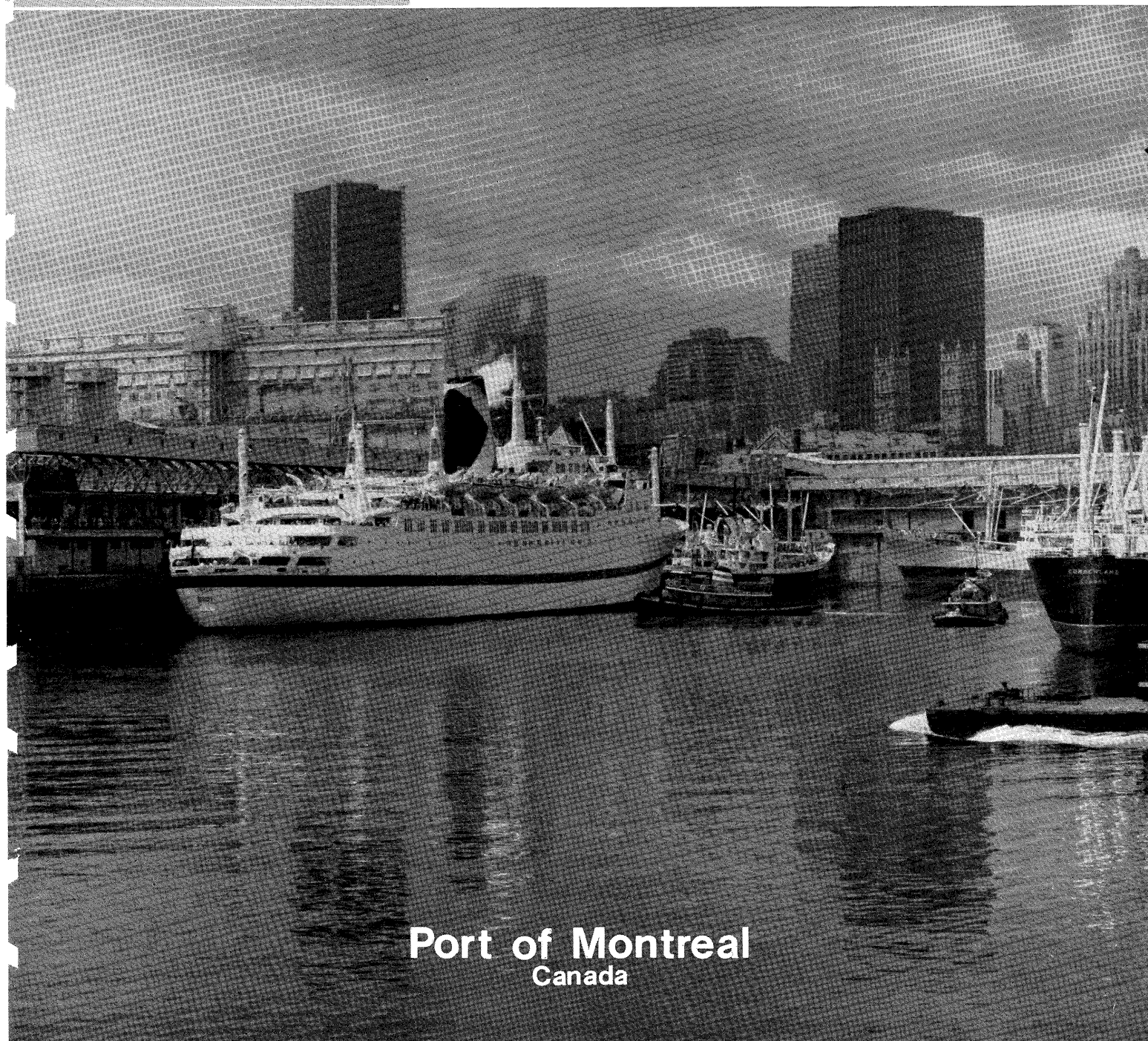


PORTS *and* HARBORS

April, 1971

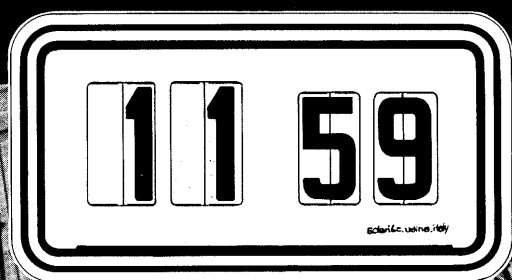
Vol. 16, No. 4



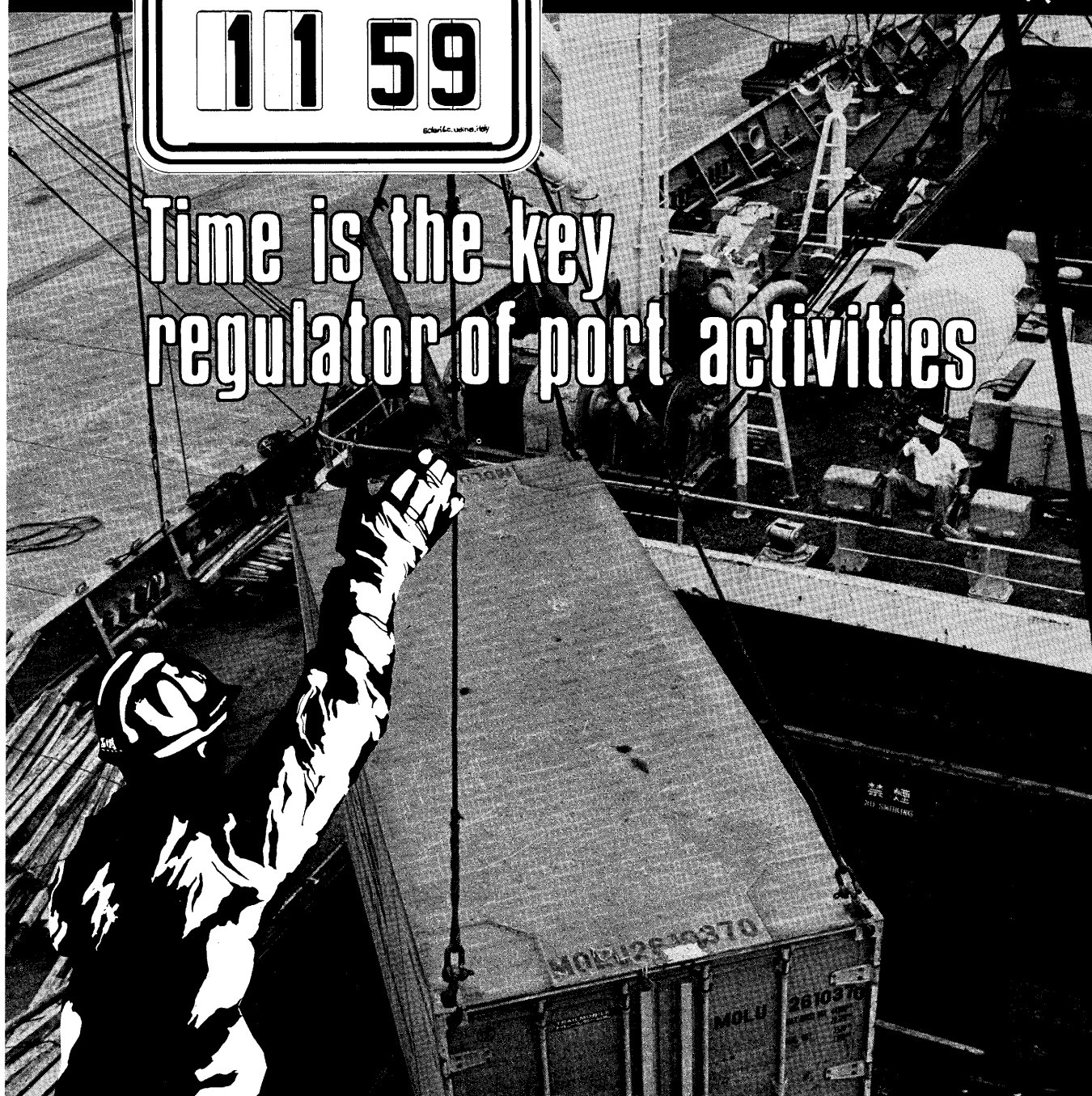
Port of Montreal
Canada

MONTREAL CONFERENCE JUNE 7-12 1971

The Publisher: The International Association of Ports and Harbors
Kotohira-Kaikan Bldg. 1, Kotohira-cho, Minato-ku,
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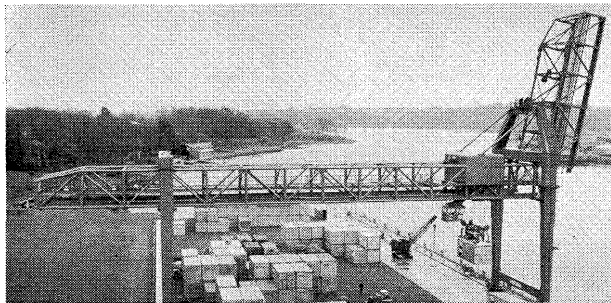
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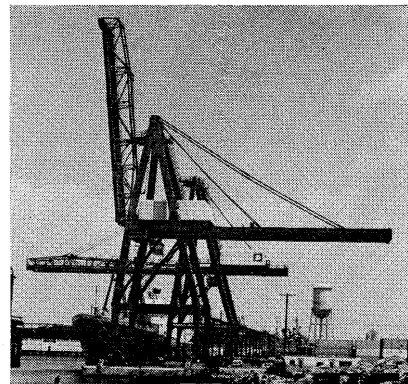
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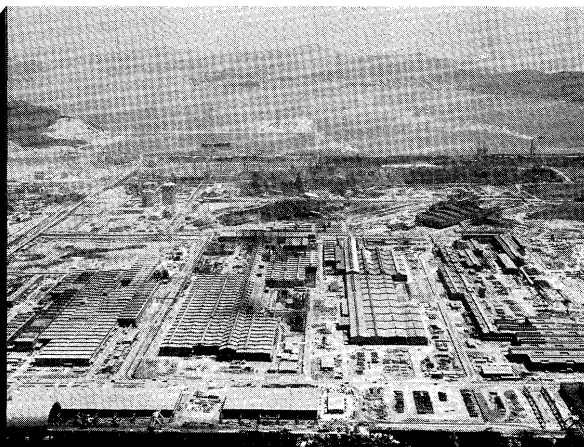
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PORTS *and* HARBORS

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Melbourne Harbor Trust
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April, 1971 Vol. 16, No. 4

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The Cover :

A busy corner of Montreal Harbour, with the Canadian Pacific passenger liner "Empress of Canada" at the Louis Jolliet Passenger Terminal which is on the upper floor of transit shed No. 10. Also shown are several freighters at their berths, with Grain Elevator No. 1 and the City of Montreal skyline in the background. (Also see story on Page 18.)

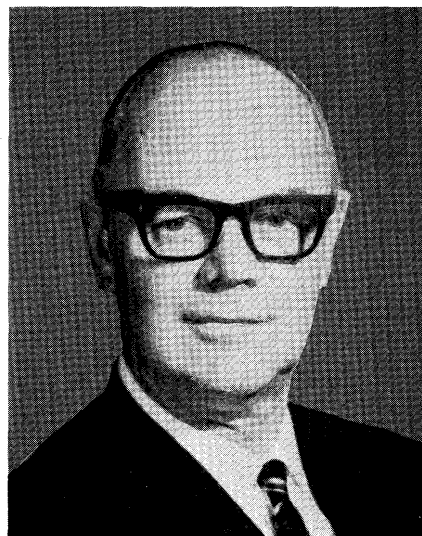
Head Office:

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Tel.: TOKYO (591) 4261
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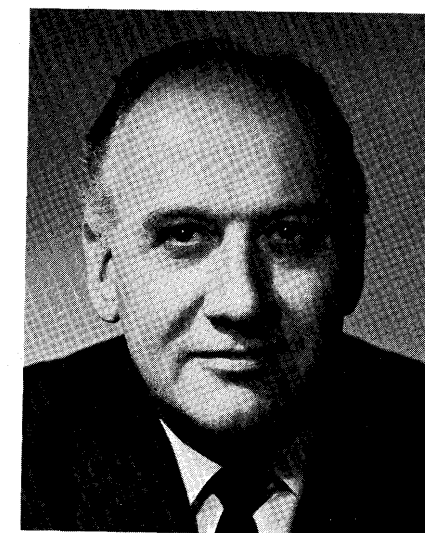
Toru Akiyama

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US\$20.00 per year



The Seventh I.A.P.H. Conference

Come To Montreal



With the time of the Seventh Conference of the International Association of Ports and Harbors to be held in Montreal from 7th to 12th June 1971 now fast approaching, I would like to take this opportunity of extending an invitation for all members of the Association to be present on this occasion.

The venue which has been selected and the arrangements being made by the Organizing Committee both for the formal Conference proceedings and for the comfort and convenience of delegates will, I am certain, ensure a most successful Conference.

An excellent Ladies' Program has been prepared and, for those who will be able to participate, extremely interesting pre and post Conference Tours are being offered.

With a membership of some 56 Countries of the world and the position which the IAPH has established as the co-ordinating body of ports and port users on an international basis, Conferences of this nature afford a unique opportunity for port administrators, and those associated with port activities generally, to meet and discuss their problems which, as you will appreciate, are surprisingly similar throughout the world.

The rapidly changing methods of cargo handling which are at present occurring in almost all areas, make it increasingly necessary for a frequent interchange of information between ports and port users.

The subjects of the Papers to be presented and of the Panel Discussions, have been selected because of their universal interest and the format which is to be adopted of general discussion periods to follow the presentation of Papers at the Conference, together with the Panel Discussions, will provide a valuable opportunity for the expression of a broad cross-section of opinion from the floor of the Conference.

I am confident that we can expect a large and representative attendance of members in Montreal in June and look forward to a most successful Conference.

V. G. SWANSON,
President

In the past the Port of Montreal has been accorded recognition in many ways. It has been honoured by official visits by Royalty, by Governors General and Prime Ministers, by Ambassadors and Archbishops, by Cabinet Ministers and business executives, by men and women representing a great many countries around the world. It has been recognized as Canada's greatest port and one that ranks high among the major ports of the world. It led the field in container terminal development in Canada and, in past years, it created a world record for grain handling that defied duplication for more than a third of a century. Its officers and staff have been sought out for advice and assistance by ports in distant lands.

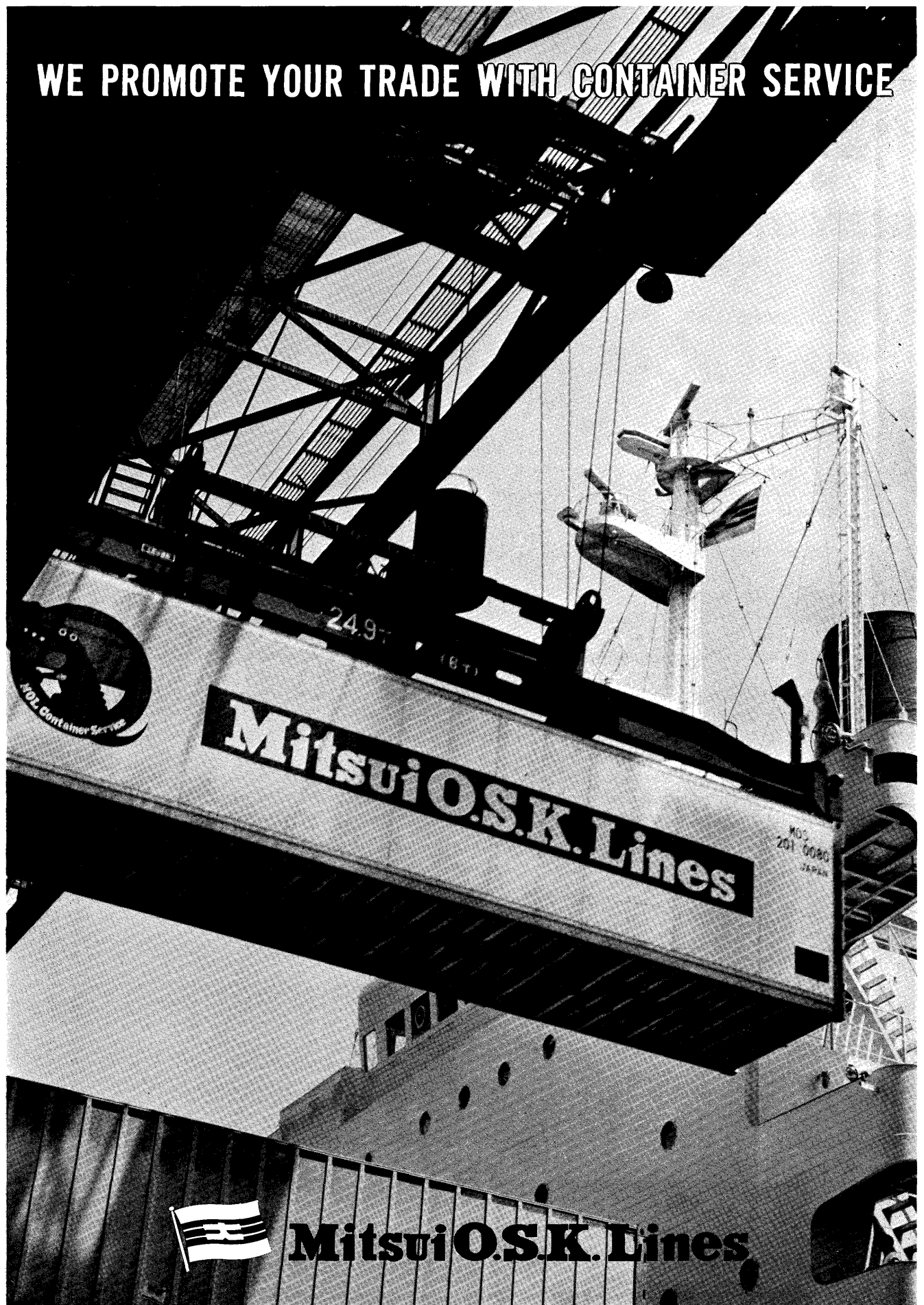
Well up among the honours that have come to Montreal was its selection by the International Association of Ports and Harbors as host port for the Seventh Biennial IAPH Conference. This constituted a challenge which the Organizing Committee has worked hard to meet. You have read the invitation brochure and, judging by your response, you have found our offering acceptable.

To those who have already registered, as well as those who have not yet mailed their registration forms, I extend a hearty invitation to join with us to make this conference a resounding success. Informative and interesting major, minor and panel papers have been prepared. Enjoyable entertainment awaits you in the surroundings and atmosphere that only Montreal can provide. The hotel conference facilities are unsurpassed. All that is needed for a memorable conference is your presence. I urge you to be with us.

Yours sincerely,

G. Beaudet,
Montreal Port Manager and
Chairman, the Organizing Committee

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The Port of Montreal is rated as one of the great ports of the world, with a wide diversity of facilities. It is located on the St. Lawrence River, about one thousand miles from the Atlantic Ocean. The developed part of the harbour extends for a distance of 15 miles along the west shore of the river which is generally referred to locally as the north shore. The harbour limits encompass both shores of the river for a distance of approximately 40 miles, which provides ample room for future development. Despite severe winter ice conditions, the port operates the year around.

Montreal is a very interesting cosmopolitan city which contains more French-speaking citizens than any city in the world other than Paris. A substantial segment of its population is of British origin and there is also representation from practically every other ethnic group in the world.

Montreal has a world-wide reputation as a tourist and convention center. The Organizing Committee and all others connected in any way with the Seventh Biennial Conference of the International Association of Ports and Harbors will do everything possible to make your attendance an occasion to be long remembered.

Since Canada is officially bilingual, all documents will be printed in English and French. The major papers will also be printed in Japanese and Spanish.

National Harbours Board and the Port Manager and staff of the Port of Montreal extend a hearty invitation to all prospective delegates to attend the Seventh Biennial Conference of the International Association of Ports and Harbors in Montreal, Canada's largest city and major port.

THE PATRON

The Conference will be held under the distinguished patronage of the Honourable Donald C. Jamieson, P.C., Minister of Transport, Government of Canada.

YOUR HOST

Will be Mr. Guy Beaudet, Port Manager, Montreal Harbour.

Registration:

Registration will take place on the convention floor of the Queen Elizabeth Hotel. Delegates may register from 1,000 hours to 1,700 hours on Sunday, June 6th and from 0900 hours to 1700 hours on Monday, June 7th.

The registration fees, in U.S. funds, are as follows:

1. Regular members \$110.00
2. Supporting members:
 - Individual \$110.00
 - Corporate \$200.00
3. Non-members:
 - Port authority \$150.00
 - Others \$300.00

The Conference:

The Conference will take place during the period from Monday, June 7, 1971, to Saturday, June 12, 1971, inclusive. The registration desk will also be staffed on Sunday, June 6th to take care of all early arrivals.

Several Committee Meetings are scheduled for Sunday but participation by delegates in general will commence on Monday.

Conference Site:

The Conference will be held in the Queen Elizabeth Hotel in the heart of downtown Montreal. The Queen Elizabeth was designed as a convention hotel and it serves this purpose admirably. With more than 1,200 rooms, there is ample space to house all delegates within this one structure.

A discount of 5% is offered for payment of registration fees in full not later than March 31, 1971. If full pre-payment is not possible, delegates are requested to forward their registration form with a payment of 10% not later than March 31, 1971. Similar requirements apply to fees for pre and post-conference tours. Any balance outstanding is payable at time of registration. There is no conference registration fee for ladies accompanying delegates. The fees for pre and post-

CONFERENCE PROGRAMME:

The timetable of the Conference is as follows:

Sunday, June 6th	1000 to 1230 Hours and 1400 to 1700 Hours	Registration of delegates.
Monday, June 7th	0900 to 1200 Hours 0900 to 1230 Hours and 1400 to 1700 Hours 1100 to 1200 Hours	Inspection of container terminals, grain handling operations, general cargo handling and any of the port operations in which delegates are interested (optional). Registration of delegates. Call on the Mayor of Montreal by the President, Vice-Presidents, Secretary General and immediate Past President to sign the Golden Book.
	*1400 to 1500 Hours *1900 Hours	Official opening ceremonies. Lobster party at Le Cercle Universitaire.
Tuesday, June 8th	0900 to 1230 Hours 1230 to 1400 Hours 1400 to 1630 Hours *1830 Hours	Conference. Luncheon. Conference. Reception and buffet dinner by the City of Montreal.
Wednesday, June 9th	0900 to 1215 Hours 1230 to 1400 Hours 1400 to 1645 Hours	Conference. Luncheon. Conference.
Thursday, June 10th	0900 to 1130 Hours *1200 Hours 1900 Hours	Inspection of container terminals, grain handling operations, general cargo handling and any of the port operations in which delegates are interested (optional). Tour of Montreal Harbour and the first lock of the Seaway aboard a cruise ship, with a reception, buffet luncheon and later refreshments aboard the ship. Disembark from ship for return to hotel.
Friday, June 11th	0900 to 1230 Hours 1230 to 1400 Hours 1400 to 1645 Hours *1900 to 2000 Hours *2000 to 2300 Hours	Conference. Luncheon. Conference. Reception. Presidents' dinner.
Saturday, June 12th	0930 to 1130 Hours *1130 to 1400 Hours	Conference. Closing session and luncheon.

* Joint function for delegates and ladies.

conference tours are applicable not only to delegates who register for these tours, but also to accompanying ladies.

Kindly TYPE or complete in BLOCK letters, the registration card and the application for pre and post-conference tours and air mail them to:—

The Secretary,
IAPH Conference Organizing Committee,
National Harbours Board,
Port of Montreal Building, Wing 1
Cité du Havre,
Montreal 104, Quebec, Canada

Kindly make bank drafts or money orders payable to National Harbours Board, Montreal, Canada.

Conference Procedure:

At the Plenary Sessions at the Conference the right of delegates to speak and vote will be conducted according to the By-Laws as follows:—

Privileges of Members (By-Laws)

Sec. 6. Each Regular, Supporting and Life Supporting Member shall have the privilege of subscribing for any number of membership units and of attending Conferences at the rate of one delegate per subscribed membership unit.

Each Regular Member shall have the privileges of the floor in considering all matters that may be brought before a Conference and shall have the right to exercise one vote, without regard to the number of membership units subscribed or the number of delegates. Regular Members whose membership dues are delinquent for more than one year shall not be privileged to exercise their vote.

