

# PORTS *and* HARBORS

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**Port of Auckland**  
New Zealand

## IAPH Conference Nagoya May 1981

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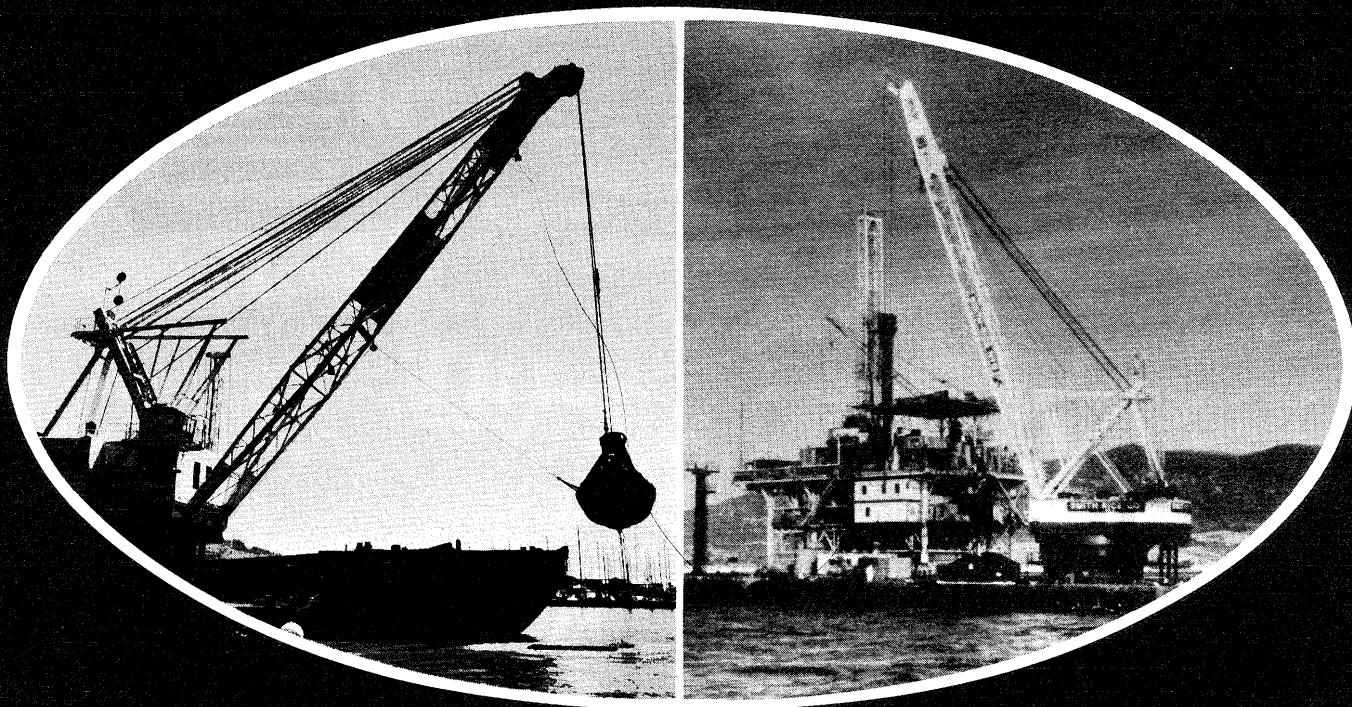
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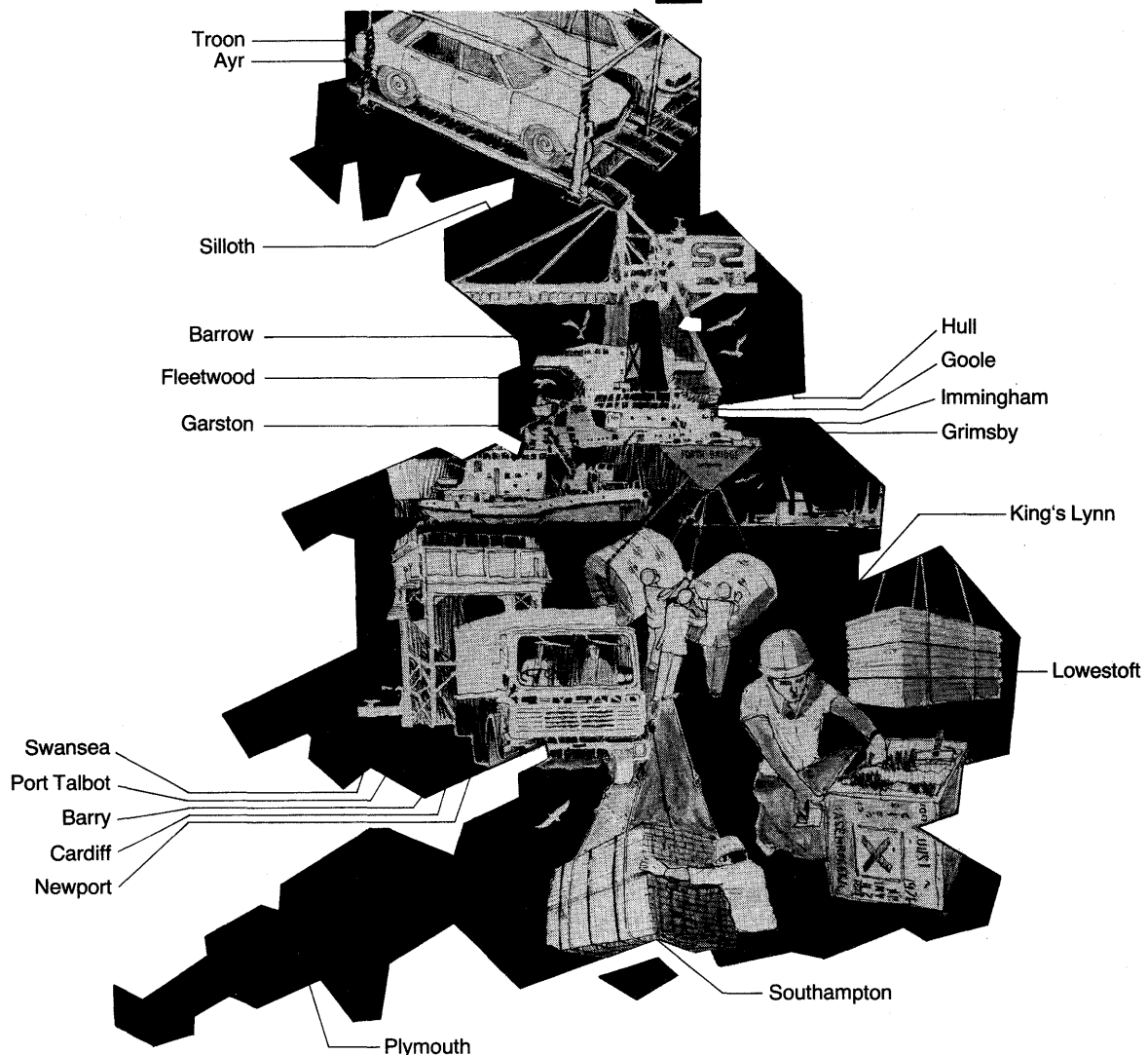
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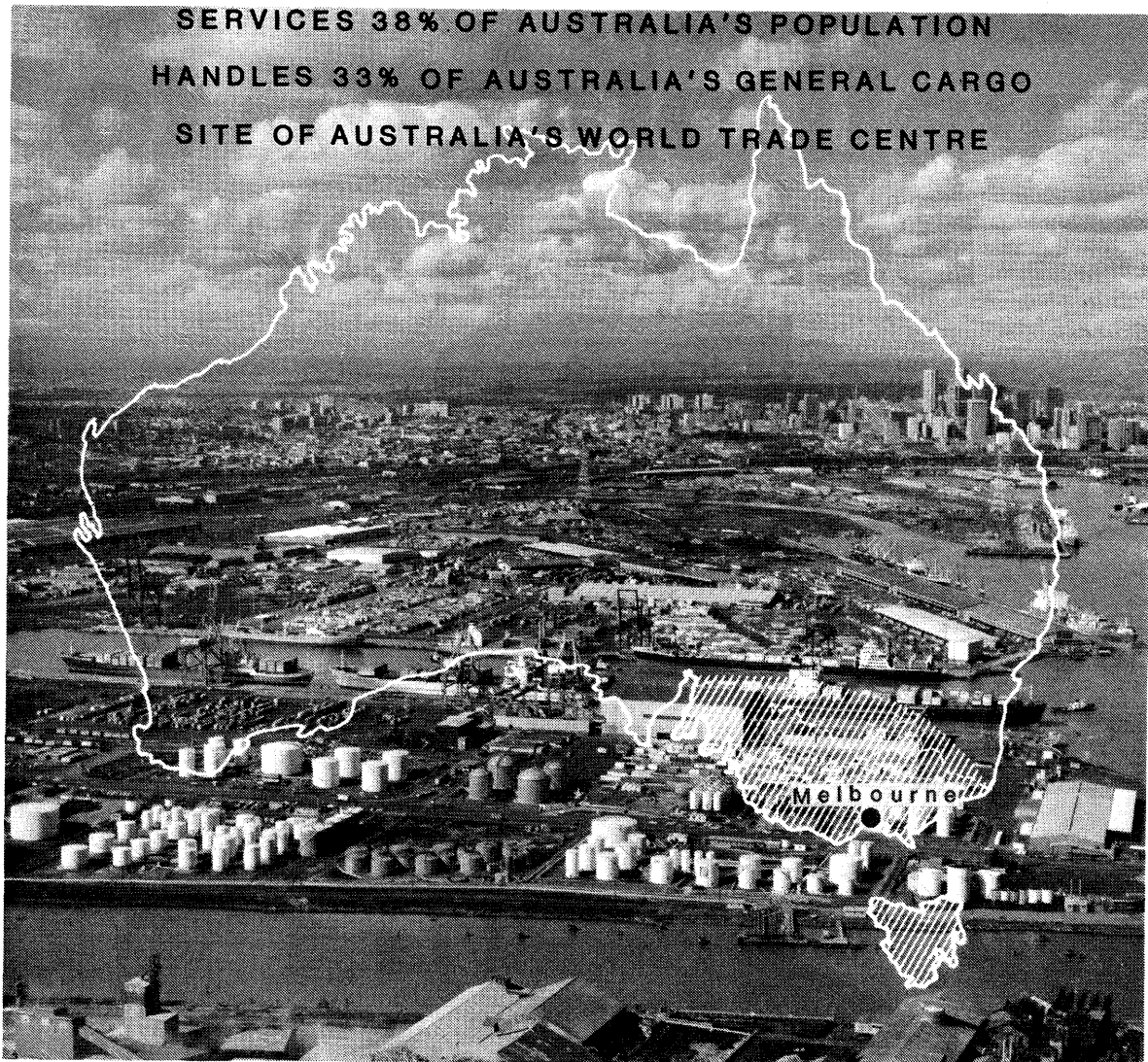
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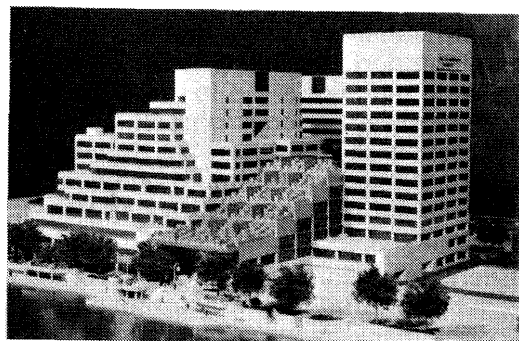
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All enquiries: The Secretary, Port of Melbourne Authority  
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# PORTS *and* HARBORS

