacity silos to await shipment on specially designed 100ton hopper railroad cars to the Eastalco Buckeys-town plant, eight miles south of Frederick.

PACECO supplied the Unloader under a contract with Bechtel Corporation, prime contractor for the Eastalco project.

Eastalco Aluminum Company, a joint venture of Howmet Corporation and Pechiney Enterprises, Inc., expects to produce 90,000 tons of aluminum a year at the new 1,400 acre Buckeystown site. (PACECO News)



New PACECO Bulk Unloader at Maryland Port Authorities' Hawkin's Port Marine Terminal, Baltimore. (PACECO News)

#### **Export Sales Engineer**

Alameda, California, March 31: -Bill Anderson has joined PACE-CO, A Division of Fruehauf Corporation, as Export Sales Engineer for all of the Company's products sold in the international market accord-

ing to an announcement by H. I. Leeds, Export Sales Manager.

Recently Bill Regional was Manager for marketing for Abex Corporation, and prior to that was Bill Anderson



six years with H. K. Porter-France as Area Sales Director. Previous experience included several years with Rockwell International as Sales Engineer in Latin America.

In his new assignment, Bill will sell dredges, and dredge accessories, as well as PACECO's line of cranes known in the international markets as Portainers, Transtainers and Shipstainers.

Mr. Anderson is a graduate of Mississippi Southern College and the Thunderbird Graduate school ofInternational Management, Phoenix, Arizona. Formerly a resident of Los Angeles, Bill and Mrs. Anderson now reside in Alameda, California.

#### **Cutting Red Tape**

Baltimore, Md.: — The United States Commerce Department will make a sharp cut in paperwork required and the delays sometimes involved in United States export shipments.

Maurice H. Stans, Secretary of Commerce, announced that the department offers three changes to simplify export documentation process and benefit business and government in terms of time, money and efficiency.

The changes were made to meet the request for more streamlined export procedures and our government's urgent need to increase exports to improve our balance of payments position, Stans said, adding, "Whether we meet these needs depends now on the cooperation of exporters, the shippers and the carriers."

The changes in procedure are:

1. Exporters are not required to file shipper's export declarations for general-license shipments to Free World countries when the shipments are valued at \$100 through \$250. According to past procedure, export declarations were required for such shipments when they were valued at less than \$100.

This change could eliminate 1.5

20 per cent of the total required in the past; it will also affect only about 1 per cent of the United States exports dollar value.

2. High-volume exporters who meet requirements set by the Office of Export Control and Bureau of the Census have the option of filing monthly export declarations instead of a declaration for each export shipment to Free World countries of goods under Department of Commerce jurisdiction. Reports may be filed in specified written summary form or provide on computer tape or punched cards that are compatible with systems used by the Bureau of the Census.

This change will reduce paperwork on export shipments as the number of qualified exporters availing themselves of this option in-

3. Exporters are no longer required to submit export declarations to the Bureau of Customs for authentication before loading merchandise moving under Department of Commerce general licenses to Free World countries. Instead, they may submit the documents directly to carriers that will review the declarations before loading and forward them to Customs.

This change could affect between 85 and 90 per cent of all declarations covering shipments to foreign countries other than Canada, which is already exempt from the preauthentication rule. The effect could be to reduce the expense of documentation processing and runner time, reduce storage and demurrage costs caused by paperwork delays, and speed export shipments.

"While further improvement in documentation required by the government is needed, most of the documents for export transactions stem from commercial practices that only industry can change," Stans said.

Although the Department of Commerce does not have available the necessary information to estimate the full dollar savings the new procedures will achieve for United States exporters, however, recent testimony by an industry spokesman before a Senate Subcommittee estimated the annual costs of American exporters to be \$100 million for filmillion documents a year, or almost ling out, filing and processing the

Shippers' export declaration. Based upon this and other estimates, the new procedures should lead to a very substantial savings for United States exporters (Port of Baltimore Bulletin, January)

#### Connecticut's Seaport?

New York, N.Y.:—Seaports were a major feature of Connecticut's history. Whether or not a new type of seaport should be a part of its future is the subject of a study to be co-sponsored by the Connecticut Research Commission and the Department of Transportation. The title of the study is "New Concepts in Seaports as They Relate to the Total Transportation System in Connecticut".

Through the Research Commission, the State has engaged the combined services of three firms to perform this study. Soros Associates, Inc. of New York will lead the combined efforts of Charles A. Maguire and Associates, Inc. of Wetherfield and Dunlap and Associates, Inc. of Darien. The proposal submitted by this group was selected from twenty-one proposals that were submitted to the Research Commission last November.

Because of the major ports in New York City and Boston, little more than overflow is available to Connecticut. For port development to be possible and justified, the most advanced concepts in harbor design and materials handling would have to be applied to provide the speed and cost-efficiency necessary to produce sufficient benefit. The study will examine the possibility that a fresh start along Connecticut's shoreline will permit the development of a seaport for specialized cargo that cannot be handled efficiently in the older ports because of crowded conditions.

If some type of port development is found feasible, the project researchers will describe guidelines for the establishment of such a facility and the steps needed to bring it into being.

Soros Associates will handle and contribute the study's marine, ports and harbors engineering and technical aspects. Charles Maguire and Associates will handle inter-related land and air transportation matters as well as ecology impacts. Dunlap and Associates will execute the economic evaluations and studies.

Connecticut's Senator, William B. Stanley is the Chairman of the State's Study Commission charged with ascertaining the feasibility and/or desirability of establishing a Port Authority by Connecticut or in cooperation with contiguous States. The new concepts study is considered to be an essential part of the overall investigation as launched by the State. Soros Associates, Inc. Vice President, Mr. Bela Koman has been named in change of the three firms' combined affairs and accomplishment of this contract with the State's Research Commission. (Soros Associates, N.Y.)

#### 1969 Season

Detroit, Mich.:—Final overseas shipping statistics for the 1969 season (April 12 through December 7) in the Detroit-Wayne County Port District reveal that the season was, on balance, the most successful in the port's history.

Although combined export/import tonnage was down 352,232 tons, or 13.9% from 1968's all-time record, the 1969 total exceeded all other seasons.

Export cargo movements were the largest in history, hitting a total of 757,233 tons. General cargo exports were up 98.6% over 1968 and bulk exports rose 178% over last year.

The concentrated, joint efforts of the Port Commission, Port Terminal Operators and Greater Detroit Chamber of Commerce to increase export business began to show encouraging results. These efforts were greatly aided by a change in the pattern of steel movements which saw steel exports hit 103,101 tons, surpassing all prior seasons except 1960.

The import/export balance showed marked improvement. While 1968 saw a ratio of 7.5 tons of imports handled for each ton of exports, the 1969 season posted the

much more favorable ratio of only 1.87 tons of imports for each ton of exports. This marked the most favorable balance since 1964. (Detroit-Wayne County Port Commission)

#### **New Page**

Detroit, Mich.:—The Port of Detroit can now offer direct service to Rotterdam for shipments of containers and roll on-roll off cargo throughout the entire year. Very shortly the same service to Antwerp and the United Kingdom will be available as well.

On January 16, 1970 the first movement of containers in the new service began at the docks of Detroit Processing Terminal Division of Nor Cote, Inc., writing a new page in Detroit port history. These containers were the first of 250 scheduled to move out of the terminal during the next few weeks, and prospects are bright for a steady stream of this kind of traffic.

Equipment which represented nonproductive cost for a four month period in prior years and terminal personnel who experienced seasonal layoffs will now see service on a full year basis.

This revolutionary development in Detroit port operations is the result of a highly ingenious plan, based on local and international cooperation. Under the plan, Detroit Processing Terminal and Morton Terminal Ltd., at Windsor, Ontario, entered into an agreement whereby containers, and, to a lesser degree, unitized and roll on-roll off general cargo is moved by barge between the two terminals. From the Morton Terminal the cargo moves by rail to Montreal, Quebec City, Halifax and St. Johns for loading on ocean vessels unable to come into the St. Lawrence Seaway due to ice conditions.

Detroit Processing Terminal and Morton Terminal have chartered three tug-propelled barges from Mc-Queen Marine Ltd. of Amherstburg, Ontario, 110 to 120 feet in length, having capacities for carriage of 7 to 12 containers of the 20 foot variety.

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Working agreements have been established by the terminals with four container leasing and pooling companies, Interpool, CTI, CSI and CPR.