Each Supporting, Life Supporting and Honorary Member shall have the privileges of the floor in considering all matters that may be brought before a Conference, including the privilege of participating in debate and being appointed to any Standing Committee, but not the privilege of moving resolutions or bills, making or seconding nominations, or of voting.

Non-members are not entitled to vote or speak during Business Plenary Sessions.

Conference Papers:

Delegates will have the opportunity to discuss all papers presented at the Conference and discussion time has been allocated for each paper. There will be five major papers presented (in precis form) and the total time allocated for both presentation AND discussion of each paper is one hour. There will be two panel discussions for each of which a two-hour period has been allocated.

There will also be nine minor papers and the total time allowed for presentation AND discussion of each paper is twenty-five minutes. Presentation of each paper must be limited to a maximum time of fifteen minutes to allow at least ten minutes for discussion.

Languages:

In accordance with Canada's official status as a bilingual nation, all documents will be printed in both English and French. There will be simultaneous translation of all proceedings at the Conference in English, French, Japanese and Spanish. All major papers will also be printed in these four languages.

Conference Record:

Following the completion of the Conference, all proceedings will be published and forwarded to all members.

The major papers will be available to delegates before the Conference, PROVIDED the authors have submitted their papers in ample time for translation and printing.

MAJOR PAPERS:

1. Abandonment of Old Installations in Urban Center and Development of New Facilities Outside of Urban Center to Meet Container Challenge

Mr. Ben E. Nutter,

Executive Director, The Port of Oakland.

2. The Role of Ports in a National Economic Plan

Dr. Yoshiaki Kurisu,

Director General, Bureau of Ports and Harbors, Ministry of Transport, Japan.

3. Financial Policies for Ports

Mr. Stanley Johnson, C.B.E.

Managing Director, British Transport Docks Board.

4. Customs and Door-to-Door Transport

Paper to be presented by a representative of Customs Co-operation Council to be designated later.

5. The Functions and Work of IMCO

Paper to be presented by a representative of Inter-Governmental Maritime Consultative Organization to be designated later.

PANEL DISCUSSIONS:

1. Computers and the Port

Moderator:

Mr. Townsend Lucas,
Manager, Port Service Improvement Committee, Port of New York.

Panelists:

Mr. John Eyre,
President, Saguenay Shipping Ltd., Montreal.
Mr. Claude Mandray,
Director of Operations, Port of Marseilles.
Mr. Clifford Muller,
Manager, Data Processing, Port of Seattle.
Mr. N. N. B. Ordman,
Director of Planning, Port of London.

2. Containerization

Moderator:

Mr. Ben E. Nutter,
Executive Director, Port of Oakland

Panelists:

Mr. Peter Evans,
Director for North America, Furness, Withy & Company Ltd., Montreal.
Mr. A. Lyle King,
Director of Marine Terminals, Port of New York.
Mr. Dudley Perkins,
Director General, Port of London.
Mr. F. Suykens,
Assistant General Manager, Port of Antwerp.

MINOR PAPERS:

1. **Research by UNCTAD in the Field of Port Development**
Mr. S. G. Sturmev, Deputy Director, Division for Invisibles and Chief, Shipping Branch, United Nations Conference on Trade and Development, Geneva.
2. **New Challenges to the Ports in Terms of Environmental Questions and New Managerial Challenges**
Mr. Harry C. Brockel, Former Director of the Port of Milwaukee, U.S.A.
3. **International Co-operation in Port Policing**
Mr. D. N. Cassidy, Director General, Police and Security, National Harbours Board, Canada.
4. **A Few Principles to Apply and Mistakes to Avoid in Preparation of Port Tariffs**
Mr. F. K. DeVos, Chief Economist, Marine Works Branch, Marine Services, Department of Transport, Canada.
5. **Methodology of Studies of Cargo Handling in Ports**
Mr. Jacques Gruot, Paris, France.
6. **The Simplification of Port Charges**
Mr. J. R. Sainsbury, Director of Marine and Harbors, South Australia.
7. **Trends and implications of Container Shipping**
Dr. Eric Schenker, The University of Wisconsin—Milwaukee, U.S.A.
8. **Port Development-What Priority?**
Mr. Joseph L. Stanton, Executive Director, Maryland Port Authority, U.S.A.
9. **Is Cooperation Between Ports Possible? A Study on the Practical Fields in which Competitive Ports can Cooperate**
Mr. R. Vleugels, General Manager, Port of Antwerp, Belgium.

Conference Facilities:

For the convenience of delegates and accompanying ladies, a number of facilities will be available on the convention floor of the Queen Elizabeth Hotel. The facilities will consist of—

A Tourist Bureau: Representatives of the Montreal Municipal Tourist Bureau will be on hand to provide information concerning Montreal and the region.

An Official Photographer will be available.

An Information Bureau: There will be an information service to assist and advise in connection with individual problems concerning Conference functions, together with any other general inquiries regarding

shopping or other personal matters.

An Airline Representative: A representative of CP Air will be on hand to provide service and advice in connection with any matters dealing with air travel.

A Wrapping Service: A wrapping service will be provided to assist with wrapping Conference documents or parcels of any other type for mailing or other disposal. A post office is located a little over a block from the hotel at the corner of University and Cathcart Streets.

For security reasons, bank facilities will not be available on the convention floor. However, a number of banks are located in the immediate vicinity of the Queen Elizabeth Hotel.

Electric Power:

The normal electric current in Canada is 110 volt A.C. Outlets for razors and other light equipment are designed to accommodate plugs with two flat prongs.

Hotel Reservations and Charges:

Arrangements were made with the Queen Elizabeth Hotel to set aside a block of rooms for delegates attending the Conference. In addition to this, it is necessary for delegates to make advance reservations by using the prescribed reservation card by air mail with The Queen Elizabeth Hotel, 900 Dorchester Blvd. West, Montreal 101, Quebec, Canada. It is necessary to state that the reservation is for attendance at the IAPH Conference. No deposit is required when making reservations. Payment for the hotel room will be made by delegates directly to the hotel. The reservation card must be completed and mailed as soon as possible.

Official Air Carrier:

For the convenience of delegates and accompanying ladies, a major Canadian airline, CP Air, has been designated as official air carrier for the Conference. This airline operates to many countries all over the world as well as in the domestic sphere. CP Air is making special arrangements to provide the best possible service to Conference delegates from the regions which it serves.

From a modest beginning in 1942, rooted in the amalgamation of ten small independent air services, CP Air (formerly Canadian Pacific Airlines) has expanded to become one of the world's major carriers. Its 54,382 mile unduplicated route pattern radiates from Vancouver in the form of a giant X, linking five continents and all major cities in Canada.

This route pattern includes 5,928 domestic route miles, of which 3,723 route miles are on the inter-con-

tinental run which offers daily service to Vancouver, Calgary, Edmonton, Winnipeg, Toronto, Ottawa and Montreal. The overseas routes, 48,454 miles in extent, stretch from Hong Kong through Tokyo, Vancouver, Calgary, Mexico City, Lima and Santiago to Buenos Aires; from Australia through Fiji to Honolulu, Vancouver, Edmonton and then over the polar route to Amsterdam; from Montreal to Amsterdam and Rome; from Mexico City through Toronto and Montreal to the Azores, Lisbon, Madrid, Rome and Athens and from Vancouver to San Francisco.

In addition to CP Air, there are many international airlines which operate into Canada and delegates may, of course, choose any one of these. However, before completing their travel arrangements, delegates should check with their airline as to the possibility of intermediate stops at Halifax and Vancouver in connection with the pre and post-check the section of this brochure which deals with these tours.

Customs, Immigration and Health Requirements:

Canadian Customs Officers have been advised that delegates to the Conference will be arriving in Canada from many countries and will do everything possible to carry out the formalities quickly and courteously. The following Customs information may be useful delegates:

1. Alcoholic beverages, cigarettes, cigars, tobacco are permitted entry duty-free in the following maximum amounts for each person who has passed his twenty-first birthday:

Cigarettes	200
Cigars	50
Manufactured tobacco	21 bs.
Alcoholic beverages	40 ozs.
or, as a substitute,	
beer or ale	24 pints

Films and flashbulbs are permitted in reasonable quantities appropriate to the intended length of stay in Canada.

Items such as a camera, bino-

LADIES' PROGRAMME :

A programme has been arranged for the ladies who will be in Montreal with delegates to the Seventh Biennial Conference. A number of interesting activities have been planned but ample free time has been left for shopping, visits to points of individual interest or just relaxing.

The programme for the ladies is as follows:

Monday, June 7th	*1400 to 1500 Hours	Official opening ceremonies.
	*1900 Hours	Lobster party at Le Cercle Universitaire.
Tuesday, June 8th	0930 to 1030 Hours	Morning coffee.
	1030 to 1200 Hours	Guided tour of Place Ville Marie underground shopping area.
	1200 to 1400 Hours	Luncheon.
	1400 to 1530 Hours	Guided tour of Bonaventure underground shopping area.
	*1830 Hours	Reception and buffet dinner by City of Montreal.
Wednesday, June 9th	0930 to 1200 Hours	Scenic tour of City of Montreal.
	1230 to 1430 Hours	Luncheon and fashion show.
	Free Afternoon	
Thursday, June 10th	Free Morning	
	*1200 to 1900 Hours	Tour of Montreal Harbour and the first lock of the Seaway aboard cruise ship.
	*1200 to 1300 Hours	Reception aboard ship.
	*1300 Hours	Buffet luncheon aboard ship.
	*1730 Hours	Sandwiches and coffee aboard ship.
Friday, June 11th	*1900 Hours	Disembark from ship and board buses for return to hotel.
	Free Day	
	*1900 to 2000 Hours	Reception.
Saturday, June 12th	*2000 to 2300 Hours	Presidents' dinner.
	Free Morning	
	*1130 to 1400 Hours	Closing session and luncheon.

*Joint function for ladies and delegates.

culars, etc., which are for a delegate's personal use during his visit to Canada are permitted entry duty-free. This is also true of wearing apparel and personal articles of the type normally carried on the person or in personal baggage such as jewellery, toilet requisites, electric razors, etc.

2. Immigration regulations require

that all persons except citizens and permanent residents of the United States of America must have valid passports for admission to Canada as non-immigrants. In all cases, the passport must be valid for the full period that the visitor intends to remain in Canada.

The following persons do not require a non-immigrant visa for

The programmes for the pre and post-Conference tours are as follows:

PRE-CONFERENCE TOUR :

Tour participants arrive at Halifax on Wednesday, June 2nd, and will lodge at the Nova Scotian Hotel.

Thursday, June 3rd	0900 to 1200 Hours	Scenic tour of the city and surroundings.
	1400 to 1700 Hours	Tour of Harbour.
	1800 Hours	Reception.
Friday, June 4th	0800 Hours	Transfer from Nova Scotian Hotel to airport.
	0925 Hours	Depart from Saint John.
	1010 Hours	Arrive in Saint John. Transfer to Admiral Beatty Hotel.
	1200 Hours	Reception.
	1430 Hours	Scenic tour of the city and surroundings, including the Reversing Falls, a unique and natural phenomenon caused by an extremely high tide in Saint John Harbour. A tour of the harbour will follow the scenic tour.
	1830 Hours	Transfer from hotel to airport.
	1955 Hours	Depart for Quebec.
	2055 Hours	Arrive in Quebec. Transfer to Chateau Frontenac.
N.B.: Saint John is in the Atlantic time zone Quebec is in the Eastern time zone. There is a one-hour time differential.		
Saturday, June 5th	0900 Hours	Scenic tour of the city and surroundings, including Old Quebec, the Plains of Abraham, the National Assembly building and other points of interest.
	1430 Hours	Tour of harbour, followed by a reception.
Sunday, June 6th	0930 Hours	Depart from Quebec for Montreal by deluxe motor coach via the Trans-Canada Highway.
	1200 Hours	Arrive at Queen Elizabeth Hotel in Montreal.

POST-CONFERENCE TOUR :

Sunday, June 13th	0910 Hours	Depart from Central Station, Montreal, via Canadian National Railways' Turbo Train.
	1315 Hours	Arrive in Toronto. Depart immediately by motor coach for Niagara Falls, for a scenic tour of the Canadian and American Falls, the Whirlpool Rapids, the cable car, Queen Victoria Park and other points of interest. Return to Toronto early evening. Lodging at the Royal York Hotel.
Monday, June 14th	0900 Hours	Tour of Toronto Harbour.
	1200 Hours	Reception.
	1430 Hours	Scenic tour of the city.
	1850 Hours	Depart for Calgary.
	1940 Hours	Arrive in Calgary. Transfer from airport to Palliser Hotel.

entry to Canada as visitors: British subjects or citizens of Commonwealth countries (excluding persons travelling on Southern Rhodesia passports); citizens of Ireland, France, the Republic of South Africa, citizens and permanent residents of the United States of America; persons born or naturalized in any country of north, south or central America or islands adjacent thereto. For a visit of not more than three months, citizens of Japan, Western European countries, including Turkey, do not require non-immigrant visas.

3. Visitors must comply with the following vaccination requirements: Smallpox: Evidence of vaccination is required for all persons arriving in Canada except those persons who, for at least 14 days before arrival, resided continuously in one of the following countries only: Bahamas, Bermuda, Cuba, Greenland, Iceland, Jamaica, Mexico, Panama Canal Zone, Puerto Rico, the Islands of St. Pierre and Miquelon, the United States of America and the Virgin Islands.

Cholera: Evidence of vaccination is required from persons arriving from infected areas.

Yellow Fever: Evidence of vaccination is required from persons arriving from infected areas.

The required vaccinations must be recorded on the official certificates of vaccination in the form prescribed in the International Sanitary Regulations of the World Health Organization.

Weather and Dress:

June is usually a very nice month in Montreal. The average maximum and minimum temperatures in degrees Fahrenheit are 74.2 and 57.5. The average rainfall during the month is 3.6 inches. However, as in most areas, unusual weather can develop and it is possible to experience very warm or quite cool weather during the first part of June. It is suggested that visitors provide themselves with clothing suitable for cool weather as well as reasonably warm weather.

Informal dress will prevail at practically all Conference functions. At the Presidents' dinner, dress will be optional. For men, evening dress comprising dinner jacket (black tie) or national dress would be preferred but business suits may also be worn. For ladies, evening gowns, cocktail dress or national dress will be in order.

Tipping:

Tipping is a general practice in Canada. Tips are expected by taxi drivers, food and drink waiters, attendants who handle baggage at hotels, airports and railways, hotel maids, shoe-shine boys, cloakroom attendants, barbers, hairdressers, etc. The size of the expected tip varies but, in general, it runs from 12% to 15% of the bill. Some restaurants may include a service charge in their bill which constitutes a tip for the waiters and other service staff. It is advisable to check your bill to ascertain whether it includes a service charge before leaving a tip.

POST-CONFERENCE TOUR (cont'd)

N.B.: Toronto is in the Eastern time zone and Calgary is in the Mountain time zone. There is a two-hour time differential.

Tuesday, June 15th	0900 Hours	Scenic tour of the city.
	1330 Hours	Depart by motor coach for Banff. On arrival, a scenic tour of Banff and surroundings, including the Bow River and Falls, Tunnel Mountain, Sulphur Mountain and other scenic features. Lodging at Banff Springs Hotel.
Wednesday, June 16th	0900 Hours	Depart by motor coach via the scenic Yoho Valley and Kicking Horse Pass. The beauty spots will include the Takakkaw Falls, approximately 1200 feet (400 meters) in height, Emerald Lake, the Natural Bridge, Moraine Lake, the Valley of Ten Peaks and Lake Louise.
	1800 Hours	Arrive at Banff.
	0800 Hours	Depart for Calgary by motor coach.
	1040 Hours 1155 Hours	Depart for Vancouver. Arrive in Vancouver. Transfer to Georgia Hotel.
Thursday, June 17th	1430 Hours	Scenic tour of city and region, including Stanley Park, Capilano Canyon, Lion's Gate Bridge and many other scenic or interesting features.
		N.B.: Calgary is in the Mountain time zone and Vancouver is in the Pacific time zone. There is a time differential of one hour.
Friday, June 18th	0900 Hours	Tour of Vancouver Harbour, Roberts Bank and other regional harbours, followed by a reception. Balance of day free.
Saturday, June 19th	1000 Hours	
	1300 Hours	Arrive in Victoria. Scenic tour of the city, its beautiful parks and residential districts, its magnificent Provincial Parliament Buildings, its famous Butchart Gardens and other points of interest.
	2000 Hours	Arrive at Georgia Hotel in Vancouver following trip by bus and ferry from Victoria.
This is the official end of the tour. Hotel rooms are paid until Sunday morning. Anyone wishing to remain longer must make their own hotel arrangements. For those returning to Montreal, please note the following schedule:		
Sunday, June 20th	0730 Hours	Transfer from hotel to airport.
	0855 Hours	Depart for Montreal.
	1800 Hours	Arrive in Montreal.

N.B.: Vancouver is in the Pacific time zone and Montreal is in the Eastern time zone. There is a three-hour time differential.

TOUR COSTS AND CONDITIONS :

A. Pre-Conference Tour

1. Cost, per person, in U.S. funds:

- a) Transportation by air from Halifax to Quebec with stop-over at Saint John \$ 38.00
 - b) Hotel rooms and other arrangements 150.00
- \$188.00

(Item (b) will be reduced to \$142.00 if paid in full not later than March 15, 1971)

2. Total cost includes:

- a) Transportation by air, economy class, surface transportation by deluxe motor coach.
- b) Hotel accommodation: Two nights at the Nova Scotian Hotel in Halifax and two nights at the Chateau Frontenac Hotel in Quebec, based on two persons per twin bedded room, with private bathroom facilities. If a single room is desired, there will be an extra charge of \$20.00 for the tour.
- c) Transfers: Between hotels and airports.
- d) Sightseeing and Excursions: By deluxe motor coach.
- e) Tips: For baggage handling at airports and hotels and for hotel chambermaids.
- f) Meals: Two breakfasts and one dinner at the Chateau Frontenac. Other meals are not included. Such meals may be expected to cost each person a total of from \$20.00 to \$25.00.

Everyone taking part in the pre-Conference tour should arrange for transportation to Halifax for arrival on June 2nd. In some cases, air fare from a delegate's home to Montreal will include a stop-over at Halifax at no extra cost. In such circumstances, the item for air transportation from Halifax to Quebec MAY NOT be applicable. Your local air line ticket agent can advise you on this point.

Currency:

The Canadian currency system is about identical with that of the United States of America. It is a decimal system, with the units consisting of dollars and cents. The denominations of the more common coins are 1 cent, 5 cents, 10 cents and 25 cents. The most commonly used notes or bills are in denominations of 1 dollar, 2 dollars, 5 dollars, 10 dollars and 20 dollars.

In recent years, the Canadian dollar was pegged at a valuation of approximately 92 cents American. In 1970, the Canadian dollar was permitted to fluctuate freely. At the end of the year, its valuation had risen to between 98 and 99 cents American. There is a possibility that the dollar may be pegged again in the future.

Anyone travelling with American money will find that it can be used

anywhere in Canada for purchases of goods or services. Travellers' cheques in American funds may be converted into Canadian money in most places of business in addition to banks.

Pre and Post-Conference Tours:

Canada is a large country. Some appreciation of its size may be gained from the length of the Trans-Canada Highway which connects St. John's, Newfoundland to Victoria, British Columbia by 4,787 miles of paved highway. It is impossible, in the time available, to show delegates all of our country. It is the aim of the Organizing Committee to provide glimpses of a number of different sections of the country which, combined, will give delegates something of the feel of Canada as a whole.

The pre-Conference tour will touch Halifax and Saint John in the provinces of Nova Scotia and New Brunswick, which are two of Canada's four Atlantic provinces. The tour then moves on to the City of Quebec located in the province of Quebec on the St. Lawrence River, the great waterway that carries ships on the first stage of their voyages to the heart of the continent. The tour ends at Montreal in time for registration for the Conference.

The post-Conference tour will begin on Sunday, June 13th, and will include Niagara Falls, one of the world's scenic wonders, and Toronto in the province of Ontario, which is Canada's second largest city and a seaport which is 1,400 miles inland from the Atlantic Ocean. The tour will then move by air over the mineral rich pre-Cambrian Shield of Northern Ontario, over the provinces of Manitoba, Saskatchewan and part of Alberta, which produce wheat, cattle, oil, potash, coal and other products. The tour will touch down at Calgary in the foothills of the Canadian Rocky Mountains and will then move on to scenic Banff and Lake Louise, nestled amid the splendour of white-capped peaks. The tour will then move by air above various ranges of mountains to Vancouver, in the province of British Columbia, Canada's great Pacific Coast port. A visit to Victoria, on Vancouver Island, will follow and

the tour will officially end at Vancouver on Saturday night, June 19th, with hotel accommodation paid for until Sunday morning.

Inspection of Port Facilities:

Arrangements will be made for any delegates who choose to do so to inspect container terminal operations, grain handling facilities, general cargo handling operations or any other phase of Port of Montreal operations. These inspection trips will be arranged for Monday, June 7th, from 0900 hours to 1200 hours and Thursday, June 10th, from 0900 hours to 1130 hours. Delegates will be transported by bus or other vehicles to the various facilities, will be given a guided tour through them by port staff members who will be able to provide any information required. A registration form for these inspection tours should be completed and mailed to the Secretary of the Organizing Committee along with the Conference registration form.

TOUR COSTS AND CONDITIONS (cont'd)

B. Post-Conference Tour

1. Cost, per person, in U.S. funds:

- | | | |
|----|--|----------|
| a) | Transportation by air from Toronto to Vancouver, with stop-over at Calgary, and return to Montreal | \$273.00 |
| b) | Hotel rooms and other arrangements | 265.00 |
| | | \$538.00 |

(Item (b) will be reduced to \$252.00 if paid in full not later than March 31, 1971)

2. Total cost includes:

- a) Transportation: Rail transportation from Montreal to Toronto on the Turbo train, Canada's newest and fastest passenger train, economy class air transportation and surface transportation by deluxe motor coach.
- b) Hotel accommodation: One night at the Royal York Hotel in Toronto, one night at the Palliser Hotel in Calgary, two nights at the Banff Springs Hotel in Banff and three nights at the Georgia Hotel in Vancouver, based on two persons per twin bedded room, with private bathroom facilities. If a single room is desired, there will be an extra charge of \$60.00 for the tour.
- c) Transfers: Between hotels and airports.
- d) Sightseeing and Excursions: By deluxe motor coach.
- e) Tips: For baggage handling at airports and hotels and for chambermaids.
- f) Meals: Two breakfasts and two dinners at the Banff Springs Hotel. Other meals are not included. Such meals may be expected to cost each person a total of from \$40.00 to \$50.00.

If it is not desired to return to Montreal, the air fare shown above will be reduced by one half. In some cases, the air fare from a delegate's home to Montreal will include a stop-over at Vancouver at no extra cost. In such cases, the item for air fare from Toronto to Vancouver MAY NOT be applicable. Consult your local air line ticket office.

The Port of Montreal

by Guy Beaudet

Port Manager

Montreal, host port for the Seventh Biennial Conference of the International Association of Ports and Harbours, established a record in 1970 when more than 25 million tons of cargo moved over its wharves. This represented an increase of 17 percent over the previous year. Roughly 20 per cent of this total was general cargo. The remainder was composed of bulk commodities such as petroleum and petroleum products, grain, mineral ores, etc. The total cargo was

divided almost equally between import and export. 5456 ships with a net registered tonnage of 23,419,542 moved this cargo to and from Montreal.

In many respects, the port is favored by its location. Situated at the head of deep water navigation, it is about the mid point of the vast inland waterway comprising the St. Lawrence River and the Great Lakes. Although 1,000 miles inland from the Atlantic Ocean, Montreal is closer to the United

Kingdom and most European ports than are New York and other United States Atlantic seaports. About 1,200 miles distant by water from the head of the Great Lakes, Montreal is also advantageously located in regard to the great producing and consuming areas in central and western Canada and the middle United States. Thus, as a point of interchange between lake, river, ocean, road and rail traffic, the Harbour of Montreal was, from the beginning destined to fulfill an important function in the development of Canada's domestic and foreign trade. Today it is Canada's largest port and one of the most important on the North American continent.