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**The International Association of Ports and Harbors**

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**March, 1980 Vol. 25, No. 3**

## CONTENTS

	Page
<b>IAPH announcements and news:</b> . . . . .	7~12
IAPH Committee Meetings Go "Down Under"—Sydney welcomes participants in Brisbane Meetings—Donation to IAPH Special Fund continues—French version of "Guide on Port Safety" available on request—Chairman Lorimer invites your participation in Bridge Clearance Survey—Questionnaires by Committee on Community Relations—IAPH's Consultative Status renewed by IMCO—Harbours Association of New Zealand invites IAPH members to March Conference—Membership Notes—Visitors	
<b>Open forum, Port releases:</b>	
The Land-Sea Interchange: Transport Developments in the Next Two Decades (Yann-Pierre Rémond, Port of Marseilles Authority) . . . . .	12
The World Bank and Port Development (Mr. A.J. Carmichael) . . . . .	16
<b>International maritime information:</b>	
<b>World port news:</b>	
Recommendations on the Safe Transport, Handling and Storage of Dangerous Substances in Port Areas (1) (IMCO) . . . . .	19
Forms in the "Manual on a uniform system of port statistics and performance indicators" (UNCTAD). . . . .	30
United Nations Conference on International Multimodal Transport. . . . .	34
A Short History of the Port of Nagoya . . . . .	44
VOICE—"I would like to know" . . . . .	48

**The Cover:** Port of Auckland, New Zealand, in November 1979 looking west over busy Fergusson Container Terminal with two ships on the berth.

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# PORT OF NAGOYA

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- Port of Nagoya plans to further modernization and integration of facilities.
- Port of Nagoya hosts 12th Conference of the International Association of Ports and Harbors in 1981.



## NAGOYA PORT AUTHORITY

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# IAPH announcements and news

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## IAPH Committee Meetings Go "Down Under"

The inter-conferences meeting of IAPH Executive Committee this year has found its site on the Gold Coast, Queensland, 80 km from Brisbane, Australia between April 18 and 22, 1980 under the hostship of the Port of Brisbane Authority.

The committees planning to meet simultaneously are;

1. Finance Committee (Chairman: J. den Toom, Managing Director, Port of Amsterdam)
2. Committee on Large Ships (Chairman: J.M. Wallace, President, Maritime Services Board of N.S.W., Australia)
3. Committee on Community Relations (Chairman: J. Bax, Head, External Affairs Dept., Port of Rotterdam)
4. Constitution and By-Laws Committee (Chairman: J.H.W. Cavey, Member, National Harbours Board, Canada)
5. Committee on Containerization, Barge Carriers and Ro-Ro Vessels (Chairman: R.T. Lorimer, General Manager, Auckland Harbour Board, N.Z.)
6. Membership Committee (Chairman: J.P. Davidson, Deputy Chairman and Managing Director, Clyde Port Authority, U.K.)