In cooperation with local foreign freight forwarders, the terminals furnish container stuffing service, including consolidation of less than container shipments in full container loads. Open storage area at Morton Terminal, with 1500 acres available, is used for marshalling containers in the process of consolidating full containers into shipments of 20 or more, which obtain a reduced freight rate. Thus the operation enables both shippers of less than full container loads and shippers of less than 20 full containers to enjoy reduced rates unavailable for break bulk or lesser container shipments.

The barge movements also offer service to shippers unable to use the Ambassador Bridge or Detroit-Windsor Tunnel by reason of weight or hazardous cargo restrictions.

A separate barge company owned by the two terminals is being formed and construction of specialized barges will commence almost immediately. The new barges are designed to carry 27 containers, or a lesser number of containers in combination with unitized or roll onroll off cargo. They will feature end loading for roll on-roll off cargo.

An existing slip at Detroit Processing Terminal is being enlarged to accommodate the barges, which are presently handled at the marginal wharves. Docking the barges in this slip will permit roll on-roll off loading at the inshore end and lift gear loading on both sides, simultaneously.

Joseph McCann, former St. Lawrence Seaway Administrator, now a Detroit Processing Terminal vicepresident explained the thinking that led to the undertaking as follows:

"With the great number of container ships being built, most of them too large to come into the Seaway, we have seen a gradual decrease in break bulk general cargo and expect this will continue."



San Francisco, Calif., April 1:—Floating Containers via LASH vessels will soon service not only Far East ports from the Pacific Coast, but also Latin America. This forecast—and that more than eleven Lighter Aboard Ships will operate from the West Coast—was given 300 members of the San Francisco Propeller Club by Jerome Goldman (center), LASH inventor and designer. The New Orleans-based naval architect said Prudential-Grace Line will extend the new transportation concept South-of-the-border—helping to ultimately assure Pacific Coast LASH service to more than 80 world ports. San Francisco pioneers are Pacific Far East Line, headed by Leo C. Ross (left), which will take delivery late next year on the first of six LASH vessels ordered. Hugh F. Munroe (right), Propeller Club president and American President Line executive, presided at the Sheraton-Palace Hotel luncheon meeting. (don maskell & Co.)

"Steel continues as our major cargo and our customers have been constantly lamenting the lack of a longer season," McCann continued.

"It occurred to us," he said, "that our best bet for increasing business would be to find ways to attract more containers and to lengthen the season for movement of steel."

"We came up with the cooperative container stuffing and consolidating plan," he said, "but realized that a longer season was necessary to make it workable. The barge method seemed the answer," he continued.

"After some research, we discovered that coil steel could be containerized and wrapping the coils could be dispensed with. This gave us the chance to extend the season for steel as well," he concluded.

McCann said he feels they have taken a timely step with the use of barges since many experts in the field foresee the eventual use of LASH operations throughout the Great Lakes, feeding gathering ships at Montreal. (World Port of Detroit)



San Francisco, Calif., March 4:—Prospects for even closer "East-West" cooperation in common efforts to cut shipping "red tape" were evident recently when Pacific Coast maritime officials met with the top industry specialist in paperwork simplification. John Page and Chris Blom (left)—vice president and president, respectively, of the Marine Exchange—joined with recently-appointed San Francisco Port Director Miriam Wolff to greet Arthur E. Baylis (right), national director of the National Committee on International Trade Documentation, New York. Page—president of General Steamship Corp., Ltd. and also chairman of the N.C.I.T.D.'s executive committee—and Blom, president of Overseas Shipping Company (both of San Francisco), heard Baylis report on recent and major steps taken to further reduce excessive documentary costs inherent in current paperwork practices. The Pacific Coast maritime executives urged increased Western participation in the national program—as "enlightened self-interest". (N.C.I.T.D.)

#### **Public Relations Officer**

Duluth, Minn., April 17:—Arvid Morken, widely-known marine columnist for the Duluth News-Tribune & Herald, has been appointed assistant public relations director for the Seaway Port Authority of Duluth.

Public Relations Director Davis Helberg said Morken's responsibilities will include work on Port Authority publications, research and special projects.

The appointment is effective Monday, April 20.

Morken, 30, has been the Duluth News-Tribune & Herald marine columnist since February 1967. Prior to joining the Duluth newspaper staff, he was a reporter for the Superior Evening Telegram. (Seaway Port Authority of Duluth)

#### **Record Passengers**

Hollywood-Fort Lauderdale, Fla., Feb. 26:—Port Everglades Commis-

sioner Lester E. Culverson reported that 30,866 passengers, an all-time high for a single month, came through the harbor in January.

With more than 12,000 embarking here for 47 cruises and voyages, passenger totals soared 43 per cent above the corresponding month last year.

This erased the previous singlemonth high of 27,436, set in March, 1969. Number of sailings also toppled the previous record of 44 for the same month a year ago, Culverson said. (Port Everglades News)

#### **Galveston News**

Galveston, Texas, April 17:—The Board of Trustees of The Galveston Wharves has adopted a projected time schedule for design engineering and construction of Stage 1 of the container terminal approved by the voters on March 10th, C. S. Devoy, Port Director, announced today.

- Specifications for container cranes and material handling systems are to be submitted by consultants by May 15th. Systems analysis on cranes, transtainers and other materials handling equipment will be conducted by the Wharves and its consultants between May 15th and September 1st, at which time equipment bids will be requested.
- The Wharves Board has awarded the design engineering on Stage 1 of the container terminal to A. C. Ellis Corporation, to include structural and civil design engineering, specifications, working drawings, and inspection on the 1,000-foot dock to be built on the channel between Piers 10 and 12; the filling of the slip between Piers 10 and 11; and any building and elevation changes involved. A four-month period has been projected for the design engineering phase with the time schedule calling for requesting public bids for construction on September 1, 1970.
- Bid submissions on both the construction and the provision of materials handling equipment will be called for by October 15, 1970. It is expected that the successful construction bid and the equipment bids can be awarded by November 1, 1970. The start of construction on Stage 1 of the container terminal project is slated for December 1, 1970, with an estimated period of construction of twelve months. The Wharves proposes to have Stage 1 of the container terminal operative by January 1, 1972, Devoy said.
- In a special election on last March 10th, Galveston voters approved issuance of \$7.7 million in tax obligation bonds to which the Port of Galveston will add \$10 million from revenues during the next 10 years for port modernization: To build a \$9.2 million container terminal, a barge consolidation terminal, berths for LASH and SEABEE ships, and a 15-acre barge fleeting station. (News from The Port of Galveston).

#### **Trading Partners**

Houston, Texas:—The Port of Houston's ten top trading partners in 1969 generated almost \$1 billion in total trade, according to figures just received from the U.S. Bureau

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of Census.

The report shows a total of \$954,-108,158 in combined import and export products, in the following order:

Japan, \$209,722,402; West Germany, \$139,429,408;; Brazil, \$109,214,033; India, \$92,733,830; United Kingdom, \$86,884,963; The Netherlands, \$75,342,595; Venezuela, \$65,613,195; Belgium, \$62,038,139; France, \$56,694,713; and Italy, \$56,434,880.

The Port of Houston led the nation in imports of steel and steel products mainly from West Germany and Japan, including nearly 80,000 motor vehicles. Principal exports to these two countries were chemical products, as well as rice to West Germany and mile to Japan.

Exports to India included wheat, milo and fertilizers and jute bagging was the principal import. The United Kingdom trade was largely in imported alcoholic beverages and motor vehicles, with shipments from Houston of chemical products, oil well supplies and mohair.

The Netherlands trade was in metal manufactured goods, chemical products, and Venezuela, logically enough, shipped petroleum and received oil well supplies.

Steel products, including machinery and vehicles, were the principal imports from Belgium, with exports from Houston of wheat, milo and chemical products.

Imports from France were mostly steel products and wines and other beverages, with exports from Houston of rice, wheat and chemical products. Italy's trade was in chemical products and motor vehicles to Houston and imports of oil well supplies and other machinery. (Port of Houston News Release)

#### New Rep. Appointed

Los Angeles, Calif., April 22:— The Los Angeles Board of Harbor Commissioners today (Wednesday, April 22) approved an agreement with Zenzaburo Seto as promotional representative for the Port of Los Angeles in Japan.