The harbour limits enclose a 42 mile length of the river and include both shores. The principal development has taken place along some



A ship load of Containers being unloaded at one of Montreal's Container terminals



The upstream end of Montreal Harbour showing cargo vessels at their berths. Also in the background is Grain Elevator No. 5 and the 275 ton capacity floating crane. In the lower right hand corner the Polish passenger liner "Stephan Batory" has left her berth at one of the Port of Montreal's two passenger terminals to begin her voyage to Europe.

15 miles of the Montreal side of the river, referred to locally as the North shore. This leaves room for expansion for many years to come.

Montreal is one of 10 ports which are under the jurisdiction of National Harbours Board. Its facilities are extensive and include 14 miles of wharves and piers, with berths for 140 ships, 52 transit sheds with 4.5 million square feet of floor area, five grain elevators with a total capacity of 22.5 million bushels, three container terminals, a cold storage warehouse with a capacity of 3 million cubic feet and two modern passenger terminals.

The Board (National Harbours Board) owns and operates a 62 mile terminal railway at the

harbour which serves all sheds and most open storage areas.

A floating dry dock of 25,000 tons capacity is located in the harbour and a floating crane of 275 tons capacity is available for heavy lifts. Sufficient tugs are on hand at all times for berthing any ships which require this service.

The port operators are also responsible for the operation of two bridges across the St. Lawrence River, one of which is a toll bridge.

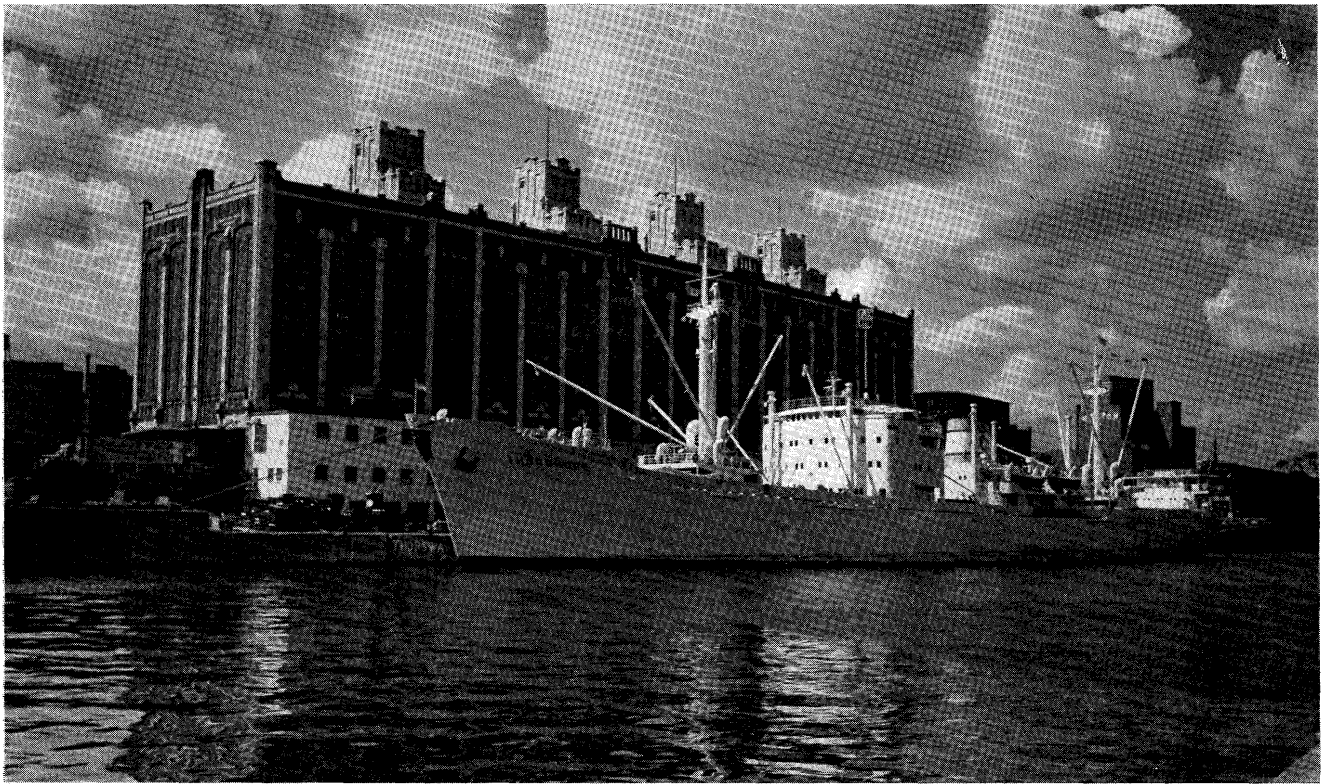
The value of all Board owned facilities at the harbour is in excess of \$250,000,000. Of this amount, \$85,000,000 has been added during the last ten years.

Montreal was the first port in Canada to construct a Container

Terminal. Opened in November 1968, it has been operated with great efficiency by Furness, Withy & Co. Ltd. It is equipped with a 25 ton capacity gantry crane, four straddle carriers, one travel crane for loading and unloading railway cars, a container storage shed and a consolidation shed for stuffing and unstuffing containers.

Manchester Liners Ltd., with three container ships which are strengthened for navigation under ice conditions, maintain a weekly service between Montreal and Manchester. Each ship carries 550 containers below deck. Turn around time at Montreal is less than 48 hours.

The operation has been so suc-



A ship with a cargo of fresh fruit from South Africa berthed at the port of Montreal's Cold Storage Warehouse.

cessful that a fourth container ship is under construction and a second gantry crane will be installed by the end of this year. With these additions the Montreal Manchester service will be stepped up to one container ship every five days and turn around time at this port will be reduced to 24 hours.

The area of this terminal is 18 area were available for development but, due to a number of compensating factors, the 18 acre site was chosen. This somewhat limited area spurred the operators to develop techniques to ensure the rapid movement of containers. In this they have been highly successful, even under Montreal winter conditions, with low temperatures and an average snowfall of 100 to 120 inches.

Two additional container terminals have now been put into operation and the container movement is expected to continue the rapid expansion that has been experienced thus far. 17,460 loaded containers were handled in 1968. This total rose to 64,625 in 1970 and will show a further substantial in-

crease in 1971.

The Port of Montreal has a police force of 115 officers and men. Well trained and directed by men of long experience and high repute in police work, the force has reduced theft to a minimum. There was only one major theft, a shipment of nickel, at the port in 1970. By painstaking police effort this case was solved and the nickel was recovered just before it was loaded aboard ship at another port.

The duties of the police force include the protection of life and property, regulation of traffic, enforcement of the National Harbours Board Bylaws and enforcement of the criminal code of Canada. It is equipped with a fleet of eleven patrol cars, a patrol boat, telex and a modern inter-communication system. It is the major unit of the Board's National police and security force.

Until recent years Montreal was not a year round port. Due to severe ice conditions in the St. Lawrence River, there was no shipping activity from late December until late March each year. That situation changed when a

Danish ship, reinforced for operation in ice, entered the harbour early in March 1962. Since then an increasing number of reinforced, ocean going ships have used the port during the winter months. The number of ships which called at Montreal Harbour from December 15, 1969 to March 31, 1970, rose to 263. The total import and export cargo handled during this period was 2,167,836 tons.

Since 1642 when Paul de Chomedey, Sieur de Maisonneuve, founded the settlement which became the City of Montreal there have been, from time to time, detractors who predicted the end of this port. In recent years this happened when the opening of the St. Lawrence Seaway in 1959 made it possible for vessels with a draught of 26 feet to sail up to the Great Lakes. It happened with the beginning of the container era and the same pessimistic notes are sounded whenever labour disputes disrupt port activities. Despite this, the Port of Montreal continues to set records. With aggressive, forward looking management it will continue to do so. February 9, 1971.

Britain Leads In Northern Europe

Container traffic passing through British ports last year exceeded that of all other North European ports put together, according to estimates published today by the National Ports Council.

During the year Britain's container traffic on specialised lift-on and conventional shipping services totalled 7,050,000 tons. The total for the rest of Northern Europe (West Germany, Belgium, Netherlands, France, Scandinavia and the Baltic) was 6,786,000 tons.

Mr. Morris Gifford, the Council's Director General, explained that some of the figures for the rest of Europe were estimates, but "where we have been in doubt we have erred on the side of generosity" he said. "There is no doubt in my mind that Britain led the field in North West Europe last year not only in total container traffic but also in the traffic on deep sea trade routes with 1¼ million tons (against West Germany's 1.1 million tons; Netherlands' 1.0 million tons)".

The above figures were achieved in spite of the diversion of the U.K./Australian traffic to the Near-Continental ports of Antwerp and Rotterdam, which had the effect of depressing the level of Britain's deep-sea container traffic and increasing that of Belgium and the Netherlands.

The Council's figures* are the first results from improved arrangements for the assembly of container statistics introduced in respect of 1969 with the co-operation of all the 45 port authorities dealing with container traffic. The figures show that Britain had one-third of the

total container traffic on most important world trade route: Northern Europe to North America (about 200,000 tons more than West Germany and 500,000 tons more than the Netherlands).

The global figure of 7,050,000 tons covering short, near and deep sea traffic, refers to lift-on traffic on special purpose containerships and on conventional ships although as some of the conventional services, especially at London, were not covered in the returns made to the Council, the true figure would be somewhat higher. Another 1¼ million tons of goods in containers were carried on roll-on/roll-off vessels, making a total of 8,314,000 tons in container units, compared with less than 4 million tons in 1967 and less than 2 million tons in 1965.

In addition, goods traffic carried in road vehicles or trailers continued to grow with an increase of half a million tons (from 2.1 to 2.6 million tons) whilst railway wagon traffic fell very slightly (from 788,000 to 782,000 tons).

Specialised lift-on vessels accounted for 6.2 million tons out of the 11.7 million tons of goods carried during 1969 in 1,323,622 loaded units (Containers, flats, tanks, road goods vehicles, railway wagons). Specialised roll-on vessels carried 4.6 million tons and conventional vessels the remaining 432,000 tons.

In addition, roll-on vessels carried over a million tons of other traffic not in intermodal units, such as import and export vehicles, caravans, crated beer on ships' trailers etc. Altogether 12.7 million tons of goods were moved through British ports in specialised returnable units or on specialised lift-on/lift-off shipping services. Roll-on vessels, which carried some 5.6 million tons of this total, also carried 1,568,178 accom-

panied cars and buses in the rapidly growing tourist trade.

Movements of empty units, which involve uneconomic "dead heading" for operators and make extra demands upon port lifting and storage capacity, proved to be even more numerous when specifically recorded in the new returns than had been previously estimated by the Council's staff. In 1969 some 414,000 empty units moved through British ports, about 31 per cent of the total loaded numbers and about 33 per cent in the foreign trades and 26 per cent in the coastwise trade (the Council's estimates for the previous years were 26 per cent overall, 30 per cent in the foreign trade and 18 per cent coastwise).

Preston, where Britain's unitised services first began, continued as the primary container and roll-on port in Britain with a total of 1.2 million tons. But Liverpool and Felixstowe have narrowed this lead with their recent growth in the foreign trades and each totalled 1.1 million tons followed by Hull (1.0 million tons) Dover (0.9 million), London (0.8 million) and Southampton (0.5 million).

The Council point out that individual figures for all ports cannot be given because of the need to avoid revealing details of the commercial activities of individual undertakings operating unit transport services in highly competitive conditions.

The publication includes two graphs illustrating the growth of unitised traffic since 1965. The most spectacular growth has been in the foreign trades (excluding the Irish Republic), from under 2 million tons in 1965 to nearly 8½ million tons in 1969. During the same period trade across the Irish Sea increased from 2 million tons to almost 4 million tons.

Subsequent publication is envisaged of additional more detailed material about unit transport traffic.

ends

23rd November, 1970

* Container and roll-on port statistics, Part 1: traffic by type of unit, service and overseas country. Published by the N.P.C., 17, North Audley St., London W1Y 1WE. Price £1.

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Orbiter Probe

IAPH News :

S.G.

The 10th Seminar on Ports and Harbors organized by the Overseas Technical Cooperation Agency of Japan, is in session January 25 through March 18.

On Saturday February 27 the Secretary General Mr. Toru Akiyama privately invited the seminar participants to an excursion by bus to his company country manor, Sobu-Sanso, 45 kilometers east of Tokyo for a barbecue lunch. After lunch the party of 32 including 17 seminar participants played a heated prize tournament of shuff-board game in the country house garden.

Travelers

From Northland Harbour Board (Whangarei), New Zealand, arrived in Tokyo on Friday February 26 Mr. A. W. Leslie, Deputy Chairman, and Mr. E. J. Johnson, Board Member. The two gentlemen were here on a study tour of Japan after attending the Conference of the Australian Port Authorities in Hobart, Australia. On Monday, March 1, Mr. Kisaburo Enomoto, Counsellor of Keihin (Tokyo Bay) Port Development Authority, took them down to Yokohama and showed them around the Himmoku container Wharfs, then

back to Tokyo to introduce them to Mr. Mitsunobu Ishiba, Deputy Director of the Port and Harbor Bureau of the Tokyo Metropolitan Government, who is scheduled to attend the Port Centennial in New Zealand, March 29 through April 3, 1971 in Auckland. The two port men visited the Secretary General Mr. Toru Akiyama at his business office for a few minutes around 5.00 p.m. The two-man party is scheduled to visit the Port of Kobe on Wednesday, March 3 for the tour of the container facilities.

ICHCA Conference

London:—Arrangements for the Tenth Biennial Conference of ICHCA are well under way and a preliminary brochure has already been prepared. The conference will take place in Madrid at the National Palace of Congresses and Exhibitions, under the general title of "Transport Coordination in the 'Seventies'". The congress will open on Monday, June 14, under the

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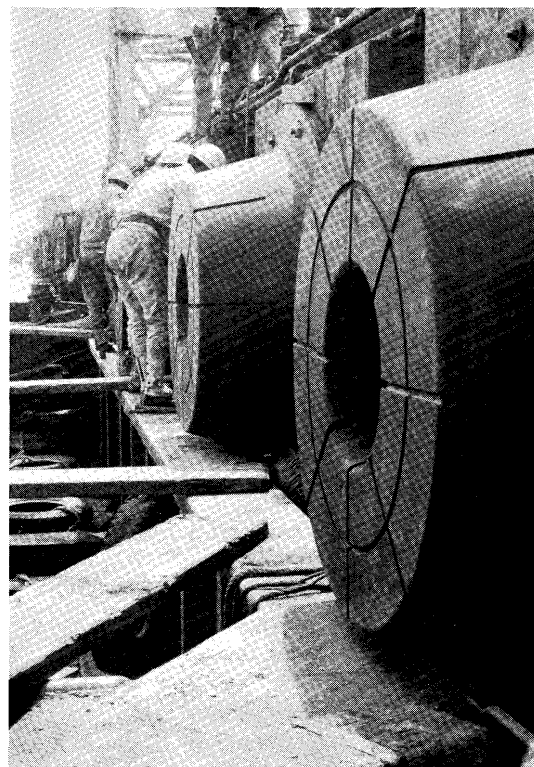


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patronage of H.R.H. the Prince of Spain, and papers will be presented during the four days by Dr. Harald Jürgensen (Germany), Mr. Loh Heng Kee (Singapore), Mr. R. P. Holubowicz (USA), Mr. S. G. Sturmey (UNCTAD), Mr. N. N. B. Ordman (UK), Mr. M. C. Kieft (Netherlands), Sr. A. Gonzalez Isla (Spain) and Sr. Ramiro Cercós (Spain).

There will be simultaneous translation in English, French, German and Spanish, and delegates will receive copies of all papers beforehand in either English or French. There will be social events and a ladies' programme is being prepared. (ICHCA Monthly Journal, February 1971)

OCEANEXPO

Bordeaux:—International Colloquium and Exhibition on the Exploitation of the Oceans is to be held March 9-14, 1971 in the Auditorium of the Parc des Expositions, Bordeaux. The address of the Secretariat is c/o CNEX-B.P.-107, Paris (XVIe), France.

Seaway Notice No. 1, 1971

Opening and Closing Dates—1971 Navigation Season

A. Opening

Weather and ice conditions permitting, navigation on the Seaway system will open at 0800 hours on the following dates:

Area	Opening Date
Welland Canal	March 29, 1971
Sault Ste. Marie Canal (Canadian)	April 4, 1971
Montreal-Lake Ontario Section	April 1, 1971

The Lakes Control for Lake Ontario and Seaway Long Point in Lake Erie will resume operation on March 26, 1971, at 0800 hours.

In the Montreal-Lake Ontario Section, daylight navigation only will be permitted from the opening date until floating aids, sufficient to permit night navigation, have been installed.

The Seaway Authority and the Seaway Development Corporation will commence on March 1, 1971, to issue weekly ice bulletins to

users associations. Other interested parties may receive the same upon request to:

U.S.

Director of Operations,
Saint Lawrence Seaway
Development Corporation,
Seaway Circle,
Massena, New York.

CANADA

Director of Operations,
The St. Lawrence Seaway
Authority,
P.O. Box 98,
Cornwall, Ontario.

Ice conditions as of February 10, 1971, were as follows:

Ice cover existed in canals, rivers and lakes in the Montreal-Lake Ontario area. There were a few small openings in the St. Lawrence River in the area from Prescott to Lake Ontario.

Ice thicknesses were as follows:

Below St. Lambert Lock	18-28 inches
South Shore Canal	23-26 inches
Lake St. Louis	22-26 inches
Beauharnois Canal	21-26 inches
Lake St. Francis	21-27 inches
Iroquois Lock	14-17 inches
Lake St. Lawrence	19-26 inches
Wiley Dondero Canal	25-29 inches

In general, ice thicknesses and cover to date are similar to those in 1970, e.g. Lake St. Francis in 1970 on the same date was 26 inches.

B. Closing

Barring acts of God and/or other unforeseeable events, and weather and ice conditions permitting, navigation in the Seaway system will remain open until the formal closing dates shown below:

Area	Closing Date
Welland Canal	December 22, 1971
Sault Ste. Marie Canal (Canadian)	December 12, 1971
Montreal-Lake Ontario Section	December 12, 1971

The Montreal-Lake Ontario Section and then Welland Canal may remain open, on a day-to-day basis, beyond the formal closing dates dependent on weather and ice conditions and traffic demand.

C. 1972 Season

In order to assist mariners in their long range planning, notice is given that the 1972 navigation season in the Welland Canal section of the Seaway will close on December 15th. This early closure is related to the completion of the Welland By-Pass, which is scheduled to open on April 1st, 1973. (The St. Lawrence Seaway Authority, Cornwall, Ontario, February 17)

Shipboard Container Cranes

Alameda, Calif., February 2:—A contract for six shipboard container handling cranes of new design has been awarded PACECO, a Division of Fruehauf Corporation, Alameda, California, by "K" Line of Japan.

The 30 ton capacity cranes will be installed aboard three modified containerships to be used in "K" Lines' new container service between the United States and Southeast Asia. Each ship will be equipped with two PACECO Shipstainer cranes, one forward and one aft to load and unload containers. The vessels will have a capacity of 300/40-ft. containers which the Shipstainers can load and unload at an average rate of 32 per hour. In terms of tons, the cranes will handle 800 to 900 long tons of containerized cargo per hour.

Cantilevers, on each side of the cranes, have an outreach of 23-ft. to enable ship loading and unloading onto the pier from either side of the ship. When the ship puts out to sea, cantilevers are folded within the crane's gantry frame for compact stowage.

The cranes are designed to stack containers two high on the top deck of the ship, and will operate on ship's power utilizing DC variable voltage for smooth, position container spotting.

"K" Lines new container service which will start in October of this year, will have direct calls between Seattle, Washington; Long Beach, California; Keelung; Hong Kong; and Pusan. Sailings are scheduled for every 15 days. (PACECO News)

1-Mil.-T Container Port

Baltimore, Md., February 4:—Baltimore became a million-ton container port during 1970, year-end figures just released by the Maryland Port Authority revealed today.

Combined with 692,452 containerized tons handled at the state agency's Dundalk Marine Terminal, more than 400,000 tons moved by Sea-Land Service, Inc. put the 1970 container total well over the million-ton mark.

Month after month during this first year of the new decade, records at Dundalk were successively set and broken, as the Port of Baltimore registered the best year in its long history. Prospects for the future indicate even greater records for the months and years yet to come.

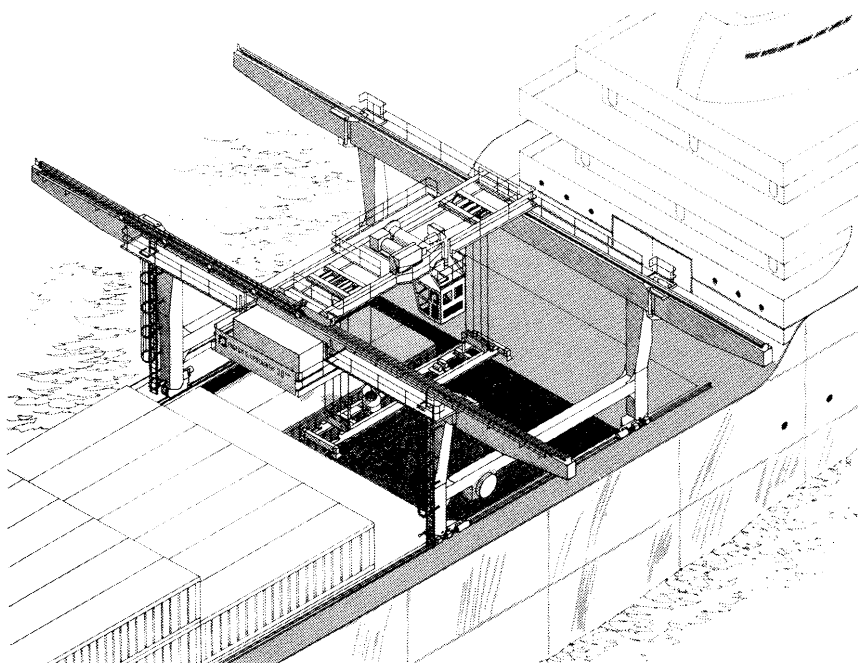
During the initial 12-month period of the decade, 52,417 containers carried boxed cargo aboard 411 vessels at Dundalk Marine Terminal alone, not to mention the volume handled at Sea-Land and other areas of the port.

Compared to previous years, the 1970 Dundalk totals appear even more dramatic: in 1969, the terminal handled 229,948 tons of container cargo; in 1968, only 77,455. In 1967, the first year of containerization, the tonnages were so low—here as in other ports—that individual statistics were not kept.

But the growth has been so tremendous at Baltimore that by the autumn of 1972 the Port Authority expects to have seven huge bridge-type container cranes operating at Dundalk terminal on six specialized berths designed for the exclusive handling of containers.

In addition, the construction of two new consolidation sheds will give the MPA facility a total of 195,000 square feet of container consolidation space. There is already one 65,000-square-foot shed in use near Dundalk's Berth 8.

Current staff projections indicate a continuing growth of container tonnage in the years ahead. With its existing and planned facilities the Port of Baltimore will be ready and waiting to handle it. (Maryland Port Authority News Release)



A contract for six shipboard container handling cranes of new design has been awarded PACECO, a Division of Fruehauf Corporation, Alameda, California, by "K" Line of Japan. The 30 ton capacity cranes will be installed aboard three modified containerships to be used in "K" Lines' new container service between the United States and Southeast Asia. Each ship will be equipped with two PACECO Shipstainer cranes, one forward and one aft to load and unload containers. The vessels will have a capacity of 300/40-ft containers which the Shipstainers can load and unload at an average rate of 32 per hour. In terms of tons, the cranes will handle 800 to 900 long tons of containerized cargo per hour. Cantilevers, on each side of the cranes, have an outreach of 23-ft. to enable ship loading and unloading onto the pier from either side of the ship. When the ship puts out to sea, cantilevers are folded within the crane's gantry frame for compact stowage. The cranes are designed to stack containers two high on the top deck of the ship, and will operate on ship's power utilizing DC variable voltage for smooth, position container spotting. "K" Lines new container service which will start in October of this year, will have direct calls between Seattle, Washington; Long Beach, California; Keelung; Hong Kong; and Pusan. Sailings are scheduled for every 15 days. (PACECO News, February 2)

1st Port of Call

Baltimore, Md., February:—Sea Train Lines, a powerful U.S. containership operator, made an important change in their Europe-U.S. service. They will start calling the Port of Baltimore first, and then the Port of New York secondly. Baltimore and New York are the only ports used in their highly competitive European trade.