Business Programme Mr. F.M. Wilson, General Manager of the host port, prepared and distributed among the committee members is as follows;

The agenda will include Secretary General's report on the financial affairs and the activities following the 11th Conference and the state of preparation for the next conference in Nagoya, May, 1981 by Mr. Fumio Kohmura, Executive Vice President, Nagoya Port Authority. (TKD)

### THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS COMMITTEE MEETINGS

#### BUSINESS PROGRAMME

#### WEDNESDAY—April 16, 1980

Arrive Brisbane (Book into Lennons Hotel)

#### THURSDAY—April 17, 1980

Travel to Gold Coast—Book into "The Chateau"

#### FRIDAY—April 18, 1980

- |                      |   |
|----------------------|---|
| 9.00 am to 9.30 am   | President and three Vice Presidents call on Mayor, Gold Coast City Council. |
| 10.00 am to 10.30 am | Welcome by Minister for Maritime Services and Tourism.                      |
| 10.30 am to 10.45 am | Morning Tea/Coffee  |
| 10.45 am to 12.30 pm | Committee Meetings (Finance Committee; Committee on Large Ships)            |
| 12.30 pm to 2.00 pm  | Lunch   |
| 2.00 pm to 3.30 pm   | Committee Meetings (Community   |

Relations Committee; Committee on Large Ships)

- |                            |                             |
|----------------------------|-----------------------------|
| 3.30 pm to 3.45 pm         | Afternoon Tea/Coffee        |
| 3.45 pm to 5.00 pm         | Committee meetings continue |
| ..... (Refreshments) ..... |                             |

#### SATURDAY—April 19, 1980

- |                            |  |
|----------------------------|--|
| 10.00 am to 12.30 pm       | Committee Meetings (Constitution and By-Laws Committee; Committee on Containerisation, Barge Carriers and Ro-Ro Vessels) |
| 11.00 am to 11.20 am       | Morning Tea/Coffee and Group Photograph  |
| 12.30 pm to 2.00 pm        | Lunch  |
| 2.00 pm to 5.00 pm         | Committee Meetings (Membership Committee; Committee on International Port Development)                                   |
| 3.30 pm to 3.45 pm         | Afternoon Tea/Coffee   |
| 3.45 pm to 5.00 pm         | Committee meetings continue  |
| ..... (Refreshments) ..... |  |

#### SUNDAY—April 20, 1980

Conference Break—"Social Programme"

#### MONDAY—April 21, 1980

- |                            |   |
|----------------------------|---|
| 9.00 am to 11.00 am        | Committee on Legal Protection of Port Interests |
| 11.00 am to 11.15 am       | Morning Tea/Coffee                              |
| 11.15 am to 12.30 pm       | Executive Committee Meeting                     |
| 12.30 pm to 2.00 pm        | Lunch   |
| 2.00 pm to 3.30 pm         | Executive Committee Meeting (contd.)            |
| 3.30 pm to 3.45 pm         | Afternoon Tea/Coffee                            |
| 3.45 pm to 5.00 pm         | Executive Committee Meeting (contd.)            |
| ..... (Refreshments) ..... |   |

#### TUESDAY—April 22, 1980

- |                            |                                      |
|----------------------------|--------------------------------------|
| 10.00 am to 11.00 am       | Executive Committee Meeting (contd.) |
| 11.00 am to 11.15 am       | Morning Tea/Coffee                   |
| 11.15 am to 12.30 pm       | Executive Committee Meeting (contd.) |
| 12.30 pm to 2.00 pm        | Lunch                                |
| 2.00 pm to 3.30 pm         | Executive Committee Meeting (contd.) |
| 3.30 pm to 3.45 pm         | Afternoon Tea/Coffee                 |
| 3.45 pm to 5.00 pm         | Executive Committee Meeting (contd.) |
| ..... (Refreshments) ..... |                                      |

## Sydney welcomes participants in Brisbane Meetings

Mr. J.M. Wallace, President of the Maritime Services Board of N.S.W., extends through this journal invitation to all IAPH members attending the meetings in Brisbane to take the opportunity to include a visit to Sydney in their itinerary.

"It would be an ideal opportunity for them", says Mr. Wallace, "to inspect the major developments in New South Wales ports and to see some of the scenic sights of Sydney Harbour and its environs". "Besides", he added, "most representatives will necessarily travel to and from Brisbane via Sydney."

He further stated "Visitors will see our new Port Botany has recently commenced operation with the commissioning of a Bulk Liquids Berth and, by April this year, three of the six new container berths will be in service." "For those interested in coal loading and the discharge of bulk products" he remarked, "I can also arrange a visit to Newcastle and/or Port Kembla". (TKD)

## Donation to IAPH Special Fund continues

Mr. F.J.N. Spoke, General Manager, Vancouver Port Authority, informed that Vancouver Port would contribute US\$1,000 to IAPH's Special Port Development Technical Assistance Fund.

## French version of "Guide on Port Safety" available on request

According to President Bastard, the report of IAPH Committee on Large Ships known as "Guide on Port Safety" was translated into French recently in response to a strong demand of local bodies. The translation, he says, was made possible by the great cooperation of Port Autonome du Havre.

The local organizations which strongly requested the French version included "Direction des Ports et de la Navigation Maritime, Services des Phares et Balises", and copies, on request, are obtainable through the Port Autonome du Havre, Service de la Documentation (Terre-Plein de la Barre B.P. 1413, 76067 Le Havre, Cedex. France), added President.

President Bastard also comments that the French version of the report is provisional since the various chapters of the report are currently being reshaped in the Committee chaired by Mr. J.M. Wallace, President, the Maritime Services Board of N.S.W., Australia. (TKD)

## Chairman Lorimer invites your participation in Bridge Clearance Survey

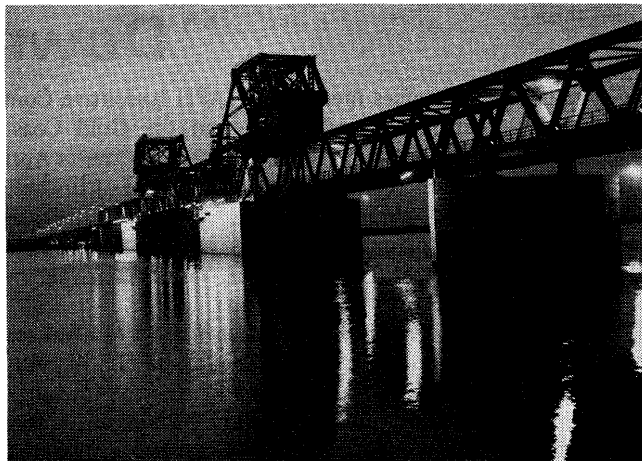
A questionnaire requesting information on bridge clearances was circulated to all regular members on the 29 September 1979.

Seventy replies have been received. Thirtysix ports have completed the questionnaire giving particulars of bridges in the port area and thirtyfour ports have advised that there are no bridges affecting their area.