Seto, a former executive and representative for one of Japan's major steamship lines, replaces Shoichi



San Francisco, Calif., March 5:—A recent review of first month's operating results of harbor advisory radar at the Golden Gate served as a prelude to the April 29-May 1 spring assembly in San Francisco of the Radio Technical Commission for Marine Services. Lester C. Bedient (left), general manager of Harbor Tug and Barge Co., is general chairman of the event which will attract more than 200 telecommunications experts from throughout the U.S. and abroad. He explained the program of 20 presentations scheduled to Capt. Robert Wilcox, Maryland Port Authority operations director, and Capt. George A. Quick, president of the Association of Maryland Pilots, while Capt. William F. Adams (right) of the Coast Guard looked on. (See news captioned "Cargo Security Program" on this page for details.)

Akiyama in Tokyo, who resigned recently due to ill health. Akiyama succeeded the late Akira Ikeda, who was the port's first Japan representative and served in that capacity for 14 years. Los Angeles was the first port to employ such representation.

Seto, whose contract with the Los Angeles Harbor Department is for the three years, is a graduate of Waseda University in Japan. During his 29 years as a steamship company representative, he was manager of the traffic department of Osaka Shosen Kaisha, Ltd., and deputy general manager for Mitsui O.S.K. Lines, Ltd.

The 53-year-old steamship and foreign trade executive will work out of the Harbor Department's Tokyo offices, which are located in the heart of the Japanese capital city.

Commerce with Japan accounts for 50 per cent of Port of Los Angeles business.

The port's newly-appointed Japan representative will serve to continue the expansion of that trade, developing an increasing amount of it for and through the Port of Los Angeles. (Port of Los Angeles)

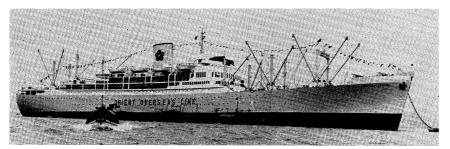
#### Cargo Security Program

San Francisco, Calif., March 16:

—Early formation of a regional cargo security program for ports and terminals served by the Golden Gate was forecast in an announcement today, Monday, March 16, by Chris Blom, president of the Marine Exchange of the San Francisco Bay Region.

The action results from a twoyear study and development effort under the direction of two Marine Exchange officials, Robert E. Mayer, Pacific Coast sales manager for Todd Shipyards Corp., and George J. Gmelch, vice president of Pacific Far East Line. Both are directors and former presidents of the 121year old maritime service agency.

Following recent approval of the program by the Exchange's board of directors, the two industry officials reported that the Bay Region's first cargo protection council could be operational "within two months". Regional terminals, stevedoring companies and ports have tentatively agreed to underwrite operating



San Francisco, Calif., April 3:—On Monday, April 6, a unique alternative to jet-age stress sails through the Golden Gate. The 22,000-ton luxury passenger liner ORIENTAL CARNAVAL is making her inaugural call at San Francisco on the first leg of a maiden around-the-world cruise. Combining the best of East and West (in cuisine, service and the art of both Pablo Picasso and leading Chinese contemporary artist Change Da-Chient), the 610 foot motorship will be greeted by civic, port and industry officials. The latest addition to the fleet of Orient Overseas Line will remain at San Francisco's pier 48A for six days—typical of her unusual itinerary which will usually afford 350 passengers three or more days at most of twenty ports around the world before her return here in August. (Orient Overseas Line)

costs, supplemented by participation of insurance companies and others concerned with potential cargo losses.

"In authorizing this action", Blom noted, "we are taking a cue from 'preventative medicine'. Bay Region pilferage of ocean cargos—and other physical losses—have not increased substantially. Our experience has been good, and security to date largely adequate. To maintain and improve on this record is the intention of this new effort, rather than see deterioration as has occurred in some port areas, domestically and abroad."

Gmelch and Mayer emphasized that the program would place stress on training and investigation, and not involve creation of new "waterfront police". "The staff will be small but highly qualified—to find potential 'weak links' in present practices, to instruct current security forces in improved operations, and to gather evidence when necessary for successful prosecution by the appropriate Federal, state or local authorities, as the case may be," they commented.

Plans are for the San Francisco Regional Cargo Security Council to be formed as a new activity of the Marine Exchange, and utilize the latter's communications, shipping intelligence and other services. Edward D. Ransom, Exchange counsel and first vice president, has provided legal guidance during its development. Ransom, a partner in the law firm of Lillick, McHose, Wheat, Adams & Charles, prepared the 1968 summary of cargo protection programs at several other U.S. ports which formed the basis for the local action.

Strong support for the security program has been indicated by most Golden Gate shipping companies, which feel the effects of ever increasing values of cargos and difficulty in determining responsibility for losses as containerization climbs Acknowledgement popularity. that losses could adversely affect the region's commerce and hence, waterfront employment—was evidenced when the Pacific Maritime Association and the International Longshoremen's and Warehousemen's Union included in their master contract a provision for revocation of the employment rights of the latter's members (and loss of pension benefits) upon second conviction for cargo pilferage.

Among proposals for study and possible action at Bay Area docks and terminals are improved lighting, less exposure of high-value cargos, tightened physical security, better tallying and record-keeping, and—especially—upgrading of skills and training of guards and other responsible waterfront personnel.

Recognition of the increasing

need for professionalism and cooperation, as the volume and value of world commerce soars with attendant loss potentials, resulted in the 1968 formation of a Canadian-U.S. association of harbor security forces. The new San Francisco-based organization is expected to participate.

Administrative responsibility for the program will be assumed by Robert H. Langner, Exchange executive secretary. (Marine Exchange of the San Francisco Bay Region)

#### 'Electronic Mariners'

San Francisco, Calif., March 5:— Twin themes of the 1970s—electronics as applied to harbor navigation, and space communications—will be reviewed by 200 U.S. specialists and experts from overseas next month when the Radio Technical Commission for Marine Services (RTCM) meets for its spring assembly beside the Golden Gate.

For its first San Francisco session in a decade, the national advisory commission has scheduled more than twenty reports on harbor surveillance radar, VHF satellite usage, computer application to ship traffic and a variety of related telecommunications subjects.

The April 29-May 1 event will be greeted by its honorary chairman, Rear Admiral Chester R. Bender, Coast Guard Western Area Commander. Lester C. Bedient, general manager for San Francisco-based Harbor Tug and Barge Co., is Assembly chairman. (Marine Exchange of the San Francisco Bay Region)

#### Captain Noble on Tour

Fremantle, 8th April:—Mr. H. C. Rudderham, General Manager of the Fremantle Port Authority, announced today that the Authority's Divisional Manager — operations, Captain Beresford Noble, will leave Western Australia by air on Friday for an overseas study tour.

His immediate destination will be Delft in the Netherlands where he will participate in the Sixth International Port Management Seminar arranged under the auspices of NUFFIC (Netherlands Universities Foundation for International Cooperation).

The Seminar, limited to 25 Port Management Executives selected on a world wide basis, consists of lectures by eminent authorities on all aspects of Port Management and includes field studies of Ports on the Continent.

The period of the Seminar is from Monday 13th April, to Tuesday 19th May, 1970.

At the conclusion of the Seminar Captain Noble will travel to England where he will continue studies of Port matters, including attendance at the Fourth International Container Services and Equipment Exhibition at Olympia in London, and participation in a two day ICHCA (International Cargo Handling Co-ordination Association) Conference.

It is expected that Captain Noble will return to Western Australia on the 10th June. (Fremantle Port Authority)

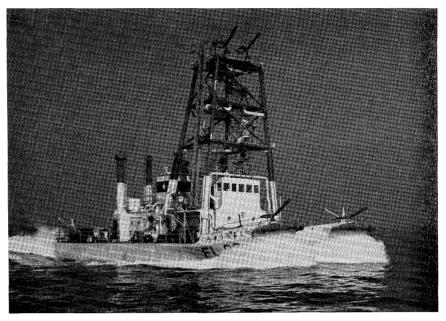
#### **Polluters Fined**

Melbourne: — The Melbourne Harbor Trust Commissioners—the Authority for the Port of Melbourne —successfully launched four prosecutions in two Courts of Petty Sessions last month for offences arising out of pollution of the waters of the port.

The courts imposed fines totalling \$1,950 plus \$117.05 costs in three convictions for offences, under the Navigable Waters (Oil Pollution) Act 1960, which occurred towards the end of 1969, and one under The Melbourne Harbor Trust Act.