The reason given for this change was that a larger of their cargoes go inland to cities in the interior of the U.S. Baltimore is the port closest to these important cargo destinations.

Sea Train announced that they

hope to deliver all inland destination cargoes to Baltimore. In New York, they plan to deliver only New York area cargo, and cargo for such nearby ports as Boston. The delays and expense in these ports, for inland cargoes, is simply too great when compared to Baltimore. Also, Philadelphia, a port some distance up a river, is easily reached from Baltimore's central location.

Baltimore is not only noted as the closest, and least expensive, port to all of the inland destinations, but it is also the U.S. East Coast's largest container port other than New York. It is also the most integrated container port. The congestion

factor is also eliminated in Baltimore.

European shippers who handle the small amounts of Norfolk cargo will have their shipments unloaded in Baltimore and transshipped to Norfolk. It was pointed out that an additional factor favoring Baltimore was that Baltimore is the most centrally located port to the great inland industrial centers of the U.S., a fact that reduces both cost and time for shippers. (Port of Baltimore News Release)

More Forwarders

Baltimore, Md., January 22:— Twelve foreign freight forwarding firms have located at the Port of Baltimore during the past two years, according to a Trade Development survey released today by the Maryland Port Authority.

While many of the new forwarders handle only household goods, a number of the firms are old established freight forwarding companies bringing additional general cargo business to the port, Joseph L. Stanton, MPA executive director, said.

The 12 firms, listed alphabetically, are: Beacon Shipping Company; Black and Geddes, Inc.; Columbia Export Packers, Inc.; Dorf International, Inc.; Global/ International Forwarding, Inc.; Harper, Robinson & Co.; Intercontinental Transport, Jet Forwarding, Inc.; Pacific Terminals, Inc.; Traffic Dispatch International; Trans-American Van Service, Inc.; and Trans-World Shipping Service.

The Maryland Port Authority, through its seven world-wide trade development offices, actively encourages foreign freight forwarders to establish offices at Baltimore. Past experience has shown that local forwarding concerns are able to exert considerable influence toward directing the flow of their accounts' cargo through the port.

Much of the business handled by the 12 new Baltimore firms formerly moved through competing ports and much of it is new business. (Maryland Port Authority News Release)

High Tonnage

Beaumont, Texas, January 27:— During 1970 all facilities of the Port of Beaumont handled a total of 2,698,738 tons of cargo, compared to 1,321,257 tons in 1969.

This was the largest tonnage total handled since 1964 which was the first one million tons year, with the exception of 1966 when 3,098,101 tons were handled.

A tabulation of this Port's tonnage growth follows:

Year	Tonnage
1963	607,485
1964	1,228,124
1965	2,263,008
1966	3,098,101
1967	2,115,016
1968	2,162,827
1969	1,321,256
1970	2,698,738

The 1969 figure represents 8½ months operations, balance of year being involved in work stoppages due to labor contract negotiations. This 1970 business was handled in 454 ships, 32,524 rail cars, 4,765 trucks, and 147 barges. (Port of Beaumont)

Board President

Duluth, Minn., January 26:— Leonard I. Theobald, Duluth, a member of the Seaway Port Authority of Duluth Board of Commissioners since before the opening of the St. Lawrence Seaway, has been elected board president for 1971.

Theobald, currently serving his third six-year term as a commissioner, originally was appointed to the board by the St. Louis County Board of Commissioners in 1975.

He succeeds John F. McGrath, Duluth, whose one-year term expired. (Seaway Port Authority of Duluth)

Ice-Breaking Operation

Duluth, Minn., February 11:— Although it is only mid-February, the first physical signs of the 1971 navigation season are now appearing in the Duluth-Superior Harbor with a huge Great Lakes bulk carrier literally being sawed free from ice.

A crew of ice cutters armed with



Mr. Leonard I. Theobald, President—1971, Seaway Port Authority of Duluth, Minn.

power saws and picks this week began cutting free the 620-foot steamer J.H. Hillman Jr. from the grasp of ice up to 36 inches thick to permit grain loading. While actual loading of the ship, wintering at General Mills Elevator in Duluth, is expected to begin Friday (Feb. 12), the vessel will not depart until April.

The ice-cutting operation comes less than two weeks after the closing of the previous Lake Superior shipping season. The "1970 season" continued to a record-setting Jan. 27 when a U.S. Steel Corp. ore carrier departed Two Harbors (25 miles north of Duluth-Superior on Lake Superior's North Shore) with a cargo of taconite pellets consigned to South Chicago.

A strip of the three feet wide is being cut around the entire full of the Hillman Jr., thus permitting the vessel to be shifted under loading spouts of the elevator and to settle deeper in the water as additional cargo is loaded.

Winter grain loading operations will follow next week at Superior elevators after ice cutters free the steamers Ben Moreell and C.L. Austin. The three ships are owned by Wilson Marine Transit Co., Cleveland.

Marine officials are hopeful the winter grain loading program will ease storage problems at the 10 elevator systems in the Duluth-Su-

perior Harbor, some of which are reported filled to near capacity. Four other lake freighters operated by Pickands Mather & Co., Cleveland, and Boland & Cornelius, Buffalo, are also expected to receive pre-season grain cargoes. (Seaway Port Authority of Duluth)

Port Everglades News

• Hollywood-Fort Lauderdale, Fla., January 26:—Former Port Everglades director Michael K. Tewksbury was elected Commission Chairman for 1971 at the annual reorganization meeting.

Tewksbury served as port director from 1969 to midyear of 1970, resigning to run for the elective office of Commissioner. He won a four-year term.

Another new Commissioner, Douglas E. Laird, was elected Vice Chairman. Other members of the five-man board are Jack Clark, Chairman in 1969-70; W. Phil McConaghey, and Fred J. Stevens. Stevens, the senior member of the Commission now in his 13th year and fourth term, was Port Chairman in 1960 and 1965.

• Port Everglades performance ran counter to most business indicators in 1970 as the harbor set records in major areas of seaport operations.

Vice Chairman Douglas E. Laird said waterborne commerce reached an all-time high by soaring above the 10-million ton mark for the first time in the 45-year history of the harbor.

Total trade was up 472,509 tons for an increase of five per cent over 1969. The aggregate for the year was 10.2 million tons.

In the area of cruise activity, impressive gains were also registered.

Sailings rose from 224 to 265 for an 18 per cent increase and the number of embarking, debarking and intransit passengers showed an increase of 17,043 to a record high of 160,383, Laird said.

Vessel entries showed only a slight gain, from 1,505 in 1969 to 1,516, but this, too, was a harbor record.

Since 1965, waterborne commerce has increased by approximately three million tons, for an annual rate of increase of eight per cent, Laird pointed out.

• Free public tours are conducted twice weekly, on Mondays at Fridays, at Port Everglades during the winter season. After April 1, tours will be held only on Mondays.

Galveston News

• Galveston, Texas:—The Port of Galveston had a net income of \$771,000 for 1970, the best since 1961, Port Director C. S. Devoy announced at the annual meeting of the Port's Board of Trustees.

The Terminal Switching Railroad, owned and operated by the Port, handled 40,543 cars during 1970, compared with 32,846 the previous year. The Grain Elevator handled 36 million bushels of grain compared with 21 million in 1969.

Net income is reached after application of the \$160,000 annual payment to the city by the port, as well as payment of bond interest of about \$112,000. The Port's total gross income reached a figure of \$5.6 million, Devoy added.

The year's three outstanding accomplishments listed by Devoy were the successful "Save-Our-Port" bond election campaign, in which the citizens of Galveston agreed to tax themselves to help build container facilities for the Port; the subsequent design, bid and award on schedule of Stage One of the New Galveston East End Container Terminal; and the selection of Galveston by Lykes Brothers Steamship Co. as its West Gulf Terminal for the giant, new SEABEE barge-carrying ships. (February 3)

• Selection of the Port of Galveston as the receiving, staging, packing and shipping area by Creole Petroleum Corporation for its multi-million dollar pipestill project to be constructed in Amuay, Venezuela, was announced today by Galveston Port Director C. S. Devoy.

Selection of Galveston as the staging area and port of exit for the project was based primarily on the successful marshalling at Galveston of an earlier project for Creole. Of particular importance in Creole's consideration was the Port of Galveston's Pier Point Packers Division, which will handle crating for the project.

Expressing pleasure over handling another such significant project,

Devoy commented that Galveston is unique among port agencies in that it controls and operates all of the many essential services required at the port of exit for a project of this magnitude. (February 12)

• Galveston Port Director C. S. Devoy is the "Gulf Coast Man-of-the-Year for International Trade." The annual award for 1970 was given Devoy by the Gulf International Shipper, weekly shipping journal covering the area from Brownsville to Tampa.

Presentation was made at the annual dinner meeting of the Galveston Chamber of Commerce, which nominated Devoy for the honor because of Devoy's leadership in placing the Port of Galveston into the Age of Containerization through plans and construction work now in progress on Galveston's container and barge consolidation terminals, and in having Galveston selected as the West Gulf Terminal for the Lykes Bros. Steamship Company's SEABEE ships now being built. (February 12)

Trade Mission to Japan

Houston, Texas, Feb. 18:—The deputy director and the general sales manager of the Port of Houston, Texas, will visit Japan late in March for conferences with Japanese exporters and importers, shipping interests and others interested in the giant Houston-Japan trade complex.

George W. Altvater, deputy director, and Henry M. Broadnax, general sales manager of the Texas port, which ranks third in the United States in total tonnage, will be in Tokyo the week of March 22nd and will also visit the ports of Nagoya, Osaka, Kobe and Hiroshima before departing for home April 2nd.

This is the first trade mission to Japan by representatives of the Port of Houston and is motivated by the tremendous trade of more than a quarter of a billion dollars annually now moving between Japanese ports and Houston, which serves the great United States heartland and Southwest.

Japan is the principal supplier of steel to Houston, which leads the United States in steel imports, and

Japan is also a principal supplier of automobiles through the Texas port as well as of plywood, machinery, electronic equipment and other general merchandise.

Houston has heavy exports to Japan of petrochemicals, grain and soybean products. Coal suppliers are beginning to develop with resources in nearby states. Discussions in Japan by the two Houston representatives will be with trading companies involved in the exportation or importation of these products. They will talk as well with the shipping lines carrying this freight and the ports involved in its handling.

The Port of Houston announced dramatic plans last August for a hundred million dollar container and sea/barge facility at a point half-way down its 50-mile channel to the sea. In addition it has built and placed in operation last year a million dollar container marshalling and handling yard for the greater adaptation of the port to container cargo, which is already playing a considerable role in Houston's total tonnage.

Altvater and Broadnax will be staying at the Imperial Hotel in Tokyo. (Port of Houston)

Water Filter Plants

Long Beach, Calif.:—Plans of Thums Long Beach Company to construct a \$500,000 filter plant on Pier J in the Port of Long Beach have been approved by the Board of Harbor Commissioners. To be completed in March, 1971, the plant is the third step in an industrywide plan to process oil field waste water before reinjection under the harbor area's repressurization program.

The Long Beach Oil Properties Department recently put into operation the first such filter facility, employing diatomaceous earth and with a capacity of 105,000 barrels daily. Total cost was \$1.4-million.

ARCO is scheduled to complete the first sand filter plant in January, 1971, with 60,000 barrel capacity, to be followed closely by Thums' plant on Pier J, with an output of over 130,000 barrels per day.

This will be followed by Mobil's filter plant next April and Union

Pacific's facility in the summer of 1971.

Thums is planning a second plant on Oil Island Delta by fall of 1971, to cost \$865,000. The seventh such installation is planned by Long Beach Oil Development for early 1972.

According to Robert L. Pierce, chief petroleum engineer for the Long Beach Department of Oil Properties, these seven filter plants are designed to eliminate the discharge of oil waters into the harbor. It has been estimated that as much as 10,000 pounds of oil and 15,000 pounds of other waste materials daily will be prevented from entering the harbor by this process, with the purified product being reinjected into wells rather than discharged into bay waters.

Water purity standards are thus further being improved within the Port of Long Beach which already boasts one of the cleanest harbors in the world. (Port of Long Beach News)

Auto-Bulk Carrier

Long Beach, Calif.:—Wallenius Line's newest entry in a fleet of 40 ships, the 661-foot long Madame Butterfly, this week paid her first visit to the Port of Long Beach to take aboard 33,500 long tons of petroleum coke in addition to a load of 800 U.S. cars destined for Japan.

The Swedish-flag vessel is the largest car carrier ever to visit Long Beach.

Built in Leningrad, the Madame Butterfly has a capacity of 2600 compact cars in eight decks. Deadweight tonnage is 36,800 tons, which rises to 38,500 when the ship is used solely for bulk cargo.

Captain Sigvard Ekwall pointed out that because the Madame Butterfly, one of many Wallenius vessels named for operas, is built entirely of high-tensile steel, she is between 3000 and 4000 tons lighter than others of this size. Due to the greater strength of the hull, Lloyds permits loading in alternate holds if desired, he added.

Originally measuring nearly 700 feet long, the new arrival had the stern shortened to comply with a

200-meter regulatory restriction in Japan.

Wallenius is the original and still largest car carrier in the world, Captain Ekwall noted. Fred F. Noonan Co., Inc. is general agent.

During the unique vessel's 12 hour loading visit, Harbor Commission President H. E. Ridings, Jr. presented her skipper with a photo memento of the port, which Captain Ekwall described as "a great pleasure to visit one of the most modern and best run ports in the world." (Port of Long Beach News)

Lumber Terminal

Long Beach, Calif.:—Fremont Forest Products Company has just inaugurated its new five-acre marine lumber terminal at Berth 83 in the Port of Long Beach, according to president Peter V. Speek.

The facility is unique in that Fremont is pioneering a new leasing arrangement whereby they use leased land at a fixed rental for storage and distribution of forest products.

Sawmwill supplier of old-growth Douglas fir for Fremont is the Moore-Oregon Lumber Company of Coos Bay, Oregon. Sause Bros. Ocean Towing Company has been contracted to bring in bargeloads of lumber for homebuilding and commercial use, which Fremont distributes throughout Southern California. Shipments will average 1¼-million board feet.

Fremont's new lumber terminal has storage capacity for up to six million board feet, Speek disclosed. Monthly movement across the dock is forecast at four million board feet, or nearly fifty million board feet annually. (Port of Long Beach News)

Legal Battle Won

Los Angeles, Calif., February 23:—Litigation in the five-year overland common point (OCP) case has finally ended in a victory for Pacific Coast ports and steamship conferences and the transcontinental railroads.

The end came with the U.S. Supreme Court denial of a petition for a writ of certiorari filed by the ports of New Orleans and New

York. The case involved an attempt by the protesting Gulf and Atlantic Coast ports to prevent the use of import-export rates and the absorption port charges.

John F. Parkinson, assistant general manager of the Port of Los Angeles and chairman of a special OCP committee of the Pacific Coast Association of Port Authorities (PCAPA), announced the end of the long case to association members on Monday, February 22.

Joining the PCAPA in the defense were the Pacific steamship conferences and the transcontinental railroads. All Pacific Coast ports took part in financing the successful five-year legal battle. (Port of Los Angeles)

Large Bulk Imports

New Orleans, February 10:—The Port of New Orleans led United States ports in iron and steel imports during calendar year 1969, last full year of record, according to figures compiled by the Corps of Engineers, U.S. Army.

New Orleans imported a total of 1,400,308 short tons during the period, compared to 1,340,790 at Chicago; 1,206,249 at Houston and 1,145,242 at Detroit.

Estimated 1970 total iron and steel imports at New Orleans was 1,141,000 tons, based on 11-month figures.

New Orleans exports of iron and steel for the first nine months of 1970 totaled 1.5 million tons. Both imports and exports at New Orleans topped comparable period totals of all other U.S. Gulf ports.

Other leading U.S. ports in iron and steel imports were Long Beach, California—976,284 tons; New York—767,486; Los Angeles—589,799; Philadelphia—577,916; Cleveland—511,372, and Baltimore—396,617.

Japan was the principal country supplying iron and steel via New Orleans, with 971,299 tons, followed by West Germany, Belgium, France, United Kingdom and Italy. (Port of New Orleans News Release)

Revenue Bonds

Los Angeles, Calif., February 24:—Los Angeles Harbor Revenue Bonds worth \$15 million were sold

today (Wednesday, February 24) to Smith, Barney & Co., New York City, whose bid of 5.48 average interest was the lowest of four bids received by the Los Angeles Board of Harbor Commissioners.

Both principal and interest on the bonds will be paid out of Harbor Department revenues at no cost to taxpayers. The bonds will be retired in 26 years.

Los Angeles Mayor Sam Yorty noted the low interest resulted "not only from the sound management and financial structure of the Harbor Department and its operations, but also from the efforts of both commissioners and staff in presenting the harbor story to bond buyers the general public."

Other firms bidding were Blyth & Co., Inc. and Associates, Los Angeles, Merrill Lynch, Pierce, Fenner & Smith, Inc., New York City, and Weeden & Co., Inc., Los Angeles.

Board President Frank C. Sullivan said the bonds are needed for major capital improvements at the \$200 million "Cargo Capital of the West." Included in a four-year plan to be financed by the bonds are expansion of the 30-acre East-West Container Terminal to 120 acres, and construction of a \$5.3 million Lighter Aboard Ship (LASH) facility on Terminal Island along the harbor's Main Channel (Port of Los Angeles)

ScanStar Service

Los Angeles, Calif., January 26:—The first ScanStar container ship isn't due in at the Port of Los Angeles until June 15, but the line has long since made plans for an increasing volume of trade.

On January 12, at a West German shipyard, the container ship M/V California Star was launched, first of four container carriers the line will put on the run from Scandinavia-North Europe—United Kingdom to the Pacific.

The California Star is the first of two medium-sized container vessels being built at the Bremer Vulkan yard near Bremen for the United Kingdom's Blue Star Line. Two similar ships are being built for Denmark's East Asiatic Co., Ltd.,

of Copenhagen. They will enter service late next year. ScanStar is a joint Blue Star—E.A.C. Lines service between northern Europe and the West Coast of the United States.

Due to enter service in May, the California Star and its to-be-named sister ship will displace 15,000 dead-weight tons, have a length of 620 feet, a beam of 85 feet, and a service draft of 29 feet, six inches. Bremer-Vulkan two-stroke diesel engines will produce 23,500 horsepower at 118 shaft revolutions-per-minute for a service speed of 21.5 knots.

The two vessels from the Bremer Vulkan yards will carry up to 900 standard 20×8×8-foot and 40×8×8.5-foot containers, with up to 125 of them insulated. The ships will also be able to carry differing cargoes requiring various degrees of refrigeration.

Additionally, the two vessels will carry a limited number of half-height bins and tank containers.

The four new containerships will enable ScanStar to offer shippers first-class through-transport service between northern Europe and Pacific ports.

The ScanStar vessels will be berthing at the facilities of Overseas Shipping Company on Terminal Island along the harbor's Main Channel.

Plans call for filling in a slip and a new concrete wharf, while Overseas is investing some \$1 million in a new container crane with a 113.5 feet boom reach.

The world seems to be shrinking almost daily. Perhaps it is only to be expected that, starting about June 15, northern Europe and southern California will, for at least containerized cargoes, be much closer together. (Port of Los Angeles)

Ship Services Directory

New York, N.Y., January 13:—The 1971 edition of the Port of New York Steamship Services Directory has been issued by The Port of New York Authority for use by importers, exporters, freight forwarders and other business organizations and government agencies directly

concerned with international trade in the New York-New Jersey Port.

The Directory lists the names, addresses and pier locations of 184 steamship lines and their agents offering regularly scheduled services in addition to the intercoastal and coastwide services available at the Port of New York. Further, the Directory provides a breakdown of the steamship services available from the bi-state port to the approximately 300 ports in 130 different countries. First published in 1955, this public service document has been periodically updated so that the information it provides remains current.

Copies of the new Directory may be obtained without charge from the Port Promotion Division, The Port of New York Authority, 111 Eighth Avenue, New York 10011 or from any of The Port of New York Authority's overseas Trade Development Offices. These offices are located at: 130 Fenchurch Street, London E.C. 3M-5 E.D., England; Room 919, Eastern Airlines Building, Santurce, San Juan, Puerto Rico 00911; Kokusai Bldg., 1-1, 3-Chome, Marunouchi, Chiyoda-ku, Tokyo, Japan; and Talstrasse 66, 8001 Zurich, Switzerland. (News from The Port of New York Authority)

Traveler's Guide

New York, N.Y., Jan. 8:—A Traveler's Guide to Port Authority Facilities in the metropolitan area, containing information on services available and access routes, was issued today by The Port of New York Authority.

The 26-page, pocket-size guide is divided into sections on airports, bridges and tunnels, bus facilities, the Port Authority Trans-Hudson (PATH) system and marine terminals, and contains helpful hints for convenient and enjoyable travel.

The Port Authority's land and air facilities serve almost a half a billion passengers a year, in addition to uncounted millions of visitors. The new Traveler's Guide provides relevant information on access to the various facilities, services available and charges for these services. It also gives addresses and

phone numbers for additional information on any of the subjects covered.

Copies of the Traveler's Guide to Port Authority Facilities may be obtained without charge at toll booths, change booths, information counters and Managers' offices at Port Authority facilities. Copies are also available upon request to the Public Affairs Department, The Port of New York Authority, 111 Eighth Avenue, New York, N.Y. 10011. (News from The Port of New York Authority)

1st Negro Commissioner

Norfolk, Va., February 3:—Myles E. Billups, Sr., president of the Hampton Roads District Council of the International Longshoremen's Association, has been named a member of the Virginia Port Authority's board of commissioners, becoming the first Negro to ever hold such a position.

Billups will fill a 11-member board vacancy created by the retirement of M. W. Armistead III, president and publisher of the Times-World Corp. in Roanoke.

When the board was increased from seven to 11 members last July, Gov. Linwood Holton said he wanted to see a representative of labor included, but he chose businessmen to round it out at that time. His appointment of Billups fulfills his earlier wishes.

Billups' ILA job is coordinator of longshoremen activities in the Port of Hampton Roads and his position on port unification follows that of Holton.

Billups said he would like to see the Hampton Roads ports under one roof. Holton has been trying to unify the ports and already has Portsmouth and Newport News in the fold and Norfolk moving in that direction.

Billups is 44 years old and has been in the ILA for 26 years. In 1967 he was elected president of ILA local 1248. Billups said he was elated by the appointment and looks forward to serving on the board. (Virginia Port Authority)

Container Show

Oakland, Calif., February 16:—The fourth International Shipping and Containerization Exposition and Congress will be held Sept. 13-16 in Oakland, Calif.

With a theme "Export '71", the exposition will take place in the arena and exhibition hall portions of the Oakland Coliseum.

Held in New York during the first three years of its existence, the event will be the first of its kind ever presented on the West Coast.

It will be sponsored by the Port of Oakland, second largest container port in the world.

The exposition and congress is designed to present the complete 1971 containerization picture including a look at new material handling systems, demonstrations of new packaging methods, special application containers and other recent developments made in containerization by land, sea and air carriers.

Also featured will be demonstrations of freight handling equipment and container stuffing and stripping.

Some 8,000 representatives of the shipping and commerce industry are expected to attend the four-day convention.

Further information and applications for exhibit space can be obtained by contacting Irwin I. Chaitin, Executive Director, International Shipping and Containerization Exposition, 1601 W. Lafayette Blvd., Detroit, Mich. 48216.

Two other important industry events will be held in conjunction with the exposition. A technical congress, directed by the Containerization Institute, will take place at the Coliseum Arena Monday through Wednesday of exposition week. The event will include lectures by industry experts as well as discussions and seminars on numerous phases of containerized shipping.

On Thursday and Friday of that same week, the International Cargo Handling Coordination Association will hold a shipping symposium at the nearby Oakland Hilton Inn.

Shipping officials from throughout the world will discuss a host of

topics relating to the efficient movement of cargo from origin to destination. (Port of Oakland)

Port Brochure

Oakland, Calif., February 16:— A new 32-page, four-color Port of Oakland marine terminals brochure has just been produced and is now available to the shipping and commerce community.

The booklet provides information on a variety of aspects concerning Northern California's largest port including container and general cargo terminal facilities; rail, truck and air transportation services; data on steamship lines that call at Oakland; distribution and warehouse facilities and services; and planned terminal developments.