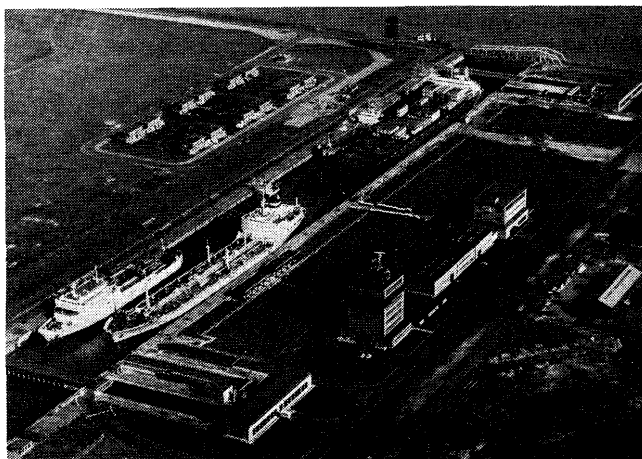
A number of authorities have included maps of the port and attached photographs of the bridges when replying. Where additional material is provided return of the formal questionnaire is also essential to provide basic detail and ready references for the survey.

The response to date indicates that a useful reference document will result from the survey but like any such document its usefulness lies in its coverage of the ports of the world. Total coverage is sought, so members who have not responded to the questionnaire are requested to do so.

It is intended that the decisions on format and publication of the survey will be approved at the Executive meetings in Brisbane in April 1980.



Picture 1 concerns the Lillobridge. In the center of this bridge two basculating parts overspan a width of 80 m. The fix parts over the water (a 400 m. wide Canaldock.) offer a free height of 9 m. The width between the supporting sectors of the access is 61,85 m. This bridge is basically meant for railway traffic and for transportation of dangerous commodities. The normal road traffic passes through a tunnel which is parallel and adjacent to the bridge itself.



Picture 2 shows the Zandvlietlock which so far is equipped with one basculating bridge with 57 m span. A second Zandvlietlock is in planning. It will be of the same concept as the above mentioned. The width however will be 68 m. On occasion of its construction two basculating bridges, one at each side (span 68 m) will be constructed as well as a second bridge on the existing Zandvlietlock.



# Questionnaires by Committee on Community Relations

## Chairman's letter

Another set of questionnaires. Yes, but they are easy to fill out. The questions have been phrased in such a way that answering them requires a minimum of your, or your staff's time. But we need a high response percentage.

The analysis will again be made by the Antwerp State University Center, Faculty of Applied Economics, which assisted us in making our first report. You will remember that Professor W. Winkelmans and his senior researcher R. Voorhamme made a number of recommendations in concluding their report. One of them expressed the need of additional information to get an even better insight in the interdependency of the problem as a function of different "types" of sea ports. The supplied data would allow the researchers to cluster and factoranalyze the complete set of information. This again may lead to specific recommendations in the field of community relations.

To get a clear picture of your specific port and as background to the answers you are going to give us, we additionally need:

- a good map of your port area and its population. The Map should also show the direct geographic hinterland (water, road, rail connections) and indicate its scale.
- Information on your port expansion plans in the near future if they carry implications for the existing port dependent environment.

We are tackling a complex problem which will not be solved by simple techniques nor will it allow uniform methods. Yet there are common denominators which makes it possible to discern trends leading to solutions.

All we need in trying to find better approaches is your assistance. We are sending these questionnaires to all members of the IAPH. We must have an 80% response. Not much more than half an hour's time will be sufficient to reach this goal. Would you please cooperate and send in the completed forms before March 31, 1980.

On behalf of the Committee of Community Relations I thank you for your help and interest.

Jack Bax, Chairman.

Committee on Community Relations

International Association of Ports and Harbors

## QUESTIONNAIRE I.

Name of the port: ..... please, do not  
Complete address: ..... mark anything  
..... in this column  
.....  
Country: .....  
Contact address (name, function, telephone): .....  
.....

No.	QUESTIONS	Data * as per Calendar year	
		1969	1979
1.1	What is your traffic-commodity structure (in 1000 metric tons)?		
	a. Crude petroleum and related products of distillation	□□□□□□ □□□□□□	□□ □□
	b. Other liquid bulk (methanol, LPG, LNG, acids, etc.)	□□□□□□ □□□□□□	□□ □□
	c. Dry bulk (ore and metal residues, cereals, feedstuff for animals and waste of foodstuff, oil seeds, oil fruits and fats, solid fuel, crude		

- minerals, fertilizers, woodchips) □□□□□□ □□□□□□ □□ □□
- d. Break-bulk, or coventional cargo (i.e. total traffic minus a.b. and c.) □□□□□□ □□□□□□ □□ □□
- 1.2. What is your shipping volume?
- a. in number of vessels entered □□□□□□ □□□□□□ □□ □□
- b. in gross register tonnage (in 1,000 GRT) □□□□□□ □□□□□□ □□ □□
2. What is your total container through-put (in T.E.U.)? □□□□□□ □□□□□□ □□ □□
3. What is the importance of the dangerous goods traffic?
- a. If possible the exact figures (in 1000 tons) □□□□□□ □□□□□□ □ □
- b. If not please indicate the correct answer
- less than 100.000 t. □ □
- between 100.000 and 1 million t. □ □
- between 1 million and 10 million t. □ □
- more than 10 million ton □ □
- \*Approximations are acceptable if exact figures are not at hand, yet.
4. How many ha does the total port area include? □□□□□□ □□□□□□ □□ □□
5. What is the port's maximum draught (in meters)? □□.□□ □□.□□ □□ □□
6. Where is the port situated with respect to the port-city? (indicate the right answer)
- a. Within the port-city □ □ □ □
- b. Within and outside the port-city (town) □ □
- c. Outside the port-city □ □
7. How many people are employed within the port area in:
- 1) petroleum, petrochemical and chemical industry; □ □ □ □
- 2) steel and metal industry; □ □ □ □
- 3) other industry; □ □ □ □
- a. If possible exact figures 1) □□□□□□ □□□□□□ □ □
- 2) □□□□□□ □□□□□□ □ □
- 3) □□□□□□ □□□□□□ □ □
- b. If not, please indicate the correct answer
- none 1) □ □
- 2) □ □
- 3) □ □
- less than 1000 1) □ □ □ □
- 2) □ □ □ □
- 3) □ □ □ □
- between 1000 and 5000 1) □ □ □ □
- 2) □ □ □ □
- 3) □ □ □ □
- more than 5000 1) □ □ □ □
- 2) □ □ □ □
- 3) □ □ □ □
8. Is it possible to give an idea of the total present actual value of port infrastructure investments (in millions of US\$) as of December 1969 and December 1979. □□□□□□ □□□□□□ □□ □□

9. Please indicate whether the port is:
- a. completely autonomous or □ □ □ □
- b. in one way or another depending from local or central government, financially and/or politically □ □
10. What is the population density in your port region (persons per square km) □□□□□□ □□□□□□ □□ □□
11. Indicate whether the wages level in the port area is approximately:
- a. lower □ □ □ □
- b. equal □ □ □ □
- c. higher □ □ □ □
- than the average national wages level
12. Does your port apply direct participation of the community in the actual, day to day, management of the port?
- no □ □ □ □
- yes □ □ □ □
13. Does your port undertake any public relations or communication activities with respect to the community in general (hence not only with respect to

- port customers)?
- no ☐ ☐ ☐ ☐
- yes ☐ ☐
14. Have you already been confronted with difficulties in executing your community relations program or activities?
- no ☐ ☐ ☐ ☐
- yes ☐ ☐
15. Any comment upon this part of the questionnaire? (about missing relevant questions, equivocal questions, . . . )
- ☐ ☐

- relative to specific projects ☐
11. What are, according to you, the most efficacious media to use in this context? (please, give a ranking of the three most important items)
- TV and radio broadcast ☐ ☐ ☐
- Exhibitions ☐
- Open-door activities ☐
- Specific port publications ☐
- Articles in newspapers and magazines ☐
12. Do you have any comment upon this part of the questionnaire?