The prosecutions were as follows: The Footscray Court on the 2nd of February imposed a fine of \$50 with \$1.50 costs on Corio Meat Packing 1965 Pty. Ltd. for the discharge of offensive matter into the waters of the port on the 14th November, 1969. The charge was laid under Section 155 of The Melbourne Harbor Trust Act.

The Port Melbourne Court on the 5th February imposed a fine of \$500 with \$44.15 costs on the Master of the Greek passenger liner "Ellinis" for the discharge of oil into the waters of the port while the vessel was berthed at Station Pier—the



190 G/T catamaran fire-fighting ship "Shoryu" was delivered to the Maritime Safety Agency by Nippon Kokan at the Asano Dock on March 4, 1970. The ship yields a speed of 13.2 knots, and will be stationed at the port of Yokkaichi where many petrochemical plants are located. The ship is of the same type as "Hiryu" which was completed in March 1969 and is now in service in Tokyo-Yokohama area. (NKK)

port's main passenger terminal—on the 1st December, 1969. The court granted a stay of execution of 28 days.

The Footscray Court on the 12th February fined the Master of the British freighter "Valetta" \$500 for the discharge of oil into the waters of the port while berthed at No. 6 Yarraville on the 20th November, 1969, and \$200—the maximum penalty under section 11 (i) of the Act—for failing to report a discharge of oil immediately. The court also awarded costs amounting to \$38.40, and granted a stay of execution of four weeks.

The Footscray Court on the 16th of February fined the Master of the Swedish freighter "Lemons" \$500 for the discharge of oil into the waters of the port while berthed at "B" Appleton Dock on the 9th of December, 1969, and \$200 for failing to report a discharge of oil immediately. The court also awarded costs amounting to \$33.

The prosecutor for the Commissioners in each case was the Chief Security Officer, Mr. R. Goodes, who is also in charge of all investiga-

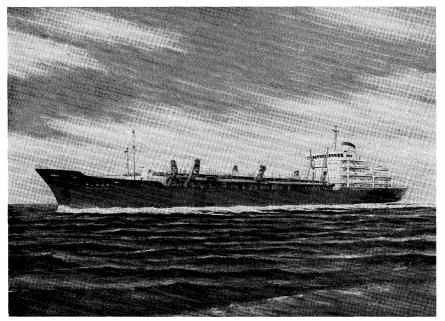
tions of reports of pollution as well as reports of breaches of the Port Authority's Act and regulations. Mr. Goodes was assisted by the Assistant Security Officer, Mr. D. Bowman.

Following investigations into alleged offences, a report is submitted to the Chairman and Commissioners who then either approve or reject recommendations that prosecutions be launched. (Melbourne Harbor Trust Port Gazette, March)

#### **New Documents**

Melbourne:—For the past two months about half of all the Melbourne Port Authority's export wharfage transactions have been made with documents conforming to the international standard type export and trade documents, which will be introduced officially throughout Australia on the first of next month.

The documents in use by the wharfage office of the Melbourne Port Authority are one of eight aligned export documents which have been proposed for world-wide acceptance and adoption by the



This is an artists's conception of Japan's largest  $(6,300\,\mathrm{G/T})$  dredger "No. 1 Tokushun Maru" launched in a Tokyo Yard of Ishikawajima Harima Heavy Industries Co., Ltd. on March 23, 1970. The ship will have two 5,800 HP IHI-SEMT engines, and a hopper capacity of  $4,000\,\mathrm{m}^3$ . (IHI News)

United Nations' Economic Commission for Europe (E.C.E.). The standard aligned documents are already in use in overseas countries, and Australia, due primarily to the efforts of its Department of Trade and Industry, will follow suit next month.

The basic principle behind the new standard type documents is a layout key which ensures that as many forms as possible be on the same international A4 size paper, and that items of informations common to all documents should occupy the same position on each form.

The aligned documents in the series are Bills of Lading; Entry for Exportation; Certificate of Origin; Certificate of Insurance; Marine Insurance Declaration; Outward Wharfage Charge Forms (export wharfage entries)—these are the forms in use in Melbourne—Export Payments Insurance Corporation; and Department of Primary Industry.

The export wharfage entry forms were introduced in Melbourne on the 1st of January, but because the documents do not officially come into use in Australia until next month, both old and new forms have been accepted by the Mel-

bourne wharfage office.

For more than six months, officers in the Melbourne Port Authority's wharfage office have been advising customs agents, shippers and exporters—particularly small companies—to assist them in the change over to the new international standard type documents.

The officers have also co-operated with printing firms who have been and are printing the documents to build stock piles for the supply and sale of forms as required.

In Melbourne the new export documents are available from Hewitts (Printers) Pty. Ltd., and Harston and Partridge & Co. Pty. Ltd.

The main advantage of the new aligned system of documents is in the considerable saving in time and costs, which has been estimated by some overseas firms, where the documents are in use, as being as high as 70 per cent.

The advantages claimed are as follows:

- It is necessary to type only ONE master document for the aligned series, thereby eliminating repetitive typing and possible errors.
- Once the master copy has been checked for accuracy, checking of

individual forms in unnecessary and all documents can be reproduced by one operator, while control and handling — particularly filing — are greatly improved.

- Additional copies of particular documents can be made without risk of errors and staff familiarisation and training is made much easier. Also reference to the master copy in most instances shows the particular facts of the documents aligned to it, which minimises the need to search through individual forms.
- Faster preparation of documents allows earlier lodgement which can result in sayings in bank and other charges, while the improved presentation and accuracy aids the checking of these forms by responsible authorities and agencies, thus saving more time and reducing the need for further corrective action.

As far as the use of the documents in the Port of Melbourne is concerned, it has been decided by the Chairman and Commissioners that, subject to further consideration at a later date, up to a maximum of six bills of lading will be accepted on the new entry provided that the shipments are made by the one consignor and are bound for the same port.

Also subject to the prior sighting and approval of the Collector of Wharfage, entries produced by the photocopying method will be accepted providing that the photocopies are printed on pale green paper—a sample of which can be obtained from the Port Authority on request. It is also required that equivalent weights on the Port of Melbourne's Export Wharfage document be shown in a prescribed way —information of which will also be supplied on request.

The Collector of Wharfage in Melbourne is also advising all firms and companies having current Melbourne Harbor Trust import wharfage entries specially printed to keep stocks to a minimum pending the introduction of new aligned import documents of the international standard type in due course. (Melbourne Harbor Trust Port Gazette, March)

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#### **Fort Denison**

Sydney, 6th March:—As part of the Captain Cook Bi-Centenary Celebrations, the Maritime Services Board has decided to floodlight the martello tower at the north-eastern end of Fort Denison, the well known island fortress in Sydney Harbour.

This was announced in Sydney today by Mr. W.H. Brotherson, President of the Maritime Services Board, who said that the Board is in the process of installing mains power at Fort Denison by laying a submarine cable to the island.

At present, the only power available at Fort Denison is provided by a bank of batteries, recharged each day by a generating plant.

Mr. Brotherson said that it is planned that the work will be completed in time to floodlight the tower in conjunction with the Bi-Centenary Celebrations, particularly on the night of the Sydney Harbour Carnival which is to take place on 29th April, 1970.

He said that the Board had approved of the laying of a submarine cable two years ago but a number of difficulties have been experienced and it has only now been possible to finalise the arrangements.

He said the scheme to provide power at Fort Denison had become possible with the co-operation of the Royal Australian Navy and the sub-marine cable would be laid from the Naval establishment at Garden Island.

The cost of the installation is estimated at \$20,000.

Mr. Brotherson said that Fort Denison was originally a rock pinnacle reaching about 75ft. above sea level. Work commenced on levelling the island in 1841 and the fort was built between the years 1855 and 1857.

The Contractor engaged to build the fort was Mr. W. Randle who also built the first railway line in New South Wales between Sydney and Parramatta.

The fort is named after Sir William Denison who was the Governor of N.S.W. at the time the fort was completed.

Fort Denison came under the

control of the Sydney Harbour Trust when it was formed 1901 but since 1936 it has been under the control of the Maritime Services Board which is the Port Authority for the State and incorporates the former Sydney Harbour Trust. (The Maritime Services Board of N.S.W.)

#### **New Tanker Terminal**

Hong Kong, 4 April: — Hong Kong is to have a new HK\$40 million (£2.7 million; US\$6.6 million) tanker terminal and fuel oil storage complex.