Receiving special emphasis are the new container and other automated freight handling facilities and equipment that in eight years have spurred Oakland's growth into the West Coast's largest containerized cargo port and number two container port in the world.

The brochure is available without charge and can be obtained by contacting Public Relations Dept., Port of Oakland, 66 Jack London Square, Oakland Calif. 94607. (Port of Oakland)

Matson Leases Land

Oakland, Calif., February 5:— Matson Navigation Co. has exercised its option to lease a 5.1-acre parcel of land from the Port of Oakland, Port Commission President Peter M. Tripp announced today.

The parcel adjoins a 42-acre Matson lease area at the Seventh Street Terminal that since 1968 has served as base for the company's West Coast-Hawaii container service.

Although terms of the agreement are not yet final, Matson will pay about \$1,300 monthly for the additional land.

Matson plans to utilize the area for cargo handling, auto shipment storage and stevedore parking as well as for a 7,000 square foot storage facility and a stevedore lunch room.

The company has options on some 19 adjoining acres at the Seventh Street Terminal, the largest con-

tainerized shipping complex on the Pacific Coast. (Port of Oakland)

Vintage Cars

Oakland Calif., February 11:— An estimated \$1 million shipment of 30 antique and vintage cars from the Harrah's Automobile Collection left the Port of Oakland recently bound for the First World Classic Car Festival in Japan.

As would befit shipment from the world's second largest containerized cargo port, the prized cars were transported in containers.

The Harrah's vehicles will be the feature attraction at the Classic to be held in Tokyo Mar. 5-14; Nagoya, Mar. 18-22; and Osaka, Mar. 28 through April 4. They are expected to attract 750,000 people during the Japanese exhibit.

The cars are a part of the world's largest automobile collection, some 1,400 autos in all, that are an attraction of Harrah's Club in Reno, Nev.

The shipment, which included such exotic models as a 1931 Bugatti, a 1933 Duesenberg Speedster, a 1913 Mercer and a 1904 Knox, was trucked to the Port of Oakland's Seventh Street Terminal.

The high value of each of the cars, one with an estimated worth of \$250,000 made security vital and container shipment a must.

Upon arrival at the Port's Seventh Street Terminal, the vehicles were off-loaded, rolled into containers and secured for ocean shipment. Large container cranes hoisted the 30 vans aboard the N.Y.K. Line containership Haruna Maru which sailed for Tokyo.

Because the cars are enclosed in metal containers, they are protected from the elements while at sea and are also protected from possible damage during handling operations.

The Japanese car classic marks the first time that Harrah's has ever sold exhibit rights for their autos to an outside firm. A unique feature of the three-city event is that a percentage of ticket sales is to be contributed to a relief fund for 60,000 traffic orphans in Japan, a country that has no automobile insurance. (Port of Oakland)

10th Container Crane

Oakland, Calif., February 10:— The Port of Oakland put its tenth containerized cargo crane into service today during ceremonies at the Port's Seventh Street Terminal.

The installation of the crane further establishes Oakland's position as the West Coast's largest containerized cargo port in terms of container cranes, berths and tonnage.

Port Commission President Peter M. Tripp, Port Executive Director Ben E. Nutter, Maritime Queen Marilee Bryce and Maid of Alameda County Marilyn Salo participated in official dedication ceremonies.

The 40-long-ton capacity giant is similar to two Portainer cranes already serving Berths G and H at Seventh Street Terminal. The new crane will primarily serve Berth I and a soon to be completed Berth J at the Public Container Terminal portion of Seventh Street. It will also be available for use at the adjoining Berth H.

Berths H and I are operated by Marine Terminals Corp. as an intermodal terminal for both containers and conventional cargo. Presently utilized by Johnson Line and United States Lines, the facility will become the site of combined Blue Star Line and East Asiatic Co. (Scanstar) container service and Pacific Australia Direct roll-on/roll-off service following terminal completion this spring.

Prefabricated at PACECO manufacturing facilities in Alameda, Calif., the 98-foot-high crane in December was barged in three sections down the Oakland Estuary for assembly at Seventh Street.

Its frame was erected on rails and the boom, which measures 245½ feet, was lifted into place by Murphy-Pacific's 500-ton capacity "Marine Boss" derrick barge.

The crane is the first ever equipped with a sway-stop trolley, a revolutionary feature that speeds container handling by eliminating pendulum swing of containers during loading or discharging operations.

Other operational advantages include its ability to reach 115½ feet outward to work a ship and stretch



TENTH FOR OAKLAND—Oakland Board of Port Commissioners President Peter M. Tripp, right, christens the Port's tenth containerized cargo crane during dedication ceremonies February 10 at the Seventh Street Terminal. Looking on, from left, are Port Executive Director Ben E. Nutter, Maritime Queen Marilee Bryce, Oakland Port Commissioner H. Boyd Gainor and Maid of Alameda County Marilyn Salo.

back into the wharf and terminal area 86 feet to provide rapid movement of containers.

It is the fifth container crane to be installed at the Seventh Street facility, including two Matson cranes. In addition two low-profile Alliance cranes are in use at the Seatrain container terminal and three Paceco A-frame container cranes serve Sea-Land's West Coast headquarters at the Port.

The Port of Oakland, in addition to being Northern California's largest port, is the second largest containerized cargo port in the world. (Port of Oakland)

Operations Manager

Portland, Oregon, January 25:—Garry Whyte has been named Operations Manager of the Marine Department at the Port of Portland, according to Keith Hansen, department director.

Whyte replaces Curtis Smith, who

held the job for 14 years under the old Commission of Public Docks. Smith becomes Industrial Marketing Director of the consolidated CPD-Port agency.

Operations Manager overseas all functioning of the three marine cargo terminals of the Port.

Other Operations changes include Don Aspros, formerly Superintendent at Terminal 1, becoming Asst. Operations Manager; Carl Leach, Asst. Superintendent at Terminal 1 replacing Aspros and Bob Driscoll, Asst. Terminal 4 Superintendent being named Terminal 2 Superintendent.

Hansen also announced that Ray Bader, former Terminal 2 Superintendent, has been named to the newly created position of Manager of the Container Terminal at T-2. He will be assisted by Dick Boyle and Richard Artle as Superintendents of the Container Yard and Container Freight Station respectively.

Over-all Terminal 2 Superintendent Driscoll is in charge of all berthing at the five berth Terminal 2 and will oversee handling of all cargo except containers.

Whyte joined the Dock Commission as a Berth Agent in 1951. He was Superintendent of Terminals 2 and 4 before becoming Assistant Operations Manager. (Port of Portland News Release)

Top Posts Filled

Portland, Oregon, January 6:—Of the eight top administrative posts created by consolidation of the Portland, Oregon Dock Commission and the Port of Portland, seven have been filled, according to Edward G. Westerdahl, II, Port of Portland executive director.

I. J. Church, formerly head of the Port's Technical Services department, becomes Aviation Department director; A. M. Eschbach, Dock Commission chief engineer is

Engineering Department director; Marion F. Siedow, remains Port Finance Department director; Keith L. Hansen, CPD general manager takes over a beefed up Marine Department; and Ogden Beeman, Port Marine and Industrial Development director, becomes Marketing Department director.

Westerdahl also confirmed his earlier announcement of Fritz Timmen as Assistant to the Executive Director—Public Information and said former Port Public Affairs Director Lloyd Robinson will be his assistant in charge of Administration. A third assistant to handle legal matters remains to be named.

The Port's dry dock, dredging operations and towboat steamer Portland will move under the Marine Department, Westerdahl said.

He described the new Marketing Department as the "most noteworthy of our reorganizational efforts". It will be required to reassess and develop accordingly the Portland area market potential.

"I'm particularly pleased at the tremendous pool of talent and knowledge from which we could choose this staff," Westerdahl said. "The personnel involved in the two former bodies are among the highest calibre of any two public agencies anywhere in the country."

He also said a representative in Washington, D. C. soon will be appointed to act as liaison for the Port at the federal level. (Port of Portland News)

Bulk Loader Revenues

San Diego, Calif., January 14:—Bulk loader operations at the 10th Avenue Terminal of the Unified Port District reflect the uneven economic trends of 1970, according to statistics released today.

Revenue received by the District from tonnage passing through the bulk loader totaled \$166,668.70. In 1969 tonnage totaled \$203,958.35 in revenues to the District.

The second half total for 1970, however, increased dramatically over the first six months: from \$71,548.90 to \$95,119.80 "and we are keeping our two-man marketing team constantly on the go in

promotion attempts to assist all marine operations oriented businesses at the Port", according to William L. Dick, Director, Trade and Community Relations. (Port of San Diego News Release)

Record Tonnage

Tampa, Fla.:—The port of Tampa handled a total of 32,381,597 tons of cargo during 1970, an increase of 13.53 per cent over 1969, Guy N. Verger, Port Director, announced.

Verger observed that the tonnage increase occurred despite a national recession. It was the best year in the history of the port.

General cargo handled through the port amounted to 1,141,435 tons for the year, an increase over the previous year of 141,098 tons. The port has enjoyed a steady rise in general cargo over the years and Verger said the rise justifies entirely the need for new general cargo handling facilities at the port.

Phosphate and phosphatic products shipped from the port amounted to 14,957,006 tons, an increase of 2,262,599 tons over the previous year. Phosphate is the largest single export product from the port.

Of this, 10,333,783 tons were shipped to foreign markets and 4,623,223 tons to domestic markets.

Bulk petroleum products also showed an increase. The total tonnage was 8,622,479 tons, an increase of 571,281 tons over the previous year.

There were also increases in sulphur, coal, grain, potash and ammonia.

General cargo products showing increases included steel, bananas, newsprint, meat products, lumber, olives and bottled citrus juices.

During the month of December, a total of 2,880,329 tons of cargo were handled, as opposed to 2,734,480 tons during December, 1969, an increase of 5.14 per cent. (Tampa Port Authority)

America's 4th Seacoast

Toledo, Ohio:—The Great Lakes have been officially declared America's Fourth Seacoast in a new merchant marine bill signed by President Nixon. The bill also removes

much of the pressure for future Seaway toll increases by refinancing the St. Lawrence Seaway Development Corporation, the administrative agency responsible for the U.S. portion of the waterway.

The new law entitles Great Lakes ship operators to establish tax-deferred construction reserve funds for the replacement of old vessels—a right formerly held only by U.S. ship operators along the three salt water coasts.

Under the bill, the St. Lawrence Seaway Development Corporation will not be required to pay past or future interest charges accumulated on the American investment in the waterway. The accrued interest had amounted to \$22.4 million before the legislation became law. Seaway proponents believe this will remove the possibility of toll increases on the waterway.

Secretary of Transportation John A. Volpe announced that an expanded Seaway research program would begin immediately. It will explore the feasibility of extending the Great Lakes-St. Lawrence Seaway navigation season, possibly to a full year.

"The full potential of the system as an integral part of our transportation complex cannot be realized," said Secretary Volpe, "until the waterway season is substantially lengthened. Neither can the needs of the Great Lakes area, with its 60 million people and its thriving industry and commerce, be met until that goal is achieved."

The immediate goal of the Department is to determine the possibility of increasing the present navigation season by one month. From this, Volpe adds, solutions might be found for many of the problems connected with year-round operation.

The U.S. Coast Guard and the St. Lawrence Seaway Corporation, two operating administrations within the Department of Transportation, have scheduled a number of projects for this winter. The Coast Guard will establish an Ice Navigation Center in Cleveland, Ohio for coordinating ice data obtained from the Great Lakes and other

sources.

The Center will make use of technology developed by the Coast Guard's International Ice Patrol and by last year's Arctic voyage of the tanker Manhattan. Coast Guard helicopters will be used to fly trained ice observers to take samples and measurements in critical areas of the Great Lakes system.

The Coast Guard ice-breaker Mackinaw will also assist in the ice data gathering along Great Lakes shipping routes. The information obtained by the Mackinaw will be utilized to develop standards for the construction of ice-strengthened merchant ships.

The St. Lawrence Seaway Development Corporation has planned projects involving heat treatment for locks and lock gates. It will also install newly designed buoys to gather ice-breaking data. The Seaway Corporation also plans to send Dr. E. W. Marshall, a glaciologist, to Europe for a five-week study of ice-clearing operations in the Baltic. Dr. Marshall's itinerary will include Russia and eight Baltic countries which have been engaged in navigation through frozen waters for a number of years.

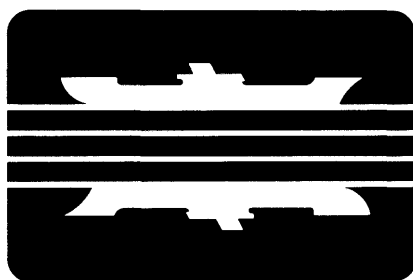
The research programs will be a cooperative effort, combining the resources of both government and industry. (Port of Toledo News)

New Logo

Toledo, Ohio, February 4, 1971:—The Port of Toledo will begin its 1971 shipping season with a new look. It now has a new logo symbolizing Toledo's position as a world trade center. The design is public property and can be used by all interested organizations in promoting the Toledo area and its port.

The logo contains two white ships against a blue background, separated by three red stripes, signifying an American port handling a two-way flow of world trade.

According to Port Authority General Manager John McWilliam, "Most of the influential import-export businessmen we are attempting to reach will never see the Toledo harbor. We believe a strong and contemporary visual identity is essential in promoting the port



PORT OF TOLEDO

throughout the world."

The Port Authority has used a design called the "compass rose" since the mid-fifties—the same period that the "Toledo Key to the Sea" design was developed in a contest sponsored by the Toledo Area Chamber of Commerce. "The new logo will be an integral part of our promotional program for the 1970's," said Mr. McWilliam.

A number of local concerns including custom house brokers, foreign freight forwarders, steamship agencies and international bankers, have already indicated their intention to use the new logo. (Port of Toledo)

Columbus Line

Melbourne:—A Shipping Company now gearing itself in its Australia-North America services to operate conventional, multi-purpose, and cellular "pure" container ships and cargo handling methods simultaneously, is the German flag Columbus Line, whose second multi-purpose ship is due in the Port of Melbourne early this month, and whose first cellular container ship is due in May.

The second multi-purpose ship is the "Cap Melville" which with the other multi-purpose vessel "Cap Colville" will operate with conventional ships in the service to the west coast of North America.

The first container ship is the "Columbus New Zealand", which, with the other two container ships "Columbus Australia" and "Columbus America" to be phased in at two monthly intervals from May, will take over the service to the east coast of North America from the conventional ships now on the run.

Up to the end of last month,

Columbus Line operated nine conventional ships and the "Cap Colville"—which came in to service last May—in the trades to both the east coast and the west coast ports of the United States and Canada.

It is intended that the Line's three cellular container ships will progressively take over the service between Australia and the east coast of North America, thereby replacing a total of about six conventional ships. The ships concerned are the "Cap Ortegall", "Cap Verde", "Cap Velano", "Cap Roca", "Cap Frio" and "Cap Norte", but it is expected that at least four or five of these ships will be transferred to the west coast service.

The "Cap Colville" and "Cap Melville" are two vessels chartered by Columbus Line for the west coast service, and "Cap Melville" will arrive in the Port of Melbourne on her maiden voyage with cargo from the east coast to enter the west coast service out of Australia.

The two ships are four hatch 19 knot ships with 425,000 cub. ft. of fully refrigerated cargo space. They will be able to convert holds to provide cellular container space by means of removable guides, and in all a total of 155 containers will be able to be carried below decks with an additional 78 on deck.

The ships are also equipped to carry container flats measuring 20 ft. × 8 ft. × 8 ft. × 6 ins. which are designed for the carriage of meat. The flats, holding about 15 tons of meat, are loaded at cold stores or abattoirs and transported to the port for direct loading into the vessels.

Columbus Line entered the Australian service in 1961, and its principal cargo out of Australia has been refrigerated cargo for American and Canadian destinations.

Refrigerated cargo will also be a feature of the Line's new 21,300 ton, 22 knot container ships, which will have a total capacity of 1,187 containers of which 485 can be freezer.

Early last month the Line announced that it had placed an order in Australia in the face of competition from manufacturers in other parts of the world, for the purchase of 195 clip-on refrigera-

tion units with an option to purchase a further 100.

The order has been placed with Email Ltd. and is valued at more than \$1½ million.

The clip-on refrigeration units will have a dual purpose, either to refrigerate insulated containers on shore or to be used while insulated containers are carried as deck cargo. When stowed below decks the insulated containers with cargo requiring refrigeration will be connected to the air cooled ducted systems installed in the ships.

As far as the clip-on units are concerned, a number will be held in all ports of call. (Melbourne Harbor Trust Port Gazette, Dec. 1970)

E. & A. Liner

Melbourne:—The Eastern and Australian Steamship Company introduced a second cargo/passenger liner on its Australia Japan service last month, when the liner "Chitral" arrived in the Port of Melbourne to begin her first round voyage.

The 14,000 ton "Chitral", with accommodation and facilities for 274 passengers and a cargo capacity of 10,000 tons, is a sister ship of the Line's "Cathay", which has been operating the service since November, 1969. Terminating in Melbourne, the other ports of call, on what will now be a monthly service, are Sydney, Brisbane, Manila, Hong Kong, Keelung, Kobe, Nagoya, Yokohama and Rabaul.

"Chitral" was built in France in 1956 and sailed as the "Jadotville" for the Cie Maritime Belge in the Continent-Belgian Congo service before being bought by P. & O. Lines in 1961 for their Far East passenger service.

Since April of this year the Liner has been operating a series of Genoa based Mediterranean cruises for which the ship was reported to be extremely popular.

Both "Cathay" and "Chitral" were transferred from P. & O. Lines to E. & A., which is a member of the P. & O. Group of Companies.

"Chitral" has a number of features which should make her popular with passengers in the Australia-Japan service, including many single and two berth cabins with private

facilities. (Melbourne Harbor Trust Port Gazette, Dec., 1970)

Association Renamed

Sydney:—At a Conference held in Hobart during the week commencing 8th February, 1971, an important step was taken in the co-ordination of policy making between the State Instrumentalities in the field of port and marine administration, more particularly in connection with the latter function.

The Australian Port Authorities' Association, which has afforded membership to public authorities engaged in port administration over a period extending upwards of fifty years, has now been expanded and an amended Constitution adopted at the Hobart Conference provides for the marine authorities of the six States of the Commonwealth to be represented in their own right and in a more direct way in the administration of the affairs of the Association, the name of which has also been changed to The Association of Australian Port and Marine Authorities.

The amended Constitution provides for the setting up of a Council to administer the affairs of the Association between the Biennial Conferences and this Council will have representation from each of the six capital city port authorities with two additional representatives from ports other than capital city ports. These latter members will be elected at the Biennial Conferences and, generally speaking, will rotate through the various States. In addition, the Council will comprise representatives of the marine authorities of each of the six States and a representative of the Department of Shipping and Transport. In this way the Council will have the benefit of the views of the Commonwealth representative in determining policy aimed at achieving uniformity between the States.

The Council will meet twice a year and will afford the opportunity of virtually setting up within itself a Committee comprising all state marine authorities to discuss matters of common interest with a view to achieving maximum reciprocity.

Discussion and liaison between authorities administering port mat-

ters will continue to be a feature of the Association but expansion of the Council will allow of the full participation of the marine authorities and will extend its usefulness into fields which have only been touched upon in the past.

Another important feature of the amended Constitution is the provision for the setting up of a permanent and central Secretariat, in a location yet to be decided upon, to serve the interests of the expanded Association. The proposed Secretariat will facilitate the endeavours of the individual state organisations in the pursuit of matters for which they are responsible within their jurisdiction and, at the same time, its potential for co-ordinating research and distributing information of mutual interest to all member authorities can be regarded as a major step forward.

Prior to the adoption of the amended Constitution, the Chairman of the Melbourne Harbor Trust Commissioners and the President of the Maritime Services Board of N.S.W. were, ex officio, Chairman and Vice-Chairman respectively of the Permanent Committee of the Australian Port Authorities' Association. The position now is that the President and Vice-President of the Association will be Chairman and Vice-Chairman of the Council and the positions will be elective.

At the Hobart Conference, Mr. V. G. Swanson, C.B.E., E.D., Chairman of the Melbourne Harbor Trust Commissioners, was elected Chairman and Mr. W. H. Brotherson, C.B.E., was elected Vice-Chairman of the Association of Australian Port and Marine Authorities.

Kobe, Traffic in 1970

SHIPS, CARGOS AND PASSENGERS AT KOBE PORT DURING 1970

I. Ships Entered:			
Ocean-going			
Number		10,271	
Tonnage		81,807,781 t	
Coastal			
Number		135,483	
		*(28,960)	
Tonnage		63,809,810 t	
		*(26,806,592)	

Asia-Oceania

Total	
Number	145,754
Tonnage	145,617,591 t
II. Cargos: (tons)	
Foreign	
Export	13,044,866
Import	17,629,827
Total	30,674,693
Domestic	
Export	29,567,935
	*(19,087,693)
Import	37,520,151
	*(19,690,584)
Total	67,088,086
Total	
Export	42,612,801
Import	55,149,978
Total	97,762,779
III. Passengers:	
Foreign-route	
Embark	34,575
Disembark	46,379
Domestic-route (Including Ferries)	
Embark	1,546,709
Disembark	1,944,527
Total	
Embark	1,581,284
Disembark	1,990,906
Total	3,572,190

Note: * () . . . Figures on Ferries included therein

(Port and Harbor Bureau, Kobe City Government)

Nagoya's Turning Point

(New Year's Message by Mr. Fumio Kohmura, Vice President, Nagoya Port Authority)

First, I wish you a Happy New Year.

I have this day the pleasure of celebrating my 3rd New Year's Day since my return to Nagoya, the home-town of mine.

Now, looking back on the year past, I cannot but feel deepest emotions crowd on my mind. It was about the beginning of January a year ago that we were grappling strenuously with the budget for fiscal 1970 of our Authority, fully determined to solve the problem of the container berths with one rush and by all means before the end of the fiscal year—a project of great concern to our Nagoya Port pending many years.

Our proposed budget for fiscal 1970 should simply have been ap-

proved with all the subsidy from the National Government granted by the end of the previous year, if things had gone well as usual. But, as you may recall, the deliberations of the national budget itself, very unusually, had to be carried over to the January 1971 session, due to the abrupt year-end bustling all over the country caused by the general election.

On January 19 the National Government and the Liberal Democratic Party jointly decided that the container wharves would be developed in Nagoya Port, unprecedentedly, according to the formula of a company, and the project was guaranteed by necessary budgetary backing and required amendments to the pertinent laws.

The Government ordinance for the enforcement of the revised law, however, was not established until the latter part of September, owing to an unexpected delay of co-ordination between the Ministries of Transport, Finance and Local Autonomy of the National Government. Upon the coming of the laws into force, we of the Authority took quick steps in calling a meeting with major 6 shipping companies of Japan, resulting in the establishment of the Nagoya Container Berth Kaisha (N. C. B.), our long-expected joint company, in December 1970.

This brought about a significant turning point in the history of port administration of this country, in that it had opened a new way for our Port to develop new liner berths by a patented company jointly invested by both the governments and private companies, which therefore had been believed only possible by the hands of the National and/or Local Government since the Meiji Era.

Furthermore, looked upon from the interest of our Port, the success of the new project has not only absolutely dismissed our fear of being shut out from the first class port-group in Japan, but has firmly linked our Port with all of the major shipping companies in our country with our long dreamed prospect of breaking away from the old "half-way" status finally appearing on the horizon.

In particular, worthy of special mention is the fact that the port the leading shipping companies selected as the one to invest their capitals for container wharves, unprecedentedly, was neither Yokohama nor Kobe, but our Port of Nagoya.

May I look forward to your further cooperation and support for this new Company henceforth, which I believe will prosper and continue to grow. (The Port of Nagoya Monthly [Japanese] January, 1971)

AJCL Operators

Tokyo, February 18:—Y. Tanaka and R. Imaizumi of Swire Mackinnon, the Australia Japan Container Line (AJCL) representatives in Japan, will leave Tokyo on February 19 for a 23-day business tour of Australia.



Tanaka

Imaizumi

Tanaka is Sales and Marketing Manager for AJCL in Japan, and Imaizumi is his Deputy Section Chief.

The two will tour Sydney, Melbourne, Brisbane, Adelaide and Tasmania to call on importers, exporters, forwarders and others involved in the Australia-Japan container trade.