## QUESTIONNAIRE II.

Name of the port: ..... please, do not  
Complete address: ..... mark anything  
..... in this column  
.....  
Country  
Contact address (name, function, telephone) ☐

No.	QUESTIONS	ANSWER
1.	Do you consider the issue of port community relations problematic nowadays	<input type="checkbox"/>
	— irrelevant <input type="checkbox"/>	
	— merely theoretical <input type="checkbox"/>	
	— of real importance <input type="checkbox"/>	
2.	Do you find the community's port mentality has been adversely changed over the last decade?	<input type="checkbox"/>
	— no <input type="checkbox"/>	
	— yes <input type="checkbox"/>	
3.	Can you, in this respect, assign some negative attitude to a specific group within the community such as:	
	(Please, rank from 1 to 3 (1 = highest impact) the three most important groups in this respect)	<input type="checkbox"/>
	— port employees <input type="checkbox"/>	
	— political organizations <input type="checkbox"/>	
	— environment committees and organizations <input type="checkbox"/>	
	— ..... <input type="checkbox"/>	
	— ..... <input type="checkbox"/>	
	or do you think that the problem of public involvement is most acute with respect to:	
	unorganized but indirectly affected populations and/or to the individuals who are directly impacted by a proposed facilities?	<input type="checkbox"/>
4.	Will the identification of potentially impacted groups pose any problems	<input type="checkbox"/>
	— no <input type="checkbox"/>	
	— yes <input type="checkbox"/>	
5.	Are there any pronounced reasons for these negative attitudes, such as considerations of	
	(Please rank from 1 to 3 (1 = highest impact) the three most important reasons)	<input type="checkbox"/>
	— economic cost <input type="checkbox"/>	
	— town and country planning <input type="checkbox"/>	
	— recreation <input type="checkbox"/>	
	— safety <input type="checkbox"/>	
	— ecology <input type="checkbox"/>	
	— employment <input type="checkbox"/>	
	— ..... <input type="checkbox"/>	
	— ..... <input type="checkbox"/>	
6.	Under which forms these negative attitudes have been expressed?	<input type="checkbox"/>
	— complaints <input type="checkbox"/>	
	— demonstrations <input type="checkbox"/>	
	— strikes <input type="checkbox"/>	
	— boycotts <input type="checkbox"/>	
	— political pressure <input type="checkbox"/>	
	— ..... <input type="checkbox"/>	
	— ..... <input type="checkbox"/>	
7.	Do you feel the need for adjustment as a consequence of these negative attitudes?	<input type="checkbox"/>
	— no <input type="checkbox"/>	
	— yes <input type="checkbox"/>	
8.	Do you consider direct citizens' participation in the management of the port as a feasible remedy?	<input type="checkbox"/>
	— no <input type="checkbox"/>	
	— yes <input type="checkbox"/>	
9.	Do you consider public relations activities with respect to the port community (not w.r.t. the port customers) as effective?	<input type="checkbox"/>
	— no <input type="checkbox"/>	
	— yes <input type="checkbox"/>	
10.	If various groups are affected, would you prefer to work upon	<input type="checkbox"/>
	— a more general approach <input type="checkbox"/>	
	— a more selective approach, <input type="checkbox"/>	

## President's Notes on UNCTAD Manual on a Uniform System of Port Statistics & Performance Indicators

The UNCTAD Ports Section has asked us to bring the following piece of information to the knowledge of the Ports and Harbors Magazine Readers:—

- In 1977 the President of the Ministerial Conference of West and Central African states on maritime transport officially requested the United Nations organization to assist the Port Management Association of West and Central Africa in the implementation of a uniform system of port statistics and performance indicators
- The objectives of providing a manual was to give sufficient guidance to enable participating port authorities themselves to uniformize the statistical information and to present common performance indicators

In developing the statistical schemes contained in this manual, the UNCTAD experts found a very wide interest for port statistics and performance indicators in other port authorities and port organizations, which were not participating in the UNDP Project, they were not members of the Port Management Association of West and Central Africa.

In fact in the past few months the requests to obtain a copy of the manual were so numerous that the proposal was made to UNDP to publish the manual for general circulation to all interested ports.

Upon agreement from UNDP the original manual was edited in particular with a view to make it generally applicable to all world ports.

The version contained in this volume remains, however, very close to the manual presented at the Douala Seminar (18-23 June 1979).

The present manual consists of two major parts: The first part presents the statistical scheme, the forms developed for introduction of the scheme and the instructions for completion of the forms. In this first part, and with a view to facilitate the filling-in and processing of the forms. A set of codes has also been included.

In the second part of the manual sets of practical exercises have been included which were developed to assist the port statistical officers in the introduction of the scheme. And can be used to train personnel from the statistical units. The Instructions contained in the first part can be most effectively assimilated by cross reference to the exercises.

For the purposes of these exercises a fictitious port (Port Laedi) is presented which allows the general utilization of the exercises without reference to specific local conditions.

The Manual which is now proposed to be generally made



available serves as a guide but the actual improvement of port statistics in any given port will depend on the commitment and motivation of management and on the efforts of the statistical cell to collate and analyse the information and present it in the shortest possible delay.

## **IAPH's Consultative Status renewed by IMCO**

IMCO circular letter (No. 687, Dec. 11, 1979) informed that the IMCO Assembly at its 11th session held from 5 to 15 November, 1979, approved the decisions of the Council following its review of the list of Non-Governmental Organizations in consultative status, and that the IAPH's consultative status was renewed.

Dr. Hajime Sato, the secretary-general, upon his hearing of the IMCO decision, expresses his thanks to IMCO and to those IAPH members and individuals, in particular reference to the Officers, chairmen of technical committees and Liaison Officers and British Ports Association, for their active contribution given for the achievement of the status.

Following is the list of organizations who are granted with the consultative status by the IMCO:— (Order: as announced in the circular).