It is to be built by Shell Co. of Hong Kong Ltd. at Aplichau, a small island just south of Hong Kong island. It will be operation by the end of 1971.

It will have a 200,000-ton storage area and will be serviced by a 490-foot long wharf 350 feet out from the shoreline. Pumping and handling equipment will enable a 100,000 ton tanker carrying its own weight in fuel to be emptied within 24 hours.

Tankers will have more than 60 feet of water under their keels. (The Week in Hong Kong)

#### Scale Only Yardstick?

Antwerp: — In the present-day world of slogans and formulae lately in and out of season scale increase is called in as an all-curing remedy. Also in port circles the tendency exists to be obsessed by the increase in scale as appears clearly from a colloquy organized by the two Antwerp university centres recently.

Scale increase seen from a historical point of view was certainly not always a magical formula and it caused many a civilization to perish.

Also in the present-day economic life one should yield enough courage to examine things more closely and with the necessary shades.

In industry scale increase undoubtedly offers advantages such as the depressing of unit prices and the creation of larger possibilities in the field of research work. This is especially true for industries pursuing a mass or quantity production. However, as soon as a refined, a "sophisticated" product is concerned things

are different. In such a case only a small production unit offers the right solution.

Large car-concerns manufacture cheap and usually good cars in flow production. When they want, however, to put a real sports-car on the market, they have to call on an outsider. This "outsider" is supported by the concern, but it is in his own workshop that he will build the special version. In the same line of thinking it can be seen how big marks absorb the smaller ones, but yet let them continue to exist as much as possible as independent entities.

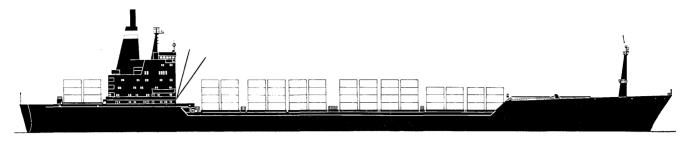
Also in the ports more and more quantity work is done and in this respect we think about the handling of ores, containers, RO/RO-traffics etc. So their scale increase in the obvious way. When, however, traffics with special character are concerned an individualized service mostly becomes indispensable. English export traffics were lost as the bigger firms could no longer pay the necessary attention to those traffics due to the concentrations resulting from the Devlin-report.

Also with most of the other enterprises not dealing with the handling of goods such as forwarding agencies, shipping agencies, underwriters, experts etc. this more or less individualized service often plays the lead. Similar enterprises should be very careful with respect to scale increase. If in order to cope with certain investments they have to face this phenomenon then appropriate forms will have to be found preserving the "spirit of the house" and the team spirit of all co-operators

We could dwell still much longer on the problem of scale increase. However, we simply wanted to exhort to reflection. A fact is more respectful than a Lord Mayor and certainly more important than a—sometimes disputable—conception. (Antwerp Port News, February)

#### **Belgian Mission to Japan**

Antwerp:—In the frame of a prospecting action oriented to Japan, the City Council of Antwerp and the Port of Antwerp Promotion Association have taken the initiative to organize a series of manifestations



On February 16, the largest all-container ship yet built was launched from the Blohm + Voss shipyard in Hamburg. The new ship, built for the Hamburg-Amerika Line, was named "Sydney Express". It will have a tonnage of 33,190 dwt. approximately, and carry 1508 20-ft. containers at a service speed of 22 knots. (Blohm + Voss)

in this country at the end of April/ beginning of May 1970. On this occasion a Belgian delegation will go to Japan. Representatives of the Belgian Government and of the Province Council of Antwerp have been invited to make part of this delegation, which apart from them, will consist of representatives of the City Council and of the Antwerp economic circles. For what the private sector is concerned an appeal has been made to specialists, belonging to the port-, commercial-, industrial- and banking circles, being specially interested in the business relations with Japan.

In close cooperation with the Belgian Office for Foreign Trade (O.B.C.E.), the Commissariat General to the Worldfair 1970 in Osaka, the Belgian Embassy in Tokyo and the Belgian Consulate General in Osaka, the organizers have foreseen a programme which, spread over a fortnight, comprises the following manifestations:

- —A "Port of Antwerp Day" (27-4-70) in Osaka;
- —Two Colloquies (28-4 and 30-4-70), also in Osaka, dealling with the four important branches of activities (commerce, port industry and finance);
- —Informative and contact-meetings successively in Kobe (1-5-70), Nagoya (4-5-70), Yokohama (5-5-70) and Tokyo (7-5-70). (Antwerp Port News, February)

#### Biggest Ship, Cargo

Liverpool, February 20th:—The largest ship ever to enter the river Mersey, the Shell tanker "Melo" of

206,492 deadweight tons capacity, berthed at Tranmere Oil Terminal to-day (Friday).

With Captain Cecil G. Bradley in command, the "Melo" (owned by Shell Tankers (U.K.) Limited) brought 133,000 tons of Kuwait crude oil for the major Shell refinery at Stanlow, Ellesmere Port. The ship had previously discharged 67,000 tons of her cargo into the 70,000 deadweight-ton Shell tanker "Drupa" to reduce her draught from 61 feet to 44½ feet to enable her to enter the Mersey. Her cargo is sufficient to keep Stanlow refinery operating for 41/2 days.

The stages and jetties of the Tranmere Oil Terminal are owned by the Mersey Docks and Harbour Board while Shell U.K. Limited owns the crude oil receiving facilities, the pipelines and the storage and pumping facilities on land. In 1969 the terminal received 10,769,-852 tons of crude oil, more than half the total tonnage of all cargoes handled in the Board's dock area. It went into operation in June 1960 when the Shell tanker "Zenatia", 38,000 deadweight tons—a giant by the standards of those daysbrought in a cargo of 35,300 tons of oil. Since that date some 75 million tons of oil have passed through the terminal.

Stanlow is Shell's largest oil refinery in the United Kingdom and is the second biggest of all the refineries in the country, with a crude oil processing capacity of 10¾ million tons a year. It is one of the most complex refineries in Europe and produces a large range of oil products, including liquid petro-

leum gases, petrol, kerosene (paraffin), aviation turbine fuel, gas oil, diesel fuel, fuel oils, lubricating oils, bitumen and wax; it also provides raw materials for the chemical plants adjacent to it and at Carrington, near Manchester, which belong to Shell Chemicals U.K. Limited.

The significant economies from the use of very large tankers like the "Melo" can be best realised if they can discharge their whole cargo in one port. Since the Mersey cannot accommodate them on full draught, Shell and the Mersey Docks and Harbour Board are actively studying projects for an off-shore crude oil unloading terminal off the coast of North Wales from which the oil would be brought ashore through a pipeline system and thence via transit storage tanks and a further pipeline to Ellesmere Port. This would eliminate delays arising from the need to lighten the ships before arrival at their final unloading point. (Mersey Docks and Harbour Board)

#### **Busy Gladstone Dock**

Liverpool, 26th January:—Trade through Liverpool's main Container Terminal at Gladstone Dock has increased so rapidly that "opening time" for receiving cargo has been brought forward one hour.

A container receiving and delivery unit is now available from 7 a.m. instead of 8 a.m., the Mersey Docks and Harbour Board announced today, and this will be increased as soon as demand justifies.