Their mission is to promote the AJCL service, currently operated in conjunction with Japanese container lines. AJCL have two 23-knot, 24,700-ton full container ships, the Arafura and Ariake, in the joint service.

In Sydney, Tanaka and Imaizumi will have meetings with Overseas Containers Australia Pty., Ltd., the managing agents for AJCL in Australia.

Tanaka, 38, a veteran of 17 years in shipping, has managed AJCL sales and marketing activities in Japan since the service was organized a year ago. Previously, he

handled freight sales for Blue Funnel and the Matson container service. His varied background also includes experience in accountancy and airline passenger sales.

Imaizumi, 35, also was associated with the Matson container service in Japan prior to joining AJCL on its inception. A graduate of the Law School of Waseda University, he previously specialized in adjusting freight claims for conventional shipping. (AJCL News)

New Record in Tonnage

Antwerp, 28 December:—For the first time in history in one year more than 19,000 ocean-going vessels called at the port of Antwerp. Indeed, on 28th December 1970 the Swedish boat "WOOLAHRA" entered the port as the 19,000th ocean-going vessel of the year. (X)

On this occasion a short ceremony took place. Mr. Delwaide, Alderman of the Port, went on board of the vessel for a short visit in the course of which he handed over—in the name of the City Council—a commemoration present to the captain.

In 1969 17,885 ocean-going vessels with an aggregate tonnage of 65,523,537 BNT (or 52,418,829 NRT) were recorded in the port of Antwerp.

When comparing the figures for the first eleven months of 1970 with those for the corresponding period of 1969 one gets a clear idea of the progress made. During the period in view of 1969 16,379 ocean-going vessels with an aggregate tonnage of 60,064,188 BNT were registered. In 1970 these figures were 17,569 vessels and 62,357,521 BNT respectively. As compared with 1969 the tonnage of shipping-traffic increased by 3 or 4%.

The former record in the field of shipping-traffic was established in 1964 with 18,550 ocean-going vessels and 54,692,918 BNT (42,207,405 NRT).

Presumably also in the domain of goods traffic 1970 will be a record year for the port of Antwerp.

Indeed, as compared with 1969 the rate of increase of maritime goods traffic was about 8%. Consequently this traffic is expected to amount to about 78 million tons in



Sir Andrew Crichton (2nd from left), Chairman of Australia Japan Container Line (AJCL), arrived in Tokyo Sunday (February 28) with AJCL Director Kerry St. Johnston (3rd from left) and Mr. L. G. Hudson (extreme left), Chairman of the Eastern and Australian Steamship Co., Ltd. (E&A), one of the member companies of AJCL. They are here to attend the Australia and New Zealand Eastern Shipping Conference at Kawana from March 2 to 4. Meeting the visitors on arrival was Mr. David Gledhill, right, a Director of Butterfield and Swire (Japan) Ltd., the AJCL agents in Japan. Not shown in picture, but also attending the ANZESC principals meeting are Mr. N. P. F. Hillerstrom and Mr. A. C. Swire, both Directors of AJCL, and Mr. A. G. Rose, a Director of E&A. (AJCL News, March 1)



P. & O. luxury passenger liner "Himalaya" (28,000 tons) arrived at the port of Yokohama February 21 on a six-month round-the-world cruise chartered by "Australian Women's Weekly". (Falcon News Release)

1970 as against 73.2 million tons in 1969.

(X) Agent of the vessel was the firm Best & Osterrieth.

(Assiport Press Release)

Container Traffic

Antwerp, 2 January: — The favourable impact on the evolution of container traffic exercised by the

comprehensive container handling equipment which for the last years has been at the disposal of the Antwerp port customers results once more from the statistics which have been published for the year 1970.

Containerized goods traffic amounting to about 0.6 million tons in 1968 and to about 1.2 million tons in 1969 left up to 2.2 million tons over the year 1970, i.e. an 85 per cent increase compared with 1969.

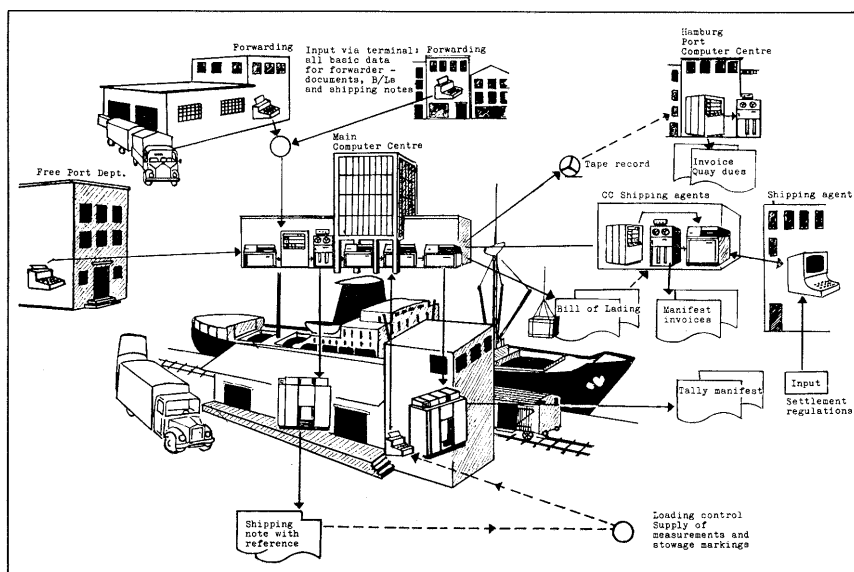
Provisional figures for the aggregate seaborne general cargo traffic in the port of Antwerp during the first eleven months of 1970 amounted to about 21 million tons. The aggregate seaborne general cargo traffic over 12 months consequently can be evaluated at some 22.9 million tons.

The above mentioned figures reveal some interesting aspects. Indeed, the total general cargo traffic in the port of Antwerp amounted to about 20.6 million tons in 1969, the figure of 1.2 million tons of containerized cargo thus representing about 6 per cent of the general cargo traffic. In 1970 this percentage rose to about 10 per cent, considering the fact that 2.2 million of the circ. 22.9 million tons of general cargo arrived at or left the port in containers.

Consequently the percentage of containerizable cargo which is actually containerized is constantly growing.

The total number of containers handled in the port of Antwerp in

SHIP System, Hamburg



1970 was 167,789 units (against 100,442 units in 1969) of which 92,150 incoming and 75,639 outgoing (against respectively 51,369 and 49,073 in 1969). This is an increase of respectively 79 and 54 per cent in 1970.

The bulk of containerized cargo still comes from or is bound for North America. Here too the increase was very important in 1970: 68,147 containers (39,639 incoming and 28,508 outgoing) against 38,850 containers (22,442 incoming and 16,408 outgoing) in 1969.

The statistics mentioned below do not include the total traffic of 22,831 empty containers which ar-

rived at or left the port of Antwerp by ocean-going vessel, or the number of pallets and flats; the tonnages indicated are these of goods conveyed, exclusive of the tara weight of the containers. (Assiport Press Release)

"INTEROCEAN 1970"

Bremen: — The Free Hanseatic City of Bremen was represented right away with three information stands at the first large exhibition for ocean research sea utilization, the INTEROCEAN 1970, which was running in Dusseldorf from the 10th to 15th November 1970—and which was coupled with an international scientific congress having the same theme. The main attraction of the largest fishing port on the European continent, Bremerhaven, was an operating radar mast, a radar screen of the Weser estuary, hydrophone tape-recordings from the ocean bed—the property of the renowned Bremerhaven Institute for Ocean Research—as was a seabed water-collector, such as is used by the Bremerhaven ocean research scientists; plus a fish-finder. That which hits the eye first, however, is the 3½ metre long skull of a sperm-whale, which the research ship "METEOR" brought back to Bremerhaven in March 1970 from

Port of Antwerp-Seaborne container traffic-1968/70

	Total container traffic					
	Unloaded		Loaded		Total	
	Number (1)	x 1.000 kg (2)	Number (1)	x 1.000 kg (2)	Number (1)	x 1.000 kg (2)
1868	32,191	328,121	25,256	276,561	57,447	604,682
1969	51,369	594,065	49,075	601,511	100,442	1,195,576
1970	92,150	1,236,761	75,639	979,266	167,789	2,216,027
North America (3)						
1968	20,125	218,381	13,412	166,908	33,337	385,289
1969	22,442	272,370	16,408	213,653	38,850	486,023
1970	39,639	549,912	28,508	558,908	68,147	908,820

(1) Empty containers and flats not included

(2) Tare of containers not included

(3) Included in the total figures

Madeira and which, after the INTEROCEAN, will be displayed in the collection of the Institute for Ocean Research:—the Oceanographic Museum of the Federal Republic of Germany.

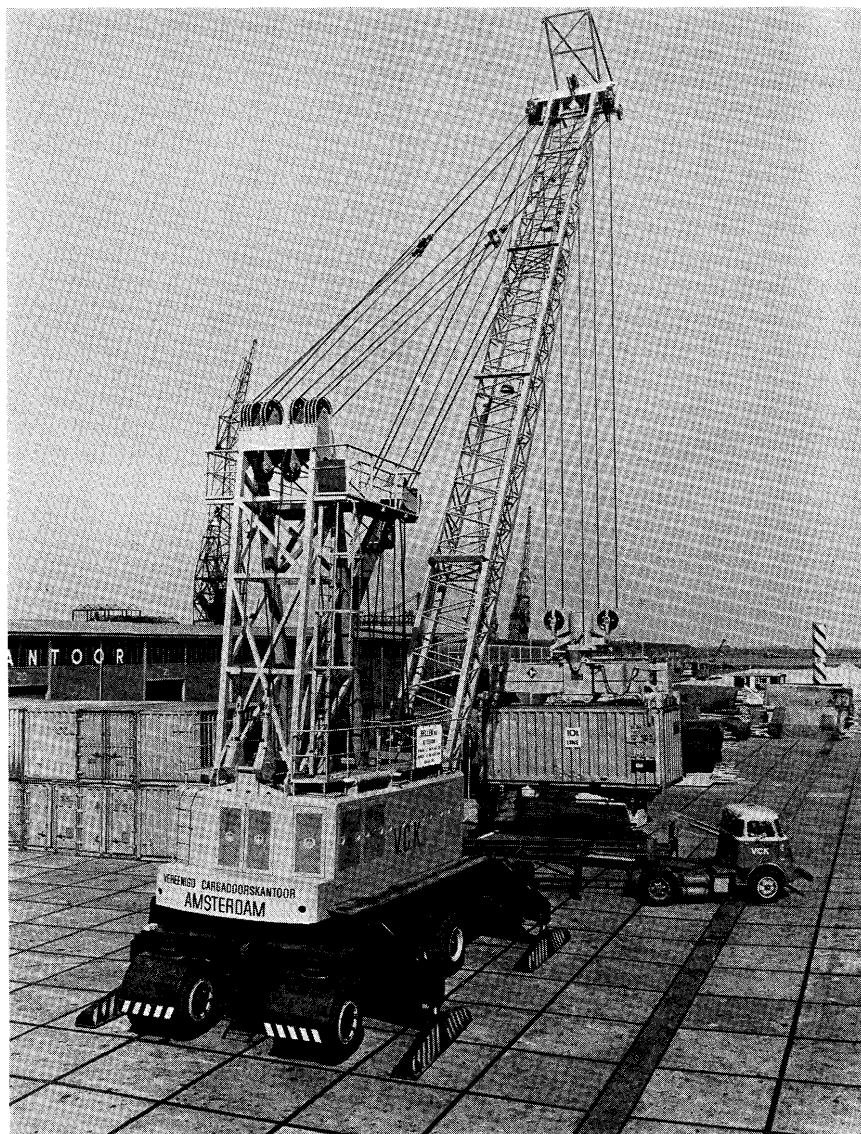
In addition Bremen showed a model of the super-tanker "ESSO LONDON" (Bremen built—and one of the largest ships in the world); the model of a localised conveyor and one of an Azure-satellite; which serve to remind that Bremen is not solely a 'wet-port', but is also an European centre for aeronautics, the aircraft industry and space research. Among the Bremen films which were being shown constantly by the Bremen hostesses—and which drew particular attention—were "Container via Bremen/Bremerhaven" (Europe's No. 1 in the transatlantic container trade) and "Metamorphosis of a Street", which has only just had its initial release.

The Federal Republic of Germany has made ocean research one of the focal points of German research. The wealth of the ocean; its nutritious potential, its ores, mineral oils, pharmaceutical elements and sources of energy are still, for the most part, to be tapped. Bremen and Bremerhaven are playing an important—and role in this particular. (Bremen Air Mail, December)

SHIPS System

Hamburg:—The newly developed data processing and information system of the port of Hamburg went into operation this year. The project, known as "SHIPS" (Seaport Hamburg Information Processing System), is being shared by all branches of the port economy. In this way, steps have been taken to deal with the continually increasing volume of traffic and the need for speeding up cargo handling operations which place new demands on traffic organisation in respect of information, taxation and control activities.

The remarkable thing about Hamburg's initiative is that besides putting the idea of an integrated processing system, which has been discussed in other ports, into practice,



A mobile container crane has been added to the facilities of the Ferry Terminal in the Coenhaven, Amsterdam.

all sectors of the port economy are cooperating towards a common goal. The start was made in summer 1968 by a number of seaport forwarding firms, who developed a comprehensive concept for the acquisition, processing and control of data flow in the port, and in July 1969 through the foundation of the "Research Association of Hamburg Forwarding Agents for the Application of Data Processing in the Port of Hamburg", which provided the necessary organisational framework. No time was lost in making contact with the Association of Hamburg Port Operators and the Association of Hamburg Ship Brokers and Shipping Agents in order to ensure close coordination at all times in this

common task.

The basic technical idea of SHIPS is the use of a central machinery system operating for all port businesses with the help of remote control data transmission. The functions of the various firms concerned with handling in the port are so related that horizontal and vertical connections can easily be established. The first place where information is gathered is the forwarder's. The data acquired here is needed by the subsequent stages in the transport chain. Hitherto, this data was re-collected and re-compiled by each stage. In future, this duplication of work will be eliminated through the continuous availability of basic information which

has been stored once, i.e. it only needs to be supplemented in order to provide each firm with the necessary information for its purposes. In the present testing stage, nine members of the Hamburg Forwarders' Research Association and the Free Port Office (as customs station for export control) each have a terminal connected to a computer centre. Forwarding stencils are being produced in the firms and shipping notes and bill of lading stencils in the computer centre. New forwarding documents and shipping notes have been developed for this; agreement has also been reached on the requisite codes.

In the second testing stage, shipping notes will be printed by way of remote data transmission at the "Overseas Centre". It is intended to extend this system later to other transit sheds and print out bills of lading at the shipping agents' offices. The final stage envisages taking over further tasks of firms involved such as tariffing, accounting and invoicing.

The realisation of the entire project can naturally only be conceived in stages. For this, close cooperation with extensive participation is aimed at, which, as a result of favourable distribution of costs, will enable even smaller firms to use data processing in transport clearance matters in the port. (Ship via Hamburg)

Ro-Ro Pontoon

Amsterdam, 16th February:—The Amsterdam Port Management has received a pontoon to be used to facilitate roll-on/roll-off traffic in the port from Verschure & Co's Scheepswerf and Machinefabriek which built it.

The 33 by 14 metre floating platform will first be used alongside the quay at Container Terminal Amsterdam (C.T.A.) in the Westhaven. It will serve as the link between the ship and the quay so that trailers can be driven on and off while the container cranes are being used to load or unload conventional containers. Just the opposite has occurred at the Vereenigd Cargadoorskantoor (V.C.K.) Ferry Terminal in the Coenhaven where a container crane was added to the ro-ro facilities.



Within short a new container/ro-ro service will be inaugurated at the Container Terminal Amsterdam.

The Port Management is well aware of the fact that more and more vessels will be combined container/ro-ro vessels and this is the reason for the pontoon. Thus the pontoon which is owned by the Port Management will first be used at C.T.A.

The pontoon will be placed into service there just before a new container/ro-ro service is inaugurated between Amsterdam and Bilbao. This service—a separate service will be maintained between Bremerhaven and Bilbao—will make use of the C.T.A. facilities and use two new purpose-built "ro-ro porters" built on a design by Amsterdam's Sea Transport Engineering. The vessels are specially designed to handle container traffic as well as ro-ro cargo, which may include containers-on-a-trailer.

Ro-ro cargo will be carried on the trailer deck while conventional containers will be carried in the holds as well as on the deck. Conventional containers will be loaded or unloaded by means of the quayside

container cranes.

The service will be operated by four shipping companies, Koninklijke Hederlandsche Stoomboot Maatschappij — K.N.S.M. — as well as the German Hansa Line and two Spanish lines, Euromar and Marítima del Norte. The service is directed specifically at door-to-door service.

Again Amsterdam's tide-free situation is a great advantage: for the pontoon is of simple design and construction and yet is able to cope with new forms of transportation in all parts of the port as it is movable.

Technical details

Length: 32.82 metres

Width: 13.94 metres

The construction is such that the pontoon can serve all types of vessels.

By means of four ballast tanks the trim and draught of the pontoon can be adjusted.

The quayflab is a fan-like construction of 16 separate parts to ensure unhindered use even when the

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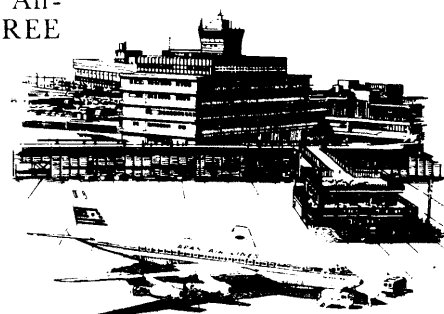
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pontoon is listing heavily to one side. (Vereniging "de Amsterdamsche Haven")

Containers

Lourenço Marques:—In several numbers of this Bulletin reference and even descriptions and opinions will be found about transport by containers.

It was with certain enthusiasm that we received the news that Engineer Duarte Silva, Director of CFB would give talk at the Railway Club on this interesting but also complex matter.

The Services, heedful of what is taking place in the world of ports and transport, have certainly already planned something on containers, their discharge and loading, reception, storing transport by rail and by road, etc.

Owing to the large areas necessary for the handling of containers, it becomes necessary to prepare places, siting and access not being the

easiest, and actually no ports are in condition to start the handling of containers at short or even long notice.

We must bear in mind what happens in the Port of Lisbon and naturally at other European ports, where one finds containers of several sizes, origins and destinations spread over kilometres.

Indeed great inconvenience has resulted, therefore it has been recognised that it is necessary, we should say indispensable for obtaining the proper results from the system to have a suitable wharf connected to the necessary area for storing and marshalling.

The containers arriving by ship, train or road would be unloaded there, when it is not possible to load direct into a truck, or lorry, and would be offloaded, loaded, handled, received and forwarded. They would be stored there in the open while awaiting despatch. Therefore, and it must not be forgotten, the port must have space for these exigen-

cies.

Engineer Duarte Silva's talk was illustrated with the film "Containerization in Maritime Transport". (Boletim Portos, Caminhos de Ferro e Transportes de Moçambique, March, 1970)

Each Year More

Lourenço Marques:—The port of Lourenço Marques, the growth of which swings forward annually, either by lengthening of the wharf or by fitting it with the most modern machinery, or by making changes to that existing so as to get better and better results, also sees the number of tons of cargo handled in its area increase yearly.

Cargo handled in the year 1969 surpassed twelve and a half million tons, about six hundred thousand more than in 1968. Thus it reached, as says the "Diário" "the All-Time Maximum".

Last year an extra length of 380 metres was started to the Cais Gor-

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jão and it will not be long before the building of a further 220 metres begins.

If we add to this the special installations provided for minerals, sugar, coal, liquid fuels, cereals, etc. it is easy to understand what standard the Port of Lourenço Marques has attained in Southern Africa.

Naturally, and we have said so often, only the permanent attention of the directorate and the support of the Provincial and Central Governments, in their high understanding of the economic value of our port, have been able to make all this possible.

To finalise what we have said, we must refer to the technical quality of the personnel who serve the port, who are constantly being put to the test and have already earned the expression from the mouth of a qualified person "with personnel like this we could make many more Lourenço Marques". (Boletim Portos, Caminhos de Ferro e Transportes de Moçambique, March, 1970)

Port Constructions

Barcelona: — The 5th and 6th stages of the circulation road have been completed and are now open to traffic, and work on the 6th stage is going along well, and is due to be completed next October.

The works to improve the south counterdyke wharf have been begun. These include the coal unloading bay, the installation of 12 ton cranes, and a double gantry as well as the alteration of a single unloading gantry of direct discharge with 64 re-inforced concrete hoppers, the piling of which is being carried out at the moment. The works for the tidying up of the Balearic Wharf have been completed, and those on the fish exchange are going ahead at full speed. The upper passage of the breakwater has been put into use, in its length along the Levant wharf and the access ramp to the same, the link area with its gardens and the demolition of the old ramp are now being finished.

The work on the container wharf

is somewhat behind schedule, the first caisson of re-inforced concrete has now been completed, and work on the construction of the container unloading shed with its connected building has been begun, while the dredging of the basin and the filling of the wharf upper surfaces are being continued.

At the same time the works of excavation for the mixed goods terminal were begun. They are of a value of 328 million. The modernisation of 8 Babcock & Wilcox cranes was approved, as well as the works on a bridge crane for the handling of containers and the metal structure for the sheds for the Mixed Goods Terminal and the shed at the back of the breakwater.

Finally, minor works for the improvement and repair of the Costa wahrf and the "Andén" of the same name, as well as small alterations to the defences of the landing.

Investments in the works, carried out up to the present month of June are in the nature of 118 million Pesetas. (Puerto de Barcelona Boletín Informativo, July 1970)



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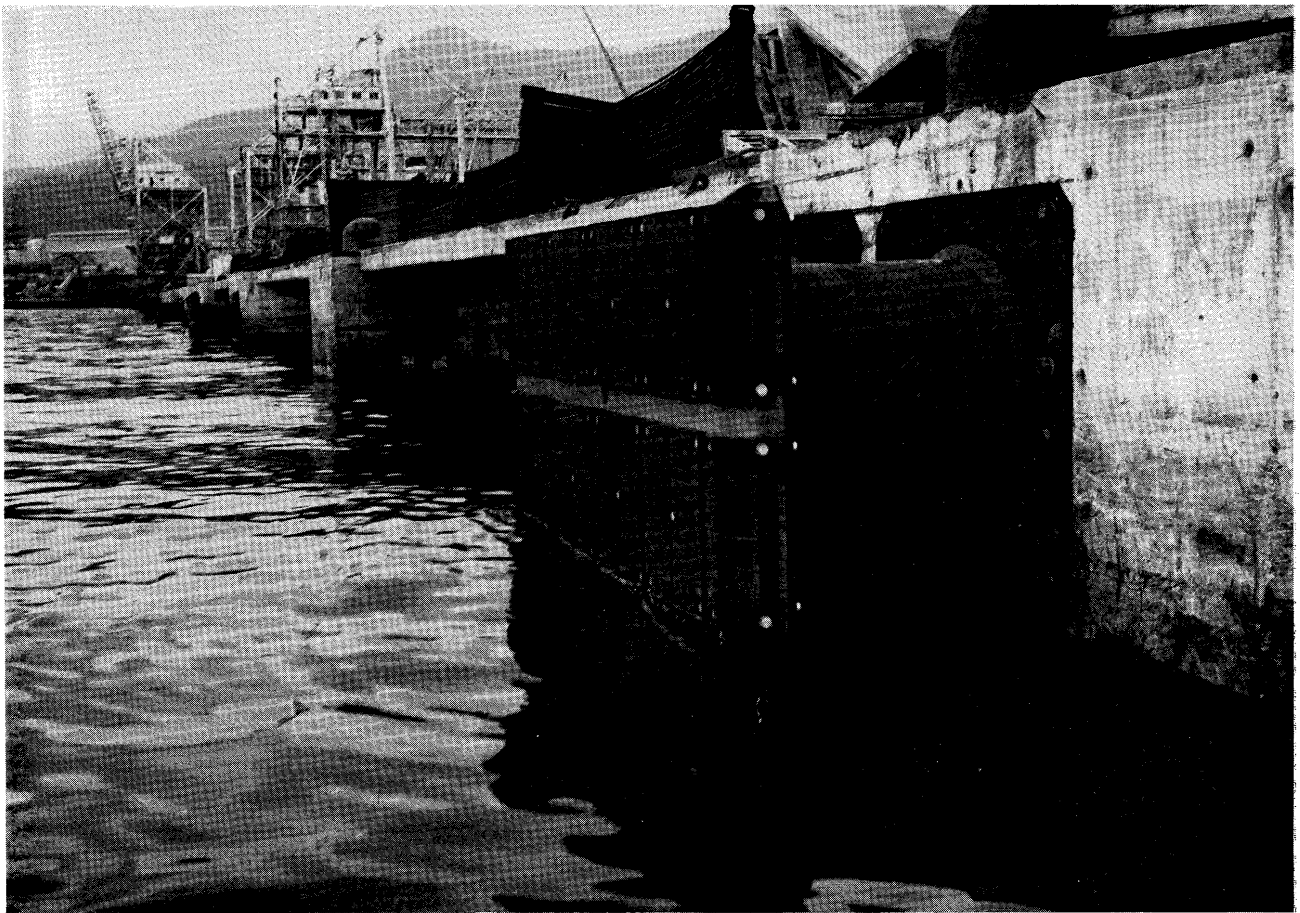
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Present and Future Container Facilities in Major Ports of the World (2)

- Supervised by Mr. Ben E. Nutter, Chairman of the Committee on Containerization of IAPH
 - Compiled by Miss Kimiko Takeda, Under Secretary of IAPH Head Office
- (This series shall last until the June issue. Presented roughly in the order of arrival.)