International Chamber of Shipping  
 International Organization for Standardization  
 International Shipping Federation Limited  
 International Electorochemical Commission  
 International Union of Marine Insurance  
 International Chamber of Commerce  
 International Confederation of Free Trade Unions  
 International Association of Lighthouse Authorities  
 International Radio-Maritime Committee  
 World Confederation of Labour  
 Permanent International Association of Navigation Congresses  
 International Superphosphate Manufacturers' Association Limited  
 European Nitrogen Producers' Association  
 International Maritime Committee  
**INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS**  
 Baltic and International Maritime Conference  
 International Association of Classification Societies  
 International Law Association  
 International Cargo Handling Co-ordination Association  
 European Council of Chemical Manufacturers' Federations  
 European Industrial Space Study Group  
 Latin American Shipowners' Association  
 Oil Companies International Marine Forum  
 European Tugowners' Association  
 International Maritime Pilots' Association  
 International Shipowners' Association  
 Engineering Committee on Oceanic Resources  
 Eurosat S.A.  
 Friends of the Earth International  
 International Air Transport Association  
 Institute of International Container Lessors  
 International Association of Drilling Contractors  
 International Association of Institutes of Navigation  
 International Association of Producers of Insurance and Reinsurance  
 International Council of Marine Industry Associations  
 International Federation of Shipmasters' Associations

International Lifesaving Appliance Manufacturers' Association  
 International Salvage Union  
 Oil Industry International Exploration and Production Forum (rin)

## **Harbours Association of New Zealand invites IAPH members to March Conference**

An invitation arrived from Mr. E.I. Poole, Secretary, The Harbours Association of New Zealand to the members of IAPH to participate in the 47th Conference of the Association which will be convened from 12 to 14 March, 1980, in Wellington, New Zealand, the Wellington Harbour Board acting as host.

The venue of the Conference this year, the organizer reports, was selected to be Passenger Terminal, Oriental Bay, Wellington, and the Wellington Harbour Board has made block bookings of accommodation.

Should any of IAPH members be able to attend, please contact Mr. E.I. Poole, Secretary, The Harbours Association of New Zealand, P.O. Box 1765, Wellington 1, New Zealand for further information. (TKD)

## **Membership Notes:**

### **New Member**

### **Associate Member**

Romke van der Veen (Class A)  
 Van Boetzelaerlaan 87, 2581 AD The Hague, Netherlands  
 Office Phone: (070) 502094  
 (Mr. Romke van der Veen, Port Consultant-Aids to Navigation and Dredging)

## **Visitors**

— On January 10, Mr. W.D. Heden, II, Commissioner, and Mr. C.A. Rousser, Director of Trade Development, Port of Houston Authority, visited the head-office and were received by the secretary-general and his staff. They were visiting Tokyo on the trade development mission trip to Peking.

— On January 14, Mr. Al Naibari, Manager, Port of Shuaiba, Shuaiba Area Authority, Kuwait, visited the head office and was received by the secretary-general and his staff. Shuaiba Area Authority, according to Mr. Naibari, is responsible for the industrial development of Shuaiba area, including the development of industrial and commercial port facilities. He expressed that the Shuaiba Area Authority would join the Association as a regular member.

— On January 21, Capt. Lapo Israngkura, Director of Port Authority of Thailand, visited the head office and was received by the secretary-general and his staff. Accompanied by Mr. Thavorn Chunnanond, Economist of the Authority, he visited Japan by the invitation of the Japan Int'l Co-operation Agency to observe the present situation of port development in this country, for two weeks, visiting Ports of Yokohama, Osaka and Kobe and various firms and factories.

— On January 23, Mr. Keith Trueman, Secretary, Port Authority of Melbourne, visited the head office and was received by the secretary-general and his staff. He was visiting Japan to attend a banking seminar organized by one of bankers in Tokyo. After the seminar, he visited Port of Osaka with which Melbourne, City and Port alike, was connected with the sistership affiliation. (rin)

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## Open forum: Port releases:

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# The Land-Sea Interchange: Transport Developments in the Next Two Decades\*

**Yann-Pierre Rémond**  
**Commercial Director, Port of**  
**Marseilles Authority**

### Contents

1. Future Economic Trends
2. The Geography of Expansion
3. The New Transport Chain
4. Port Planning
5. The Importance of Specialised Terminals
6. World Ports
7. Labour Relations
8. Ship Repairs
9. Shipping Policies, Port Trade and Revenue

#### 1. Future Economic Trends

Ever since decolonisation and, most noticeably since 1973, industrialised countries have lost control of many of their sources of energy and raw material. As a result, their dependence on the import of these now costlier items has caused them to become more interdependent and less independent, with a consequent vital obligation to export. This interdependence has also meant that the practices of protectionism and devaluation have become much less effective.

Up to 1973 the acceleration of trade expansion had tended to be confined to trade between the developed countries, and between the developed world and some hard working and fast developing countries. Since then, trade has increased between industrialised and primary raw material and energy-producing countries, and with the developing countries, as well as with the Eastern bloc.

Before 1973 the national product growth rates of OECD countries increased by about 5 per cent per annum on average and foreign trade by 8 per cent. It seems now that most developed countries' economies expect to ensure at the best a growth rate of 3 per cent, and their exports must rise continually to cover their rising basic import bills. The consequent limiting of essential imports has meant a general slowing-down of trade and activity for the developed countries and enables other more competitive development elsewhere.

Yet, relatively, trade has increased between the major industrialised countries and those having primarily a raw material trading base. A similar expansion of trade has taken place between these primary producing economies and the developing countries. This general state of affairs should continue for some years but now without considerable upheavals in various parts of the world, and in certain sectors of industry. Here, of course, the political and social aspects accompanying these factors could also be of con-

siderable gravity possibly involving, periodically, intolerable social paralysis and unemployment—both blue and white collar—in some sectors of the presently industrialised world and political interventions or localised revolutions or war in certain other parts of the globe. There exist however certain solutions to avert these problems if peoples and their leaders are prepared to adopt them in time and implement them with careful moderation.

Therefore, we can assume that this situation of world trading interdependence which has appeared so recently will continue well into the future.

As industrialised countries are obliged to export whatever they can, we see a rapid growth of the trade in technology. However, we must realise at the same time that as new technology develops, it is found that it is more and more expensive, its life span is shorter and its application, implementation and maintenance also take longer to learn. These latter facts may moderate to some extent the so-called concept of the "international division of labour", it being nevertheless said that labour and middle management in industrialised countries will have urgently to realise that there is a limit to getting more for less work and must adopt a more productive, positive and competitive attitude than it has hitherto, as they are to face a period of much lower growth.

Also, countries overdependent on oil imports will have to make known, far more quickly than they are today, their plans for energy substitution.

However, new countries with oil in their own land, if they can maintain political and social stability, will rapidly enter the international scene of trade.

In order to plan land control and efficient space utilisation on a regional, national and international basis, an appreciation of this growing interdependence of the global economy becomes necessary. Industrialised powers including multinational companies and those who are industrialising due to their oil revenues, will continue to be the principal sources of capital over the next 20 years: those with a firmly established educational base will be the source of scientific and technological research in the advanced sectors of every industry. Such research would guarantee the return on, as well as employ, such funds but on a longer term.

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\* The paper by Mr. Rémond has been reproduced from the official report of the proceedings at the "SHIPPING 2000" Conference. Copies of this report may be obtained from the organisers, Charterhouse Conferences Limited, 12a Charterhouse Square, London, EC1M 6AX ENGLAND (Telephone: 01-253 1323, Telex 25162 Dalfin G) at a price of £35 per copy, including postage and packing."

After the present period of re-adaptation, new production techniques, as well as more conventional production, will be necessary. It seems, therefore, that we all must rely henceforth on world development, as it is significant that the more countries develop, the more international trade follows.