The decision to give the Terminal

(Continued on Page 40)

ROTTERDAM-EUROPOORT

## Rotterdam-Europoort 1969 Traffic

INTERNATIONAAL GOEDERENVERVO Internationaler Güterverkehr International goods traffic	1968	1969	1969/	1968	ROTTERDAM EUROPOORT	
Mouvement international de marchan	× 1000 †	× 1000 †	× 1000 t	%		
	invoer Einfuhr doorvoer Transit aanvoer Empfang uitvoer Ausfuhr doorvoer Transit afvoer Versand totaal Insgesamt	78.793 42.331 121.124 24.516 13.257 37.773 158.897	94.749 43.016 137.765 31.913 12.968 44.881 182.646	+ 15.956 + 685 + 16.641 + 7.397 - 289 + 7.108 + 23.749	+ 20 + 2 + 14 + 30 - 2 + 19 + 15	imports importations transit transit unloaded débarquements exports exportations transit transit loaded embarquements total total
	invoer Einfuhr doorvoer Transit aanvoer Empfang uitvoer Ausfuhr doorvoer Transit afvoer Versand totaal Insgesamt	4.870 8.267 13.137 9.325 36.784 46.109 59.246	4.861 7.812 12.673 10.754 36.966 47.720 60.393	— 9 — 455 — 464 + 1.429 + 182 + 1.611 + 1.147		imports importations transit transit unloaded débarquements exports exportations transit transit loaded embarquements total total
	invoer Einfuhr doorvoer Transit aanvoer Empfang uitvoer Ausfuhr doorvoer Transit afvoer Versand totaal Insgesamt	904 369 1.273 506 519 1.025 2.298	1.014 477 1.491 615 892 1.507 2.998	+ 110 + 108 + 218 + 109 + 373 + 482 + 700	+ 12 + 29 + 17 + 22 + 72 + 47 + 30	imports importations transit transit unloaded débarquements exports exportations transit transit loaded embarquements total total
	invoer Einfuhr doorvoer Transit aanvoer Empfang uitvoer Ausfuhr doorvoer Transit afvoer Versand totaal Insgesamt	979 817 1.796 1.168 1.190 2.358 4.154	1.082 832 1.914 1.409 1.289 2.698 4.612	+ 103 + 15 + 118 + 241 + 99 + 340 + 458	+ 11 + 2 + 7 + 21 + 8 + 14 + 11	imports importations transit transit unloaded débarquements exports exportations transit transit loaded embarquements total total
	Rotterdam—Rijn Rotterdam—Rhein	17.289	21.053	-+ 3.764	+ 22	Rotterdam—Rhine Rotterdam-Rhin

			•						J - J						
		1955			1965			1968			1969				
AANTAL SCHEPEN Anzahl Schiffe		20.348			28.103	3	;	32.145			32.02	23		= 10 00	Number of ships
N.R.T. × 1000		39.663	;		73.727			91.907			104.32	23	1	14	Nombre de navires N.R.T. × 1000
GOEDERENVERKEER TE	D 755		0				_								
IN MILJOENEN METRIEK				verkehr ü ionen me			o nen ir			ods traff metric to					rchandises métriques
		1955			1965			1968				1969			·
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		ROTTERDAM ROTTERDAM						ROTTERDAM			ROTTERDAM				
STUKGOED Stückgut	6,5	3,9	10,4	12,3	6,3	18,6	15,8	8,9	24,7	18,2	9,7	27,9	1	13	General merchandise Marchandises diverses
MASSAGOED	38,8	17,0	55,8	82,8	21.3	104,1	105,3	28.9	134,2	119,6	35.1	154,7	1	15	Bulk goods
Massengut		,	,			, .				7-	,-	, .			Marchandises en vrac
MINERALE OLIËN Mineralöle	17,4	7,8	25,2	51,6	17,0	68,6	66,7	19,9	86,6	81,0	26,3	107,3	1	24	Mineral oils Huiles minérales
ERTSEN Erze	7,5	0,0	7,5	15,7	0,2	15,9	24,0	0,5	24,5	24,7	0,7	25,4	. 1	04	Ore Minerais
KOLEN												,			
Kohle	7,8	7,4	15,2	4,5	0,9	5,4	1,3	4,2	5,5	1,4	3,9	5,3		96	Coal Charbon
GRANEN Getreide	3,3	0,1	3,4	5,2	0,7	5,9	4,7	1,1	5,8	3,5	1,1	4,6		78	Cereals Céréales
MESTSTOFFEN Düngemittel	0,8	1,2	2,0	2,3	1,7	4,0	3,0	2,2	5.2	2,9	1,9	4,8		93	Fertilizers
Düngemittel ANDER MASSAGOED				,	•	•		,	- 7	_,-	.,-	-,-		•	Engrais
Sonstiges Massengut	2,0	0,5	2,5	3,5	0,8	4,3	5,6	1,0	6,6	6,1	1,2	7,3	1	11	Other bulk goods Autres marchandises en vrac
TOTAAL Total	45,3	20,9	66,2	95,1	27,6	122,7	121,1	37,8	158,9	137,8	44,8	182,6	1	15	Total Total

AANGEKOMEN ZEESCHEPEN Angekommene Seeschiffe Arrivals of sea-going vessels Navires de mer entrés

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an extra hour in the morning was taken to allow more time for the overall operation of the berths. Last Friday, for example, the Gladstone Terminal had no fewer than five ship movements in one day.

All haulage contractors and shippers have been asked to take advantage of the earlier opening time.

The Terminal's output is now approaching 1,000 containers a week and steadily increasing.

By delivering at 7.00 a.m. a Warrington company had its lorries unloaded and back in Warrington with empty containers within 23/4 hours—and re-loaded to make a second delivery journey to Liverpool the same day.

Mr. John Marshall, the port's Docks and Commercial Manager, said: "The Gladstone Container Terminal is now extremely busy serving a multiplicity of shipping lines. We wish to give them the best service and to ensure a smooth flow of traffic by spreading the pressure over as wide a timetable as possible.

"Our staff at the Terminal and our dock workers are giving splendid co-operation". (Mersey Docks and Harbour Board)

#### **Productivity Confab**

Liverpool, 13th January:—The Minister of Transport (The Rt. Hon. Frederick Mulley M.P.), is to speak at the Fourth Annual Conference dealing with Productivity in the Port Industry, organised by the Merseyside Productivity Association in collaboration with the Mersey Docks and Harbour Board. It will be held at the Adelphi Hotel, Liverpool, on Friday, 30th January, from 0930 to 1700 hours, with Alderman H. MacDonald Steward, President of the Merseyside Productivity Association in the chair.

The general subject is "The Future of the Port Transport Industry", which will be dealt with as follows:-

9.45 Strikes

Professor H. A. Clegg, M.A. (Professor of Industrial Relations, University of Warwick).

10.25 Unions' Role in Industrial Relations

T. O'Leary, O.B.E. (National Secretary, Trans-

(National Secretary, Transport & General Workers' Union, Docks Group).

11.25 Devlin—A tragedy in Modern Style—Act II
 G.H.B. Cattell
 (Director, Manpower & Productivity Service, Department of Employment and

Productivity).

- 2.00 The Coming Decade
  Sir John Nicholson, Bart.
  C.I.E., J.P.
  (Chairman, The Ocean
  Steam Ship Co., Ltd.)
- 2.40 Containers—Door to Door Concept.Sir Andrew Crichton (Chairman, Overseas Containers Ltd.)

Adequate time will be allowed for questions and discussion, and there will be a summing up by Mr. R.S.F. Edwards, C.V.O., C.B.E., Director General of the Mersey Docks and Harbour Board.

The object of this series of Conferences is to make available up-todate information concerning developments in the Port Industry, both on Merseyside and elsewhere.

The fee for the Conference will be £9.10. Od. (£9.50) to include morning and afternoon refreshments and a buffet luncheon. Application should be made to the Programme Secretary, Merseyside Productivity Association, Federation House, Hope Street, Liverpool L1 9HH. (Mersey Docks and Harbour Board)

#### **New Shipping Note**

London, 17th April:—The new London standard shipping note has now been widely accepted by exporters, shippers, forwarding agents and carriers. The note came into use on 1st April, 1970 and, after only a fortnight, was being used for two thirds of all export consignments received at P.L.A. docks.

The P.L.A. and the London shipping companies attribute this excellent response to the goodwill and cooperation of the trade organisations and the individual shippers, exporters, forwarding agents and carriers, both large and small, who have readily appreciated the need for im-

proved export documentation.

The P.L.A. and shipping companies are reminding firms despatching export cargo to P.L.A. docks that, from 1st July, 1970, a special charge will be made to cover the cost of additional work involved for each consignment not accompanied by a standard shipping note set. However, it has also been emphasised that such cargo will not be refused because the new shipping note has not been used.

Since early March the P.L.A. have distributed about 1½ million sets of the new note and, although there have been some temporary difficulties in meeting the huge demand for these forms, the P.L.A. are confident that all the distribution problems will be overcome within the next few weeks. (news from PLA)

#### **Container Show**

London, 17th April:—The Port of London Authority will be participating in the 4th International Container Services & Equipment Exhibition on Stand No. 41 in the Grand Hall at Olympia, June 1st to 5th, 1970.

Their stand will feature the Tilbury Developments Model which depicts the P.L.A.'s dock extension and container berths from which 17 container services are operating and through which containers are currently passing at a rate exceeding 100,000 per annum.