Auckland, NEW ZEALAND

PORT OF: AUCKLAND New Zealand DATE: 25 December 1970
DESIGNATION OF TERMINAL: Common User Container Terminal
OPERATOR OF TERMINAL: Auckland Harbour Board

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths		one	one
Length of each berth		950 feet	850 feet
Land area of each terminal		24 acres	11 acres
Dimensions of each terminal		1600' x 650' irregular shape	850' x 560' irregular shape
Depth of water at berths		40 ft LWS	43 ft LWS
CONTAINER CRANE			
Number of container cranes		one	(Yet to be decided)
Lifting capacity of each		45 long tons (Twin Lift)	
Reach on waterside from front edge of berth		107 ft 3 in.	
Reach on landside from deck rail		43 ft 6 in.	
MODE OF MANAGEMENT			
1. Exclusive lease for specified users		-	(Yet to be decided)
2. Preferential use		-	
3. Open to all callers		YES (Common user Principle)	
MODE OF OPERATION			
Transstainer operation		-	(To be installed under second stage)
Straddle Carrier operation		YES	
Chassis operation		YES	
CONTAINER PACKING OR FREIGHT STATION			
Dimensions		27,000 square ft	60,000 square ft
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)		YES	YES

Signature: *[Signature]*
General Manager Auckland Harbour Board

Fremantle, AUSTRALIA

PORT OF: FREMANTLE (WESTERN AUSTRALIA) DATE: 6/1/71.
DESIGNATION OF TERMINAL: PORT OF FREMANTLE CONTAINER TERMINAL.
OPERATOR OF TERMINAL: FREMANTLE PORT AUTHORITY/CONTAINER TERMINAL OPERATORS.

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths	1		Second Berth if Required. 642'
Length of each berth	893'		(As in Operation at Present)
Land area of each terminal	25 acres.		36' minimum.
Dimensions of each terminal	1,500' x 900' (Irregular Shape)		
Depth of water at berths	36' minimum.		
CONTAINER CRANE			
Number of container cranes	1	NIL	Second Crane if Required.
Lifting capacity of each	Max. 65T Single Lift, 45T with Spreader.		
Reach on waterside from front edge of berth	102'		
Reach on landside from deck rail	130'		
MODE OF MANAGEMENT			
1. Exclusive lease for specified users	Operating Areas Only.		
2. Preferential use	Berth and Portainer Crane.		
3. Open to all callers			
MODE OF OPERATION			
Transstainer operation	One Operating Company.		
Straddle Carrier operation			
Chassis operation	Both Operating Companies.		
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	Approx. 12,500 sq. ft. (Privately owned - within port area).		
Dimensions	Approx. 25,000 sq. ft. (Privately owned - outside port area)		
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	YES.		

Signature: _____

Melbourne, AUSTRALIA

PORT OF: MELBOURNE DATE: 17th February, 1971.
DESIGNATION OF TERMINAL: Berths No. 1 & No. 2 West Side Swanson Dock
OPERATOR OF TERMINAL: SEA-TAINER TERMINALS LTD.

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths	2		
Length of each berth	800 feet		
Land area of each terminal	24½ acres (Terminal serves both berths).		
Dimensions of each terminal	Approx. 1570' x 670'		
Depth of water at berths	31' at L.W. Shortly to be increased to 33 ft.		Can if required be dredged to 42 ft.
CONTAINER CRANE			
Number of container cranes	2 twin lift cranes		
Lifting capacity of each	45 long tons		
Reach on waterside from front edge of berth	102 feet		
Reach on landside from deck rail	122 ft. from waterside rail which is located 8' behind wharf face.		
MODE OF MANAGEMENT			
1. Exclusive lease for specified users	Terminal at rear of berths leased to Sea-Tainer Terminals Ltd.		
2. Preferential use	Vessels being handled by the Terminal Operator have preferential use of berth.		
3. Open to all callers			
MODE OF OPERATION			
Transstainer operation	Containers are stacked 5 high by 3 45 ton twin lift overhead travelling cranes in terminal and 2 high by side loading forklifts in adjacent container park.		
Straddle Carrier operation			
Chassis operation			
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	Freight Station 11½ acres located in port approx. 2 miles from terminal comprising 2 areas approx. 678'x653' & 238'x295'.		
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	Yes		

Signature: _____

Melbourne, AUSTRALIA

PORT OF: MELBOURNE DATE: 17th February, 1971.
DESIGNATION OF TERMINAL: Berths No. 1 & No. 2 East Side Swanson Dock
OPERATOR OF TERMINAL: Common User Terminal principally operated by Liner Services Pty. Ltd. & ACTA Pty. Ltd.

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths		2	
Length of each berth		Berth No. 1 850 ft. Berth No. 2 850 ft.	
Land area of each terminal		1. 28½ acres 2. 20 acres 3. 9½ acres (Common User Area)	
Dimensions of each terminal		1. 1247'x699' 2. Irreg. max depth 3. 942' x 476'	1247'
Depth of water at berths		31' at L.W. Shortly to be 33'	Can if required be dredged to 42'.
CONTAINER CRANE			
Number of container cranes		1 twin lift	
Lifting capacity of each		45 long tons	
Reach on waterside from front edge of berth		102 feet	
Reach on landside from deck rail		122' from waterside rail which is located 8' behind wharf face.	
MODE OF MANAGEMENT			
1. Exclusive lease for specified users		Operating Companies have exclusive lease of terminals adjacent to berths.	
2. Preferential use		Common User Terminal available all callers.	
3. Open to all callers			
MODE OF OPERATION			
Transstainer operation			
Straddle Carrier operation		x	
Chassis operation			
CONTAINER PACKING OR FREIGHT STATION			
Dimensions		1. 28½ acres (terminal & packing area integrated). 2. 29½ acres	
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)		Yes	

Signature: _____

Tokyo, JAPAN

PORT OF: TOKYO DATE: January 1, 1971
 DESIGNATION OF TERMINAL: Shinagawa Wharf
 OPERATOR OF TERMINAL: Bureau of Port & Harbor, Tokyo

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths	2		
Length of each berth	180 m		
Land area of each terminal	19,400 m ²		
Dimensions of each terminal	30,000 m ²		
Depth of water at berths	-10 - -10.5 m		
CONTAINER CRANE			
Number of container cranes	2		
Lifting capacity of each	30 ton, 37.5 ton		
Reach on waterside from front edge of berth	30 m		
Reach on landside from deck rail	12.5 m		
MODE OF MANAGEMENT			
1. Exclusive lease for specified users			
2. Preferential use			
3. Open to all callers	x		
MODE OF OPERATION			
Translifter operation			
Straddle Carrier operation	x		
Chassis operation	x		
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	Container Packing 37,476 m ² Freight Station 23,430 m ²		
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	No		

Signature: _____

Tokyo, JAPAN

PORT OF: TOKYO DATE: January 30, 1971
 DESIGNATION OF TERMINAL: Container Terminal Reclaimed Land No.13
 OPERATOR OF TERMINAL: _____

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths			3
Length of each berth			300m
Land area of each terminal			105,000m ²
Dimensions of each terminal			300m x 350m
Depth of water at berths			-12m
CONTAINER CRANE			
Number of container cranes			2units/berth
Lifting capacity of each			
Reach on waterside from front edge of berth			
Reach on landside from deck rail			
MODE OF MANAGEMENT			
1. Exclusive lease for specified users			x
2. Preferential use			
3. Open to all callers			
MODE OF OPERATION			
Translifter operation			
Straddle Carrier operation			
Chassis operation			
CONTAINER PACKING OR FREIGHT STATION			
Dimensions			
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)			

Signature: _____

Tokyo, JAPAN

PORT OF: TOKYO DATE: January 30, 1971
 DESIGNATION OF TERMINAL: Ohji Container Terminal
 OPERATOR OF TERMINAL: _____

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths		8 No.1-No.3, No.8 (250m) No.4-No.7 (300m)	
Length of each berth		No.1, No.2 (80,400m ²) No.3, No.6 (92,500m ²) No.4-No.7 (111,400m ²)	
Land area of each terminal		No.1, No.2 (250m x 320m) No.3, No.8 (250m x 370m) No.4-No.7 (300m x 370m)	
Dimensions of each terminal			
Depth of water at berths		-12m	
CONTAINER CRANE			
Number of container cranes		2units/berth	
Lifting capacity of each		30.5t	
Reach on waterside from front edge of berth		33m	
Reach on landside from deck rail		16m	
MODE OF MANAGEMENT			
1. Exclusive lease for specified users		x	
2. Preferential use			
3. Open to all callers			
MODE OF OPERATION			
Translifter operation		x	
Straddle Carrier operation		x	
Chassis operation			
CONTAINER PACKING OR FREIGHT STATION			
Dimensions			
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)			

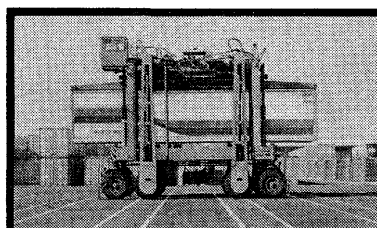
Signature: _____

Shimizu, JAPAN

PORT OF: SHIMIZU (JAPAN) DATE: JANUARY 6, 1971
 DESIGNATION OF TERMINAL: PUBLIC CONTAINER TERMINAL
 OPERATOR OF TERMINAL: SHIRAZI TERMINAL CORPORATION

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths	1	1	2
Length of each berth	222 feet	222 feet	2000 feet
Land area of each terminal	2 acres		
Dimensions of each terminal			
Depth of water at berths	40' L.W.L.	40' L.W.L.	
CONTAINER CRANE			
Number of container cranes	1	1	2
Lifting capacity of each	20.5 long ton	20.5 long ton	
Reach on waterside from front edge of berth	24.5 feet	24.5 feet	
Reach on landside from deck rail	20.5 feet	20.5 feet	
MODE OF MANAGEMENT			
1. Exclusive lease for specified users			
2. Preferential use			
3. Open to all callers	x	x	
MODE OF OPERATION			
Translifter operation			
Straddle Carrier operation	x		
Chassis operation	x		
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	12440 square feet		
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	No	No	

Signature: _____



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Baltimore, Md., U.S.A.

PORT OF: BALTIMORE DATE: JANUARY 11, 1971
 DESIGNATION OF TERMINAL: DUNDALK MARINE TERMINAL
 OPERATOR OF TERMINAL: MARYLAND PORT AUTHORITY

	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
TERMINAL			
Number of berths	2	4	
Length of each berth	715 Ft.	2 @ 600 ft. ea. 2 @ 750 ft. ea.	
Land area of each terminal	8 Acres Backup 39.7 Acres Storage Backup-20620'x280'	2 @ 3.8 Acres 1 @ 24 Acres 2 @ 20 Acres	
Dimensions of each terminal	Storage-20350'x700' 20550'x675'	2 @ 280' x600' 2 @ 750'x1200'	
Depth of water at berths	10187,308 sq. ft. 34 MLLW	2 @ 880'x1200' 34 FT MLLW	
CONTAINER CRANE			
Number of container cranes	1	6	
Lifting capacity of each	30 Tons	40 Tons	
Reach on waterside from front edge of berth	105'	105'	
Reach on landside from deck rail	30'	100'	
MODE OF MANAGEMENT			
1. Exclusive lease for specified users	X (Storage Areas)		
2. Preferential use			
3. Open to all callers	X (Berths & Backup)	X	
MODE OF OPERATION			
Transtainer operation			
Straddle Carrier operation	X	X	
Chassis operation	X	X	
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	1 @65,000 sq.ft. (650'x100')	1 @62,500 sq.ft. (625'x100') 1 @65,000 sq.ft. (650'x100')	
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	YES	YES	

Signature: *Walter D. Pines*

Baltimore, Md., U.S.A.

PORT OF: BALTIMORE DATE: JANUARY 4, 1971
 DESIGNATION OF TERMINAL: SEA-LAND SERVICE, INC.
 OPERATOR OF TERMINAL: SEA-LAND SERVICE, INC.

	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
TERMINAL			
Number of berths	1		
Length of each berth	700		
Land area of each terminal	17.4		
Dimensions of each terminal	1000 x 570 (irregular shape)		
Depth of water at berths	32' M.L.W.		
CONTAINER CRANE			
Number of container cranes	1		
Lifting capacity of each	27.5 L. Tons		
Reach on waterside from front edge of berth	105' - 6"		
Reach on landside from deck rail	80'		
MODE OF MANAGEMENT			
1. Exclusive lease for specified users	Exclusive Lease		
2. Preferential use			
3. Open to all callers			
MODE OF OPERATION			
Transtainer operation			
Straddle Carrier operation			
Chassis operation	X		
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	120 x 384		
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	YES		

Signature: *SEA-LAND*

Honolulu, Hawaii, U.S.A.

PORT OF: Honolulu DATE: December 30, 1970
 DESIGNATION OF TERMINAL: Ft. Armstrong Container Yard
 OPERATOR OF TERMINAL: Matson Navigation Co.

	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
TERMINAL			
Number of berths	3		
Length of each berth	1900 ft.		
Land area of each terminal	45 acres		2.7 acres
Dimensions of each terminal	1800' (longest), irregular 1450' (widest), shape		separate parcels
Depth of water at berths	-33' MLLW		
CONTAINER CRANE			
Number of container cranes	3		
Lifting capacity of each	2-25 ton (P&COCO) 1-33 ton (HITACHI)		
Reach on waterside from front edge of berth	P&COCO - 70' HITACHI - 101'		
Reach on landside from deck rail	P&COCO - 66' HITACHI - 72'		
MODE OF MANAGEMENT			
1. Exclusive lease for specified users			
2. Preferential use	X		
3. Open to all callers			
MODE OF OPERATION			
Transtainer operation			
Straddle Carrier operation	X		
Chassis operation			
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	1) 120' x 598' 2) 120' x 630'		
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	No	No	No

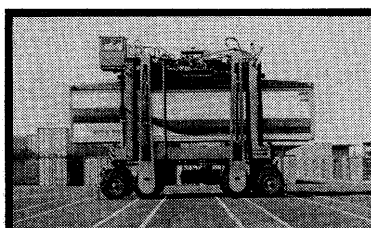
Signature: _____

Honolulu, Hawaii, U.S.A.

PORT OF: Honolulu DATE: December 30, 1970
 DESIGNATION OF TERMINAL: Sand Island Container Yard
 OPERATOR OF TERMINAL: Seatrail Terminals of California, Inc.

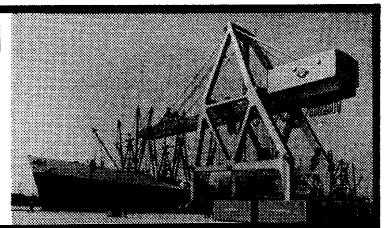
	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
TERMINAL			
Number of berths	1		1
Length of each berth	680 ft.		556 ft.
Land area of each terminal	20 acres		17.5 acres
Dimensions of each terminal	1540' x 780' irregular shape		Wedge shape; 1200' max.
Depth of water at berths	35' w/max. allowable draft of 32'		
CONTAINER CRANE			
Number of container cranes	2 (Aston)		
Lifting capacity of each	45 tons		
Reach on waterside from front edge of berth	85'		
Reach on landside from deck rail	175'		
MODE OF MANAGEMENT			
1. Exclusive lease for specified users			
2. Preferential use	X		
3. Open to all callers			
MODE OF OPERATION			
Transtainer operation			
Straddle Carrier operation			
Chassis operation	X		
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	None		100,000 sq. ft.
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	No	No	No

Signature: _____



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 Cable Address: HISHIJU TOKYO



Jacksonville, Fla., U.S.A.

PORT OF: Jacksonville DATE: January 25, 1971
 DESIGNATION OF TERMINAL: Talleyrand Container Terminal
 OPERATOR OF TERMINAL: Sea-Land Service, Inc.

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths	2		
Length of each berth	600'		
Land area of each terminal	13 acres		
Dimensions of each terminal	350' x 1200'		
Depth of water at berths	360' X 360' (remote) 34' MLW		
CONTAINER CRANE			
Number of container cranes	1		
Lifting capacity of each	27 1/2 ton		
Reach on waterside from front edge of berth	100'		
Reach on landside from deck rail	30'		
MODE OF MANAGEMENT			
1. Exclusive lease for specified users	X		
2. Preferential use			
3. Open to all callers			
MODE OF OPERATION			
Translifter operation			
Straddle Carrier operation			
Chassis operation	X		
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	46,000 sq. ft.		
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	YES		

Signature: Walter B. Kingham

Jacksonville, Fla., U.S.A.

PORT OF: Jacksonville DATE: January 25, 1971
 DESIGNATION OF TERMINAL: Blount Island
 OPERATOR OF TERMINAL: Jacksonville Port Authority

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths		2	
Length of each berth		700'	
Land area of each terminal		20 acres	
Dimensions of each terminal		1600' X 500'	
Depth of water at berths		38' MLW	
CONTAINER CRANE			
Number of container cranes		1	
Lifting capacity of each		45 short tons	
Reach on waterside from front edge of berth		113' - 6"	
Reach on landside from deck rail		80'	
MODE OF MANAGEMENT			
1. Exclusive lease for specified users			
2. Preferential use			
3. Open to all callers		X	
MODE OF OPERATION			
Translifter operation		(To be determined)	
Straddle Carrier operation			
Chassis operation			
CONTAINER PACKING OR FREIGHT STATION			
Dimensions		Up to 120,000 sq. ft.	
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)		YES	

Signature: Walter B. Kingham

Lake Charles, La., U.S.A.

PORT OF: LAKE CHARLES, LOUISIANA DATE: JANUARY 15, 1971.
 DESIGNATION OF TERMINAL: PUBLIC OPEN DOCK, INTENDED FOR CONTAINER USE.
 OPERATOR OF TERMINAL: LAKE CHARLES HARBOR & TERMINAL DISTRICT, LAKE CHARLES, LA., USA

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths	1		
Length of each berth	600 feet		
Land area of each terminal	250' x 250'		
Dimensions of each terminal	250' x 250'		
Depth of water at berths	35' MLW		
CONTAINER CRANE			
Number of container cranes		1	
Lifting capacity of each		50 tons	
Reach on waterside from front edge of berth			
Reach on landside from deck rail			
MODE OF MANAGEMENT			
1. Exclusive lease for specified users			
2. Preferential use		X	
3. Open to all callers			
MODE OF OPERATION			
Translifter operation		X	
Straddle Carrier operation			
Chassis operation			
CONTAINER PACKING OR FREIGHT STATION			
Dimensions		100' x 200'	
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)		Yes	

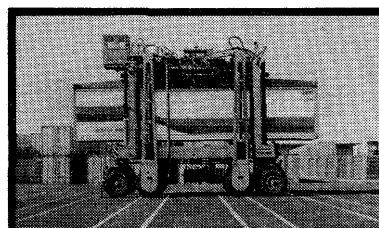
Signature: _____

Seattle, Wash., U.S.A.

PORT OF: SEATTLE DATE: January 1971
 DESIGNATION OF TERMINAL: Pier 46
 OPERATOR OF TERMINAL: Port of Seattle

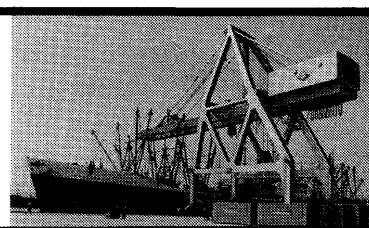
TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths	3		
Length of each berth	607; 630; 750'		
Land area of each terminal	20 Acres		
Dimensions of each terminal	1000 ft. x 900 ft. (Irregular Shape)		
Depth of water at berths	60' MLW		
CONTAINER CRANE			
Number of container cranes	2 Level Luffing Type Cranes		
Lifting capacity of each	44 1/2 Long Tons		
Reach on waterside from front edge of berth	90 ft.		
Reach on landside from deck rail	90 ft.		
MODE OF MANAGEMENT			
1. Exclusive lease for specified users			
2. Preferential use			
3. Open to all callers	X		
MODE OF OPERATION			
Translifter operation			
Straddle Carrier operation	X		
Chassis operation			
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	83,000 sq. ft. Existing transit shed used for stuffing		
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	Yes		

Signature: Arthur St. John



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Seattle, Wash., U.S.A.

PORT OF: SEATTLE DATE: January 1971
 DESIGNATION OF TERMINAL: Terminal 5
 OPERATOR OF TERMINAL: Sea-Land

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths	3		1
Length of each berth	680'; 540'; 540'		Redesignated berths at 846' each 17 Acres
Land area of each terminal	30 Acres		
Dimensions of each terminal	1800 ft x 690 ft. (Irregular)		1400 ft. x 690 ft. (Irregular)
Depth of water at berths	40' MLLW		
CONTAINER CRANE			
Number of container cranes	3		2
Lifting capacity of each	24 1/2 long tons		24 1/2 or greater
Reach on waterside from front edge of berth	110'		110'
Reach on landside from deck rail	90'		90'
MODE OF MANAGEMENT			
1. Exclusive lease for specified users	X		
2. Preferential use			
3. Open to all callers			
MODE OF OPERATION			
Transloader operation			
Straddle Carrier operation			
Chassis operation	X		
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	53,000 sq. ft. - Separate from Marine Yard		
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	Yes		

Signature: Arthur H. Yoshida

Seattle, Wash., U.S.A.

PORT OF: SEATTLE DATE: January 1971
 DESIGNATION OF TERMINAL: Terminal 18
 OPERATOR OF TERMINAL: Port of Seattle

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths	3		2
Length of each berth	720'; 720'; 696'		Redesignated berths at 850' each 35 Acres
Land area of each terminal	50 Acres		
Dimensions of each terminal	2,400 ft. by 900 ft. (Irregular shape)		1000 ft. by 900 ft.
Depth of water at berths	50' MLLW		
CONTAINER CRANE			
Number of container cranes	2	1	2
Lifting capacity of each	30 long tons	40 long tons	40 long tons
Reach on waterside from front edge of berth	110'	110'	110'
Reach on landside from deck rail	90'	90'	90'
MODE OF MANAGEMENT			
1. Exclusive lease for specified users	X		
2. Preferential use	X		
3. Open to all callers	X		
MODE OF OPERATION			
Transloader operation			
Straddle Carrier operation	X		
Chassis operation			
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	Separate from Marine Yard/ Terminal 102 CFS 37,000 sq. ft.		
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	Yes		

Signature: Arthur H. Yoshida

Seattle, Wash., U.S.A.

PORT OF: SEATTLE DATE: JANUARY 25, 1971
 DESIGNATION OF TERMINAL: Terminal 25
 OPERATOR OF TERMINAL: Not Yet Determined

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths		2	
Length of each berth		810	
Land area of each terminal		25 Acres	10 Acres
Dimensions of each terminal		680 x 1700' (Irregular shape)	(Irregular)
Depth of water at berths		50' MLLW	
CONTAINER CRANE			
Number of container cranes		2	
Lifting capacity of each		40 long tons	
Reach on waterside from front edge of berth		110'	
Reach on landside from deck rail		90'	
MODE OF MANAGEMENT			
1. Exclusive lease for specified users		Not Yet Determined	
2. Preferential use			
3. Open to all callers			
MODE OF OPERATION			
Transloader operation			
Straddle Carrier operation		X	
Chassis operation			
CONTAINER PACKING OR FREIGHT STATION			
Dimensions		29,000 sq. ft.	
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)		Yes	

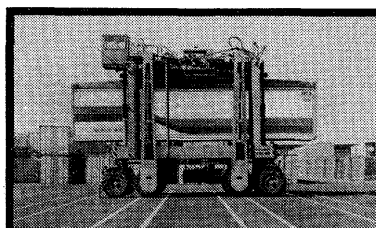
Signature: Arthur H. Yoshida

Seattle, Wash., U.S.A.