## 2. The Geography of Expansion

Now all this is as fundamental for shipping as it is for a port in the year 2000. A major viable port in that year must have *space* for all aspects of its development. It must be well connected by all possible means to whatever region it serves, not only by sea, but also if possible by air, pipeline, road, rail and river. It must have adequate storage-space and handling facilities and room for the development of major or ancillary industries where and when required. It must have the space to accommodate all types of ships and cargo—present or future. For more spectacular growth, it would be best situated on crossroads where the trading patterns described earlier are likely to occur.

## 3. The New Transport Chain

The old definition of a port's hinterland or catchment area has suffered gradual erosion over the years. The new concept of the full transport chain from door to door has taken its place in the assessment of a port's cargo capacity to penetrate inland. Indeed, shortest routing by a combination of transport by land and sea, frequencies of calls, speed of handling and despatch, and relative costs and reliability are considered more globally than before; and takes into account fuel consumption, the greatly facilitated land-sea interchange, owing to the introduction of new techniques, such as rolling-stock, pallets and containers, in their respective points of transfer, and the port's position in relation to the overseas source or destination.

As a result, the adaption of port facilities to receive ships is considered not only, in conventional terms, in respect of the types of ships and the storage required, as well as the handling of cargo, but also in respect of the structure of the inland transportation system (road, rail, river, pipeline and air). Though certain cargoes by their very nature lend themselves more easily to one of these methods of inland transportation, there are some cases where competition between one, two or three of these ways exists and is, on occasions, desirable. This integration of transport systems will continue to accelerate (rail ferries, trailer ferries, piggyback system, etc...).

## 4. Port Planning

Port planning should cover a far longer period of *time* than other industries. A ship, for example, is planned for a life span of between 10 and 20 years and industry in general is planned over a period of about 25 years.

Conceptually a port should be mass-planned in terms of space attribution for industry's docks and inland links over at least 50, and preferably 100 years or more.

This does not mean implementation decisions should be taken immediately. However, it does mean that space and opportunities should be reserved for the future when projects eventually mature.

## 5. The Importance of Specialised Terminals

### a) *Oil and Gas*

From a shipping point of view, we do not anticipate, at

least for quite some years, that VLCCs will get larger than they are; we tend to believe that oil imports will continue to be restricted largely owing to their price and also to serious doubts about their ultimate availability. There may, however, be requirements for some more berths for slightly smaller oil ships depending on the decisions of the Suez Canal Authority in 1981. Gas shipping has a reasonably assured future both in LNG and LPG. But in the case of LNG we must be very careful because plans are mainly government-inspired and generally come to fruition 10 or 15 years after the ship has been built.

### b) *Bulk*

As regards bulk shipping, we are convinced there are considerable new possibilities in certain sectors, notably coking coal and especially steam coal (the latter to a massive extent), providing technology is found to eliminate its carbon and sulphur dioxide pollutants ( $\text{CO}_2$ ,  $\text{SO}_2$  + sulphates); the size of ships carrying these cargoes could increase again before the close of the century, from 150,000 tonnes dwt. to 250,000 tonnes dwt. Grain and fertiliser traffic should also increase considerably, though less in proportion to coal.

### c) *Ro/Ro*

With the advent of the full truck or trailer concept, the development of ro/ro shipping has been extremely rapid over the past decade, but, in the small ship trade, there will be a tendency for cellular container ships to catch up gradually without suppressing them. Ro/ro ships are currently over-tonnaged and will remain so for some years to come. Specialised car carriers will probably continue to prosper.

### d) *Containerisation*

Containerisation should expand rapidly over the next two decades with the development of trade generally and it will take up a larger share of general cargo traffic compared to present other modes. I anticipate a fourth generation and slower container ship coming into service within the next few years.

### e) *Conro*

There has also been a marked development in the new large Conro ships, such as the "Rodin" (CGM), Seaspeed, NedLloyd and Hansa ships. There may be a market for smaller ones.

### f) *Conventional Shipping*

Conventional shipping should not increase beyond its present size; however, in view of the development of trade, its proportional share of general cargo will decline radically.

### g) *Towed Barge*

I expect that there will be a certain future in new adaptations of the towed barge system such as that which presently receives trailers from all over Europe through our port to ports in the Middle East.

### h) *LASH*

With the progress of river development, LASH ships are already operating and I believe there will at last be increasing possibilities for their use.

### i) *Heavy Loads*

The transport of heavy or cumbersome loads should certainly develop moderately as factories are established in new areas.

#### j) *Equipment*

Cranes will be bulk and container gantries, or mobile high and heavy reach, but in some ports there will be more ro/ro gear and ramps. All of this is not very new and we are convinced that there is room for new technology. On the port side also, new berths of a revolutionary structural concept are under construction and new conceptional works to adapt old finger pier harbours to modern container and ro/ro requirements are under way and will become general.

#### k) *Specialisation and Simplification*

For all this you will observe that there is a concentration on the development of specialised terminals.

The interchange between land and sea is now being studied in order to operate it as quickly as possible, at the lowest possible cost so as to handle a maximum amount of traffic. In many cases direct transfer will be organised where feasible. A port's function as a conditioner, operator and distributor of cargo appears as though it will continue to decline and the emphasis on industrialisation will become more pronounced.

With a view to the future, much larger centres of consolidation and distribution are being planned, as well as space for the assembly of factory parts to be exported. We will also see specialised cargo distribution chains, and facilities for sea and ocean research. Mr. Kummerman also spoke about *that*.

#### l) *Computerisation*

It is also a forecast as a certainty that new simplified documentary data processing systems will be introduced to accelerate cargo and shipping paperwork. The computer will also enter all facets of port management and operations (traffic, management, berthing, statistics, traffic flow models, berth productivity, etc., etc.). We at Marseilles have developed one which we are prepared to share with the world.

### 6. World Ports

Development of ports in the world will vary in view of their geographic position and space potential, in relation to economic world trade patterns as they evolve.

It can be said, in general, that these new concepts have yet to be realised in many ports.

However, the rapid transfer of technology has meant that many new port developments which have occurred in recent years, particularly in the Middle East, have been able to avoid going through the pains of various stages.

There, for example, we have seen ports converting conventional quays to ro/ro and container facilities, as well as building new ones, rather than building a lot of extra conventional berths—unnecessarily.

Maritime industrial development such as that of the Fos concept is being toyed with in other parts of the world today. It has, of course, already existed earlier, and thus in a rather more polluted way than ours, in Japan and certain other countries. But there is room for further development in these spheres where our technology is being transferred and where we continue to contribute our assistance.

European ports, being the most engaged in world trade,

will continue to develop moderately.

Major Northern European ports are, of course, far ahead in very many ways, through perhaps now not quite as suitably situated in view of the changing economic order mentioned previously. Other countries, such as Egypt, the North African countries, Saudi Arabia, the Emirates, South Africa, Brazil, Taiwan, the Ivory Coast and Senegal have already done much to develop their ports and are continuing to do so.

China, Australia, Mexico, certain other African and Latin American countries and South East Asian as well as Far East countries are also beginning to improve their port facilities and will certainly do much more.