Tilbury Docks have been handling trans-Ocean and Short-sea container services for the past two years.

P.L.A. experts will be in attendance throughout the duration of the exhibition to assist enquirers. Useful literature will be available about container services through the Port of London. (news from PLA)

#### Surrey Docks Closing

London, 14th April:—The Minister of Transport, Mr. Fred Mulley, has informed the Port of London Authority that they may proceed with the closure of the Surrey Docks and the Surrey Canal. The grounds for the approval given by the Minister of Transport are limited to the "safeguarding" provisions of the Ports Bill under which certain trans-

actions entered into by any Port Authority which is to be superseded could later be challenged by the National Ports Authority.

Approval by the Minister avoids this risk. Apart from this the decision is a matter for the Authority alone.

Over the past few months the Authority have consulted with all parties concerned and at the Minister's request have provided the Government with full information about the implications of closure for those employed in the Docks and for the port users concerned, and on a number of other relevant economic and social matters. The Minister's decision was not taken until after very full consideration had been given by the Government to all these aspects.

The Minister of Transport said "After very careful consideration of all the information which the Authority have provided I am satisfied that the prudent course of action is for the Authority to proceed with the closure of the Surrey Docks and the Surrey Canal".

The detailed procedure for the closure of these Docks will be urgently considered by the Authority and further consultations will take place as soon as possible with the Trade Unions, port employers, port users and others concerned. These talks will take into account the reallocation of shipping services to other Docks, the proposed introduction of Devlin Stage II and the associated two-shift working in the Enclosed Docks. It is intended to phase the closure in order to soften the impact on work people, port users and others concerned. It is expected the closure will be completed before the end of 1970. (news from PLA)

#### **Shipping Guide**

London, 1st April:—The Port of London Authority have just published the latest edition of their 56-page guide 'Shipping Services to Overseas Markets', of which some 10,000 copies of previous editions have been distributed free. This is the second up-dating within twelve months which ensures that exporters can have the latest information.

The new edition lists some 500 shipping services operating from London to all major world markets and these are alphabetically arranged for easy reference. The first three pages are an intelligently devised index to the book and carry ports and countries alphabetically listed with numbers of subsequent pages which carry the details of shipping services.

In addition to such essential information as the Shipping Line, Owners or Agents, Frequency of Service, Usual berth, the guide has a column for service comments which gives useful and practical details of such things as Vehicle Appointment Schemes and relevant telephone numbers, Groupage facilities for container services, Heavy lift capabilities and Transhipment services.

Issued free the guide may be obtained from The Port of London Authority, Marketing Services Department, Trinity Square, London, E.C.3. (news from PLA)

#### **New Port Policy**

Hamburg:—With a whole list of new measures Hamburg intends to increase the efficiency of its port, particularly in international competition. The Senate's new "Port Policy" is based on the assumption that, at the present stage of "change and readjustment in world trade, maritime traffic and handling techniques", adaptation can best be achieved through individual decisions. Greater scope for private enterprise is now afforded.

Senator Helmuth Kern, Head of the Hamburg Authority for Economy and Transport, made known the basic outline of the new plan which consists in the main of eleven separate measures. As Kern explained, the new policy should increase the efficiency of the port's economy and facilitate adjustment to modern methods of handling and transportation through the freedom of movement afforded to private enterprise, greater investment incentives and increased competition within the port itself.

Already in April 1967, in its report "Position and Development

Prospects of the Port of Hamburg", the Senate drew attention to the necessity for structural readjustment and outlined briefly the basic features of the proposed alterations. The policy now presented owes its shape to extensive discussions between parties involved and to experience gathered from part-measures already applied.

The measures primarily affect the Hamburger Hafen- und Lagerhaus AG (HHLA). This is necessary because the aims of the policy can only be achieved if the HHLA can be integrated successfully into the competitive pattern without privileges, yet without having burdens placed on it. The new measures are planned to take effect mid-1970.

The new policy is the Hansa City's answer to increasing "industrialization" in the transportation field. The port of Hamburg has so far been run as a cross between the monopoly of a Municipal undertaking—as in Bremen—and a system mainly of private enterprise—as in Rotterdam—and the new measures will reform it in the direction of the private enterprise pattern practised in Rotterdam.

The reform measures are combined in a system which will encourage private enterprise and competition within the port and at the same time promote co-operation or concentration horizontally within the various fields of activity or vertically through a number of service stages in order to remain competitive within the port through the formation of optimum operational units.

This dynamic system, combined with mixed financing, already successfully practised for several years—infrastructure is provided by the City State of Hamburg, suprastructure by enterprises using it—mobilises large reserves for rationalization and financing purposes as first experiments have already shown. In this way Hamburg can offer customers of its port further increases in efficiency and quicker adjustment to modern transport and handling techniques.

But also from the point of view of price competition agreeable prospects open up for customers of the port: package offers are already available comprising fixed price services and freely calculated services, thereby allowing a certain flexibility in the end price.

Partial measures already practised experimentally have had a dynamic effect on the modernisation and extension of the port of Hamburg by bringing in port operators and shipping firms. There are strong indications that when all the envisaged measures have started operating, the extension of the scope of private enterprise will stimulate competition outwardly as well as through a marketing system which will match the industrial character of modern transportation methods. (Ship via Hamburg, January)

#### **Over 40 Million Tons**

Hamburg:—Cargo turnover in the port of Hamburg in 1969 passed the 40 m tons mark for the first time. According to the port authority, the total volume handled last year amounted to 40.9 m tons. This is 2.9 m tons, or 7.5%, more than in 1968. The overall figure is comprised of 17.6 m tons liquid cargo, 13.3 m tons general cargo and 10 m tons dry bulk cargo. The development in general cargo can be described as satisfactory. With a general cargo volume of over 13 m tons, Hamburg is still by far the largerest German seaport in this sector. The December results apparently had a deciding influence on the overall figure. With roughly four million tons, the volume was about 9% higher than the best months previously recorded. Whereas incoming cargo accounted for almost 3 m tons, outgoing cargo exceeded 1 m tons for the first time in the port's history.

January 1970 also produced a new record with 4.288 m tons of seaborne goods handled. This figure is not only 300,000 tons higher than the record of the previous month, but also 900,000 tons (over 25%) more than in January last year. For the first time, incoming cargo exceeded 3 m tons. Both liquid cargo and a new record level of general cargo (1.246 m tons) account for these figures. (Ship via Hamburg, January)

#### **Private Enterprise**

Amsterdam:—Readers have asked us to explain the exact organisation of the Amsterdam Port. Officially, the harbour is municipally-owned; in practice, a policy of free-enterprise is followed.

The Municipal Council controls the policies of the port, it fixes rules, regulations and rates and determines the annual budget and its agency "Dienst der Havens en Handels-inrichtingen" carries out the day to day functions of the port. This body controls the municipal property, quays, sheds, warehouses and equipment and is responsible for the leasing to private firms. To paraphrase Winston Churchill, the management gives the tools to private enterprise, expecting it to fulfill the job.

The municipality controls all of the port area and there is no speculation in real estate prices which remain constant as all leases are negotiated by the city directly.

Another municipal administration authority "Havendient" allocates berthing spaces for ships and maintains the "order, safety and unobstructed navigation in the port and its entrance-ways". This authority issues Notices to Mariners as well as weather bulletins to out-going ships. The fire and escort services come under this authority.

Both "Havendienst" and "Dienst der Havens en Handelsinrichtingen" are purely regulatory bodies, designed to aid firms in the port and to control the growth of the harbour facilities. All shipyards, stevedoring and transhipment activities are in private hands, as are the tugboats in the port and at Ymuiden—where the North Sea Canal enters the North Sea.

All cargo-handling facilities are in the private domain and charges for these services outside the control of the municipality. There is a happy an practical division of tasks between the municipal authorities and private enterprise. (Haven Amsterdam, 1st October, 1969)

#### 500,000 Tonners Seen

Rotterdam: — The Netherlands Minister of Transport and Waterways, Mr. J. A. Bakker, addressing the general members meeting of the Union of Netherlands Industries at Zaandam on December 11 last year, said that the arrival of 500,000-tonners must be taken into account. "Should it come about that 500,000-tonners sail the North Sea, then Rotterdam and its Maasvlakte area must be linked up with this navigation route, provided it is economically and hydrologically justified", the Minister said.