PORT OF: SEATTLE DATE: January 1971
 DESIGNATION OF TERMINAL: Pier 39
 OPERATOR OF TERMINAL: Port of Seattle

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths	1		
Length of each berth	760'		
Land area of each terminal	7 Acres		
Dimensions of each terminal	400' x 720' (Irregular Shape)		
Depth of water at berths	33' MLLW		
CONTAINER CRANE			
Number of container cranes	None		
Lifting capacity of each	(Utilize ships' own container cranes)		
Reach on waterside from front edge of berth			
Reach on landside from deck rail			
MODE OF MANAGEMENT			
1. Exclusive lease for specified users			
2. Preferential use	X		
3. Open to all callers			
MODE OF OPERATION			
Transloader operation			
Straddle Carrier operation			
Chassis operation	X		
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	Separate from Marine Yard/ Terminal 102 CFS 37,000 sq. ft.		
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	Yes		

Signature: Arthur H. Yoshida



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San Francisco, Calif., U.S.A.

PORT OF: San Francisco DATE: January 12, 1971
 DESIGNATION OF TERMINAL: Pier 80
 OPERATOR OF TERMINAL: American President Lines & State Steamship Co.

	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
TERMINAL			
Number of berths	4		
Length of each berth	664 ft.		
Land area of each terminal	2,962,060 ft.		
Dimensions of each terminal	2577' X 1296'		
Depth of water at berths	40 MLLW		
CONTAINER CRANE			
Number of container cranes	1		
Lifting capacity of each	40 Long Tons		
Reach on waterside from front edge of berth	113 ft.		
Reach on landside from deck rail	68 ft.		
MODE OF MANAGEMENT			
1. Exclusive lease for specified users			
2. Preferential use	X		
3. Open to all callers			
MODE OF OPERATION			
Transstainer operation			
Straddle Carrier operation	X		
Chassis operation	X		
CONTAINER PACKING OR FREIGHT STATION			
Dimensions			
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	Yes		

Signature: _____

San Francisco, Calif., U.S.A.

PORT OF: San Francisco DATE: January 12, 1971
 DESIGNATION OF TERMINAL: Pier 96
 OPERATOR OF TERMINAL: Pacific Far East Line

	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
TERMINAL			
Number of berths		2	
Length of each berth		870 ft.	
Land area of each terminal		1,815,960	
Dimensions of each terminal		1,740' long, and backup distance 1900' 38NLLW	
Depth of water at berths			
CONTAINER CRANE			
Number of container cranes		1	
Lifting capacity of each		40 L.tons	
Reach on waterside from front edge of berth		113 ft.	
Reach on landside from deck rail		68 ft.	
MODE OF MANAGEMENT			
1. Exclusive lease for specified users			
2. Preferential use		X	
3. Open to all callers			
MODE OF OPERATION			
Transstainer operation			
Straddle Carrier operation		X	
Chassis operation		X	
CONTAINER PACKING OR FREIGHT STATION			
Dimensions		30,000 ft.	
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)		Yes	

Signature: _____

San Francisco, Calif., U.S.A.

PORT OF: San Francisco DATE: January 12, 1971
 DESIGNATION OF TERMINAL: Pier 50
 OPERATOR OF TERMINAL: California Stevedore & Ballast Company and Crescent Wharf and Warehouse Company

	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
TERMINAL			
Number of berths		1	
Length of each berth		1,000 ft.	
Land area of each terminal		300,000 ft.	
Dimensions of each terminal		1480' X 1000'	
Depth of water at berths		35MLLW	
CONTAINER CRANE			
Number of container cranes		1	
Lifting capacity of each		40 Long Tons	
Reach on waterside from front edge of berth		83 ft.	
Reach on landside from deck rail			
MODE OF MANAGEMENT			
1. Exclusive lease for specified users			
2. Preferential use		X	
3. Open to all callers			
MODE OF OPERATION			
Transstainer operation			
Straddle Carrier operation		X	
Chassis operation		X	
CONTAINER PACKING OR FREIGHT STATION			
Dimensions			
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)		Yes	

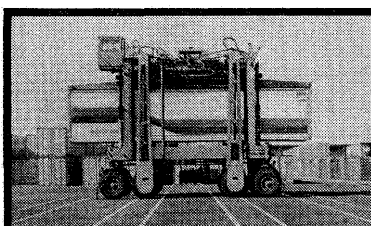
Signature: _____

San Francisco, Calif., U.S.A.

PORT OF: San Francisco DATE: January 12, 1971
 DESIGNATION OF TERMINAL: Pier 27
 OPERATOR OF TERMINAL: Open

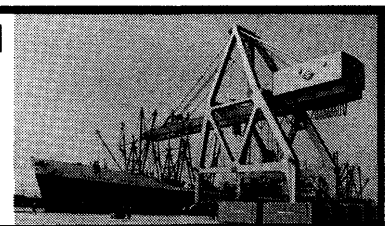
	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
TERMINAL			
Number of berths			2
Length of each berth			670 ft.
Land area of each terminal			450,000 ft.
Dimensions of each terminal			1358' X 206'
Depth of water at berths			35 MLLW
CONTAINER CRANE			
Number of container cranes			1
Lifting capacity of each			40 Long tons
Reach on waterside from front edge of berth			83 ft.
Reach on landside from deck rail			
MODE OF MANAGEMENT			
1. Exclusive lease for specified users			
2. Preferential use			
3. Open to all callers			X
MODE OF OPERATION			
Transstainer operation			
Straddle Carrier operation			X
Chassis operation			X
CONTAINER PACKING OR FREIGHT STATION			
Dimensions			
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)			Yes

Signature: _____



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Le Havre, FRANCE

PORT OF: LE HAVRE DATE: Décembre 1970
 DESIGNATION OF TERMINAL: Quai de l'Atlantique
 OPERATOR OF TERMINAL: PORT AUTONOME DU HAVRE

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths	3	4	
Length of each berth	265 mètres	225 mètres	
Land area of each terminal	147,000 m ²	450,000 m ²	
Dimensions of each terminal	800 m x 181 m (forme irrégulière)	900 m x 500 m (de forme irrégulière)	
Depth of water at berths	12 mètres	14 mètres	
CONTAINER CRANE			
Number of container cranes	4	4	
Lifting capacity of each	40 T	40 T	
Reach on waterside from front edge of berth	32,90 mètres	37,70 mètres	
Reach on landside from deck rail	23 mètres	30 mètres	
MODE OF MANAGEMENT			
1. Exclusive lease for specified users			
2. Preferential use	Banal	Banal	
3. Open to all callers			
MODE OF OPERATION			
Translainer operation			
Straddle Carrier operation	X	X	
Chassis operation	X	X	
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	10,000 m ²	7,600 m ²	
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	oui	oui	

Signature: _____

Rotterdam, NETHERLANDS

PORT OF: ROTTERDAM DATE: 1-1-1971
 DESIGNATION OF TERMINAL: Public Container Terminal
 OPERATOR OF TERMINAL: E. C. T. (Europe Container Terminal)
Harbour basin: Prins Willem Alexanderhaven

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths			
Length of each berth	1101' (360)		Future expansion to 4,400' (1350)
Land area of each terminal	45 acres (19 ha)		Subject of discussion
Dimensions of each terminal			Subject of discussion
Depth of water at berths	41' (12,50)		
CONTAINER CRANE			
Number of container cranes	1	1	
Lifting capacity of each	275 tons	275 tons	Both gantry cranes will be adapted for a bigger capacity in 1971
Reach on waterside from front edge of berth	104' ft	106' ft	
Reach on landside from deck rail	50' ft	50' ft	
MODE OF MANAGEMENT			
1. Exclusive lease for specified users	Leased from E.C.T. by Sea Line		
2. Preferential use			
3. Open to all callers			
MODE OF OPERATION			
Translainer operation			
Straddle Carrier operation			
Chassis operation	Chassis operation		
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	Consolidation area of 30,000 sq. ft. rail connected, Road traffic across front.		
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	Yes		

Signature: Havenbedrijf der Gen. Rotterdam
Atty. T. Technische Afdeling

Rotterdam, NETHERLANDS

PORT OF: ROTTERDAM DATE: 1-1-1971
 DESIGNATION OF TERMINAL: Public container terminal ; Container - and Roll-on/Roll-off traffic
 OPERATOR OF TERMINAL: E. C. T. (Europe Container Terminal)
Harbour basin: Prinses Margriethaven

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths	4		
Length of each berth	2900' (880m)	3100' (940m)	
Land area of each terminal	62 acres (25 ha)		Extension up to 215 acres (89ha)
Dimensions of each terminal			
Depth of water at berths	33' (10,06)		
CONTAINER CRANE			
Number of container cranes	1 1 1 1 1		1971 1971
Lifting capacity of each (Tons)	37 48 53 41 41		41 41
Reach on waterside from front edge of berth	100' 104' 104' 104' 104'		104' 104'
Reach on landside from deck rail	50' 50' 50' 50' 50'		50' 50'
MODE OF MANAGEMENT			
1. Exclusive lease for specified users			
2. Preferential use			
3. Open to all callers	yes		
MODE OF OPERATION			
Translainer operation	X		
Straddle Carrier operation	X		
Chassis operation	X		
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	45,000 sq. ft. (4,200 m ²)		
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	Yes (special railway-sites in the terminal)		

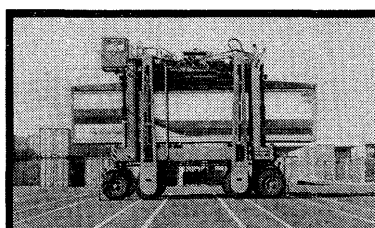
Signature: Havenbedrijf der Gen. Rotterdam
Atty. T. Technische Afdeling

Rotterdam, NETHERLANDS

PORT OF: ROTTERDAM DATE: 1-1-1971
 DESIGNATION OF TERMINAL: Public Container Terminal
 OPERATOR OF TERMINAL: UNIT CRANE
Harbour basin: Kralingen, Pier 7

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths	Per 15-1-1971:		
Length of each berth	1150' (350 m.)		
Land area of each terminal	14,02 acres (6 ha)		Up to 37,05 acres (15ha)
Dimensions of each terminal			
Depth of water at berths	33' (10 m.)		
CONTAINER CRANE			
Number of container cranes	2		4 1
Lifting capacity of each	45 tons gross		45L gross 45 tons gross
Reach on waterside from front edge of berth	131' (39,19m)		131' 131'
Reach on landside from deck rail	230' (70m)		230' 230'
MODE OF MANAGEMENT			
1. Exclusive lease for specified users			
2. Preferential use			
3. Open to all callers	Open to all callers		
MODE OF OPERATION			
Translainer operation	First stage: side loaders	Translainer operation	
Straddle Carrier operation			
Chassis operation			
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	none		
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	Yes		

Signature: Havenbedrijf der Gen. Rotterdam
Atty. Technische Afdeling



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HEAVY INDUSTRIES, LTD.
 5-1, Marunouchi 2-chome, Chiyoda-ku, Tokyo, Japan
 Cable Address: HISHIJU TOKYO



Rotterdam, NETHERLANDS

PORT OF: ROTTERDAM DATE: 1-1-1971
 DESIGNATION OF TERMINAL: Leased by BELL LINE Ltd from I.C.I. (Nederland) N.V., Rotterdam
 OPERATOR OF TERMINAL: BELL LINE, N.V.

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths	1 Jetty (K) with platform for storage 300' (90m)	EXPANSION 1 (K) Jetty doubled in febr. 1971	
Length of each berth			
Land area of each terminal	Platform 300'(90m) x 171'(50m)	Platform will be doubled with another 300' x 171' (febr. 1971)	
Dimensions of each terminal	Depth of the site behind the platform: 250' (78m)		
Depth of water at berths	23' (7m)		
CONTAINER CRANE			
Number of container cranes	1	1 second gantry crane will be placed febr. 1971 and will be used at first about June 1971	
Lifting capacity of each	25 tons gross	Lifting cap. 32 tons gross	
Reach on waterside from front edge of berth	62' (19m)	62' (19m)	
Crane track	157' (48m)	157' (48m)	
Reach on landside from dockside	39' (12m)	39' (12m)	
MODE OF MANAGEMENT			
1. Exclusive lease for specified users	Bell Line Ltd. short sea container traffic		
2. Preferential use			
3. Open to all callers			
MODE OF OPERATION			
Transfainer operation	Storage on the platform between unloading of railway flatcars and road trailers with the same gantry crane (landside rail)		
Straddle Carrier operation			
Chassis operation			
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	none		
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	Two tracks under the landside (10 of the gantry crane place for one trailer aside)		

Signature: _____

Rotterdam, NETHERLANDS

PORT OF: ROTTERDAM DATE: 1-1-1971
 DESIGNATION OF TERMINAL: Exclusive use by the "TRANSPORT FERRY SERVICE" Ltd
 OPERATOR OF TERMINAL: TRANSPORT FERRY SERVICE NEDERLAND N.V.
Harbour Basin, 1 Gemaalshaven southwardside

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths	1 (with ramp on southside)		
Length of each berth	220m. (723')		
Land area of each terminal	In use 172 acres		
Dimensions of each terminal	450m x 180m (1476' x 591')		
Depth of water at berths	7m (23')		
CONTAINER CRANE			
Number of container cranes	1		
Lifting capacity of each	32 tons gross		
Reach on waterside from front edge of berth	20,70m (70')		
Crane track	50m. (164')		
Reach on landside from dockside	12m. (39' 4 1/2')		
MODE OF MANAGEMENT			
1. Exclusive lease for specified users	Exclusive use by Transport Ferry Service		
2. Preferential use			
3. Open to all callers			
MODE OF OPERATION			
Transfainer operation			
Straddle Carrier operation			
Chassis operation	Chassis operation (Road-trailers)		
CONTAINER PACKING OR FREIGHT STATION			
Dimensions	None		
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)	Yes		

Special roll-on/roll-off terminal for short sea traffic to England. Also handtrailers (dangerous goods as designed)

Signature: _____

Rotterdam, NETHERLANDS

PORT OF: ROTTERDAM DATE: 1-1-1971
 DESIGNATION OF TERMINAL: Exclusive use by the "NOORDZEE VEERDIENSTEN N.V."
(North Sea Ferries)
 OPERATOR OF TERMINAL: NOORDZEE VEERDIENSTEN N.V.

TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths	1 Jetty (ramp)		
Length of each berth (jetty)	270m (890')		
Land area of each terminal	25 acres		
Dimensions of each terminal			
Depth of water at berths	23' (7m)		
CONTAINER CRANE			
Number of container cranes	none		
Lifting capacity of each			
Reach on waterside from front edge of berth			
Reach on landside from deck rail			
MODE OF MANAGEMENT			
1. Exclusive lease for specified users	Exclusive use by Noordzee Veerdiensten, North Sea Ferries		
2. Preferential use			
3. Open to all callers			
MODE OF OPERATION			
Transfainer operation			
Straddle Carrier operation			
Chassis operation	Chassis operation (road-trailers)		
CONTAINER PACKING OR FREIGHT STATION			
Dimensions			
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)			

Special Roll-on/Roll-off service to England for cargo (roll-on/roll-off) and passengers.

Signature: _____


Rotterdam, NETHERLANDS

PORT OF: ROTTERDAM - BLIJSPOORT PROJECT DATE: 1-1-1971
 DESIGNATION OF TERMINAL: PUBLIC CONTAINER and ROLL-on - ROLL-off TERMINAL
 OPERATOR OF TERMINAL: _____


TERMINAL	IN OPERATION	UNDER CONSTRUCTION	FUTURE PLAN
Number of berths			15
Length of each berth			300m (970')
Land area of each terminal			as an average 45 acres (202ha)
Dimensions of each terminal			
Depth of water at berths			45' (13,65m) - M.A.F.
CONTAINER CRANE			
Number of container cranes			
Lifting capacity of each			
Reach on waterside from front edge of berth			
Reach on landside from deck rail			
MODE OF MANAGEMENT			
1. Exclusive lease for specified users			
2. Preferential use			
3. Open to all callers			
MODE OF OPERATION			
Transfainer operation			
Straddle Carrier operation			
Chassis operation			
CONTAINER PACKING OR FREIGHT STATION			
Dimensions			
RAILROAD CONNECTION TO TERMINAL			
(Yes) (No)			Yes

STILL SUBJECT OF DISCUSSION AS TO THE ULTIMATE DIMENSIONS


Signature: _____

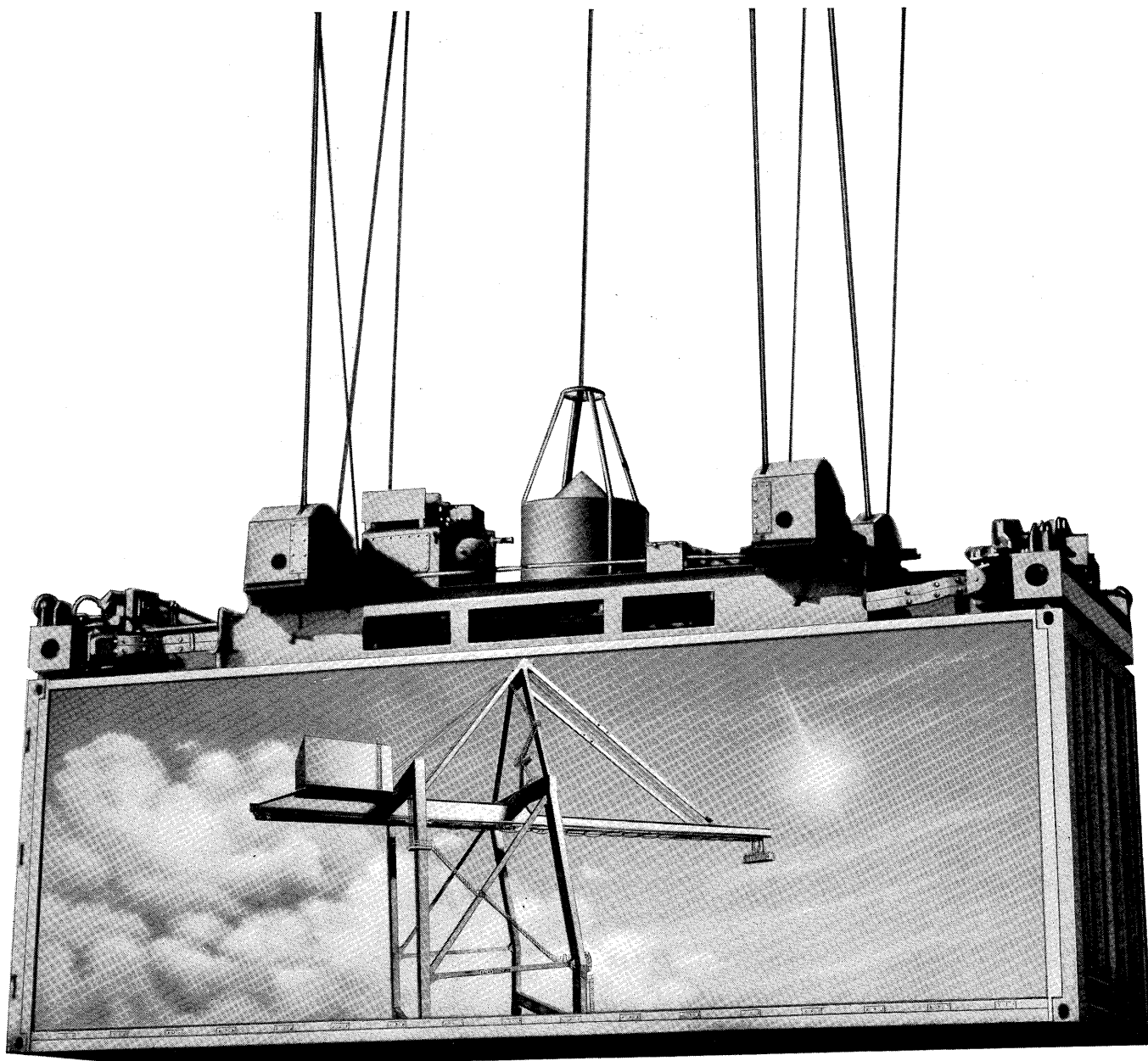


We make what containerization need
Straddle Carriers and Cranes, for instance.



MITSUBISHI
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 Cable Address: HISHIJU TOKYO





How can you put perspective into your containers?

Before you were born (we presume), we began to make cranes.
That was 60 years and 10,000 cranes ago.

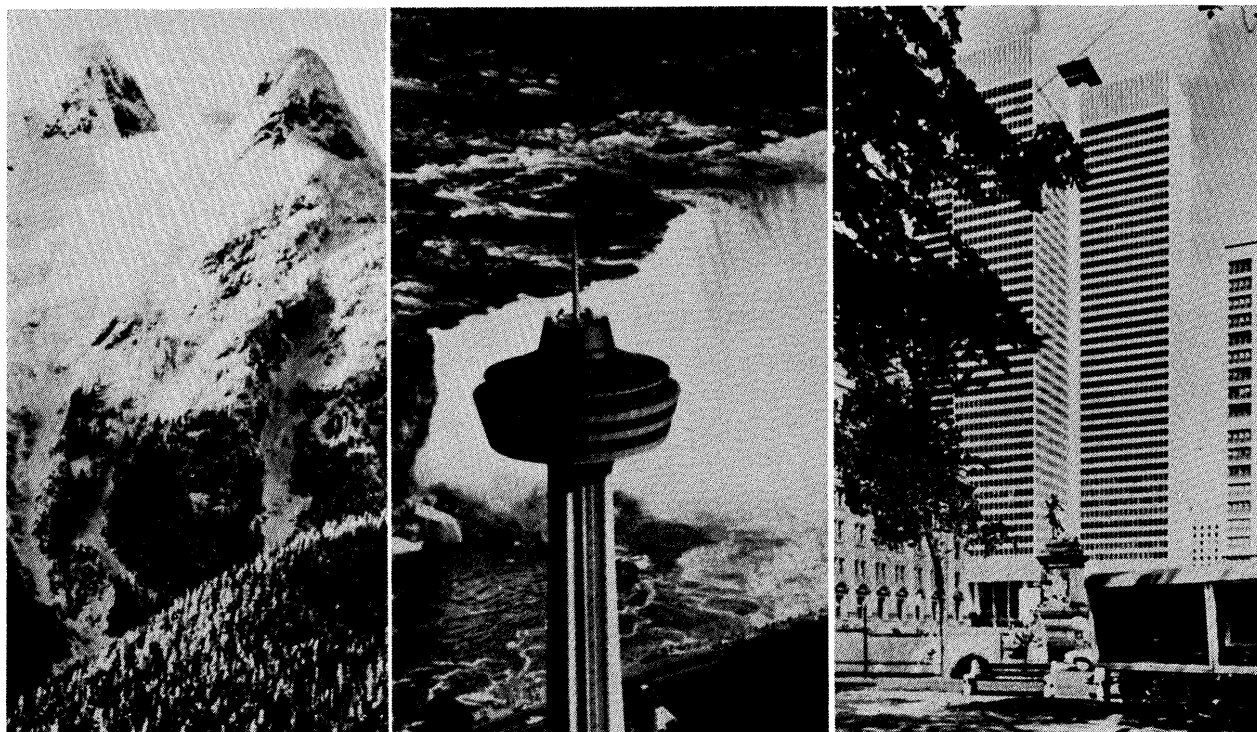
Today, you can get more than a crane with our know-how.
You can get a system.

You can get operation plans, plus, cranes for dock-side, ship and yard.

And, with our container handling systems, you can be fast, safe
and efficient. You can load, unload, stack and unstack—all at the same time.
With less personnel. With less cost. With one name. Ours. That's how.
Please write.

Ishikawajima-Harima Heavy Industries Co., Ltd., Tokyo, Japan
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IHI



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