He also mentioned in this connection that investigations carried out by international cooperation had already more or less shown which routes on the North Sea could be navigated by such large ships, both along Calais and round the north of Scotland. He said that, dependent on the question of what measurements will be decided for ships of this size—i.e. what their draught will be—it should not be ruled out that in due course considerable dredging work will have to take place on the bottom of the English Channel. (Rotterdam Europoort Delta, 1969 no. 4)

#### **Export of Citrus**

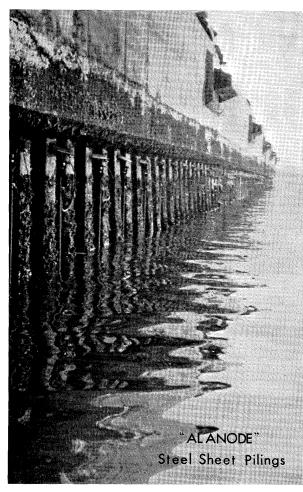
Lourenço Marques:—With regard to citrus, Moçambique is also getting its records as far as its movement is concerned, through the ports of Lourenço Marques and Beira.

Regarding Lourenço Marques, the end of the season has shown that in 1969 a record number of 3,760,000 cases has been shipped to Belgium, England, Holland, Portugal, Island of Madeira etc.

If we recall that in 1966 the number of cases handled at the Gorjao wharf was 1,361,960 cases, we will increase and if to this we add the idea already formed, based on solid facts of the tendency for this production to increase and as a consequence its export, we cannot fail to realize the reason of those who defended and ordered the building of the extension to the refrigerating chambers.

Thus Lourenço Marques continues to be efficient in all its aspects whether they be minerals, sugar or cereals in bulk. (Boletim Portos, Caminhos de Ferro e Transportes de Moçambique, October, 1969)

42 PORTS and HARBORS



Cathodic Protection

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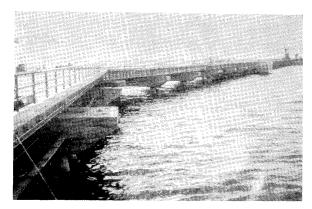
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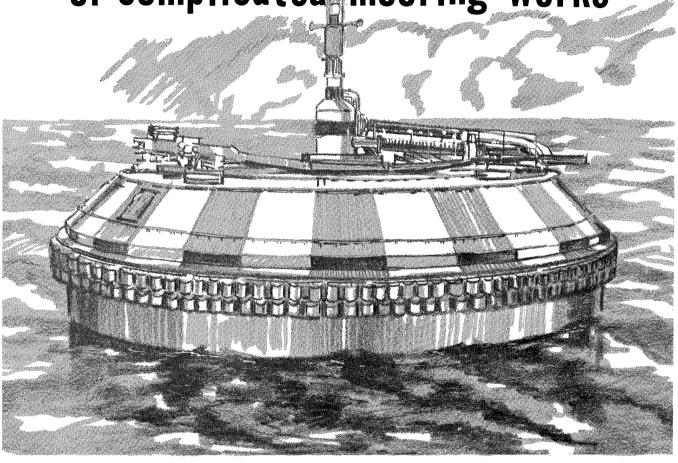
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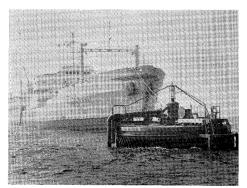
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# Now unload liquid cargoes without standard port facilities or complicated mooring works



The Hitachi Zosen Imodco Terminal for offshore cargo-oil loading and unloading



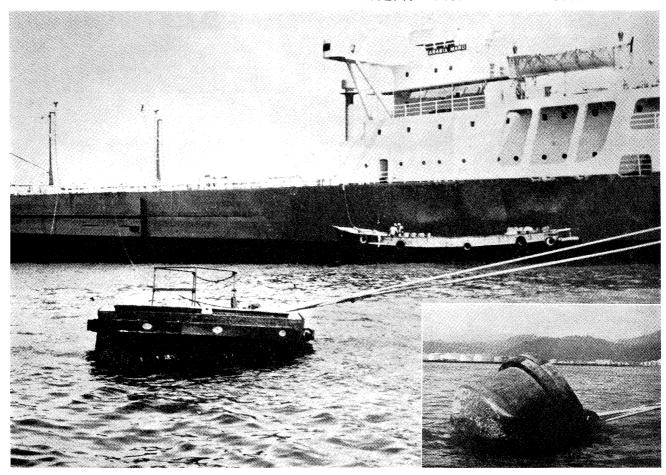
The Hitachi Zosen Imodeo Floating Oil Terminal reduces construction and operation costs, is an extraordinary installation for mammoth tanker mooring, off-shore loading and unloading.

Submarine pipelines connect moored tanker to land-based oil tanks, allow liquid cargo unloading in all weather conditions. Terminal is easily installed. Highly recommended for economical expansion and modernization of seaside industrial complexes, and for a variety of other applications. Write for detailed specifications and additional information.



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While ordinary mooring buoys bob and weave, exposing their underside when pulled by a large vessel, our patented Non-inclining Buoys always keep an even keel regardless of the size of the tanker to which it is tied. This is because of an ingenious device in the buoy-head. The buoy is equipped with a movable arm and hinge anchored at the center of gravity of the buoy. To this arm is attached a base chain which assumes the proper radius the ship & moored rope require.

Thus the chain inclines in place of the buoy, keeping the buoy always even since the buoy always faces in the direc-

tion of the pulling force. Non-inclining buoys are designed, manufactured and installed by Hamanaka.

Hamanaka has been privileged to construct the Tokuyama Seaberth (Idemitsu Refinery) in 1966, consisting of seven Non-inclining buoys. Each month these buoys moor the world's largest tanker, "Idemitsu Maru".

Since 1951, we have successfully installed more than 360 buoys. Our experience in submarine pipeline construction is vast. We most respectfully request the opportunity to be of service in submarine oil pipeline and seaberth construction, and stand ready to offer practical suggestions at any time.



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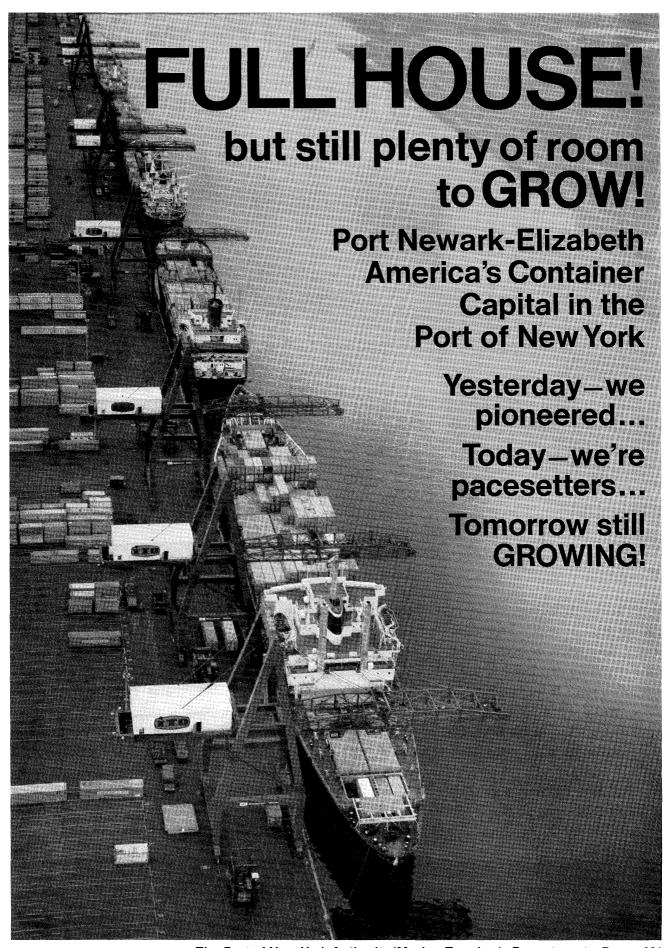
TOKYO OFFICE: YURAKUCHO BLDG., YURAKUCHO 1-5, TOKYO

Phone (213) 8681

CABLE ADDRESS: "CHAINBEST" TOKYO

FACTORY: SHIRAHAMA, HIMEJI, JAPAN

Phone (0792) 45-5151



The Port of New York Authority/Marine Terminals Department – Room 401 111 Eighth Avenue, New York, New York 10011 Tele: 212-620-7412