In many countries, considerable efforts must be made to upgrade their railway systems, as well as their operational efficiency and commercial aggressiveness. Roads and preferably motorways should also be conceived a little more to conform with port traffic and not just with tourism. Road transport will have to mature with the fastest possible suppression of quotas, and many countries holding back on signing TIR conventions would do well to hasten putting themselves into a position to do so.

Works on waterways of major importance in certain parts of the globe will be commenced and sometimes completed where waterways can be of considerably potential in the transport chain as well as for irrigation and electricity production. In this respect, the energy situation will push things ahead faster than ever. Ports will spend considerable amounts of money—but they cannot do it alone—on security; the prevention of accidents and pollution occurring more and more often, not on account of flags of convenience as many (not always rightly) say, but simply bad seamanship, lack of precautionary training and far too slow international maritime security decisions and the resulting practical implementation of them.

### 7. Labour Relations

Before touching on the question of the organisation of personnel and labour relations, I think it is important to make one thing very clear. Ports are very different in their organisation, in their financial systems, in their labour situation and in their geographical situation, and I do not regard any one or several aspects of different systems as necessarily the ideal system for all ports.

The very great weight of historical habits, methods, temperaments, environments and the regional adaptability of human beings are of prime importance before making any hasty judgements. Even if one were to find the ideal way to manage a modern port with the local environment in mind, this way would probably not prove adaptable anyway.

Labour relations in a port, wherever it may be, require close and constant attention and tact. Many people look at these problems from the purely amateur point of view and, if I may say so, government or political intervention, rather than that of real specialists, in port labour problems has often completely disrupted a port's viability.

This is due to the change in the forms of cargoes and ships, and the need for constant reappraisal of the evolution of managerial as well as labour relations in the port. Training and educational programs have, where possible, been introduced with reasonable success.

Then again, political intervention, though often inevitable, be it government or trade unionist, right, left or centre, has often marred the scene either partially or totally and



generally in the real interests of no-one. Certain labour forces are capable of working faster over shorter periods; others are more regular, but lack the capacity to accelerate. Certain people are more prone to politics than material gain or vice versa.

Fundamentally, however, managerial as well as labour elements have had to accelerate their capacity to adapt to change more in the last 35 years than in the last few centuries. The introduction of mechanical handling, pallets, containerisation, ro/ro and liquid and solid bulk handling are all factors which have required, and frequently almost simultaneously, a vast re-acclimatisation of wharf work forces, often insecure, mistrusting and traditional in character.

Only close, swift appreciation, coupled if possible with non-political action, can pave the way to success, or at least partial success, in solving this problem with which all ports have to deal permanently.

To speak more generally and not only of ports, management, including middle management, must start again, at the bottom, to become practical and work with labour in terms of better communication and mutual efficiency. Labour will have to be better trained for more varied jobs, not only of higher technology but with a greater perception of economic realities; and also have promotional possibilities based on hard work, when on the job, and capacity. The no-longer-popular conceptions of performance, precision and responsibility need reinstatement in many parts of the world. Industrialised countries will have to completely review their whole organisation of employment, social security, pensions, unemployment, working hours, etc., and establish a completely new and fair strategy redistributing the tasks between the public and private entities in order both to ensure man a feeling of usefulness and security and remain economic and competitive.

Even if ports, like shipping, are more and more capital than labour-intensive, it would be better to work regularly rather than worry or strike.

## 8. Ship Repairs

From the point of view of ship repairs, which are frequently ancillary activities to a port, it would appear that, as from 1968, two-and-a-half times the number of dry docks of over 50,000 tonnes capacity have been built whereas the number of those ships to be repaired has declined during the same period by about 18 per cent. There is, clearly, plenty of scope with only the existing facilities to try to reach break-even level without building another dry dock for the next 20 years. Though a dry dock can last 100 years. I think many ports will have difficulty amortising and paying off loans contracted over the coming couple of decades. As a result of the poor worldwide market position, many workers have had to look elsewhere for employment. If the new coating methods described earlier are introduced, implying dry docks only every five or six years, the ship-repair situation could become dramatic.

## 9. Shipping Policies, Port Trade and Revenue

One final point is that a port can be quite seriously affected in its traffic by certain over-nationalistic shipping policies such as conferences, UNCTAD, bilateral agreements, cargo and flag reservations, all of which are perhaps not quite adapted to the interdependent and international realities of the future.

Indeed, certain shipping conferences seem to have become a little over-conservative towards newcomers and fail to take sufficiently into consideration real sea distances or practice identical f.o.b. quotations in every port in their freight calculations. Moreover, they would appear too slow to recognise new economic realities at the conference level. UNCTAD has perhaps tended to become only a floor for Third World shipping; if many of its proposals are intellectually and politically satisfying, it would appear that the pure practice of shipping will prove that not only room must remain for initiative, enterprise, efficiency, good service, flexibility and incentive in a more open market, but also that no one or no one country, having once obtained 40 per cent or 50 per cent of the trade, will stop at that when he knows he can get more and how to do it (and those rules no longer suit him). This of course has happened in the past, and still does, in other sectors of transport as well as shipping.

Eastern and Western block countries' fleets are all trading as third parties well over the 20 per cent prescribed by UNCTAD; think of the practical complication in applying UNCTAD rules of 40/40/20 to large ships calling at many different nations' ports, yet making freight rates cheaper. It will also be extremely hard to find conference tariffs that are mutually acceptable to the countries involved which have such radically different running costs, building costs and social advantages, with the margin for investment varying accordingly.

As for bilateral liner agreements, we are led to believe that they tend to eliminate any competition, introduce heavy bureaucracy and afford a rather poor and more expensive service compared to services offered elsewhere where such agreements have not been enforced. A port's traffic can be affected if tied up by such an agreement when its competitors are not, due to the tariff differential and poorer service. The shipper, of course, is far from enchanted by such arrangements.

It should also be taken into account that, in many cases, a port for geographical and economic reasons is used by neighbouring countries as well as its own—and I am not just talking of my port—and just as ships from neighbouring countries can call at such a port, provision should also be made by conferences, of whatever sort, for their cargo, cargo rights and freight rates.

As a result of all these seemingly inadequate shipping policies, a port suffers congestion, quay allocation difficulties, freight differentials far higher than normal world market rates, a reduction in the frequency of calls and a consequent loss of cargo throughput and thus of revenue and employment.

Normally, a port would hope to welcome all safe ships regardless of their flag. I tend to feel we will find ourselves in the year 2000 with a fairer and more realistic conference system having experienced certain benefits of the UNCTAD code and freed it from some of its more rigid and impractical aspects. Outsiders as well as flags of convenience may very well expand all the more if trade union, political and over-nationalistic technocratic pressures intensify.

Efficiency, good service and flexibility, as well as cargo space and competitive freights tariffs, are elements which enhance a port's traffic which, of course, is its main source of revenue. When I used to run ships under seven different flags, I found that all protectionist efforts were relatively shortlived and if government intervention proved some-

(Continued on next page bottom)

# The World Bank and Port Development

by Mr. A.J. Carmichael, Ports & Aviation Adviser to the World Bank

*Following discussions at the working sessions of the Committee on International Port Development at the 11th Conference, Mr. A.J. Carmichael, Ports and Aviation Adviser to the World Bank has forwarded to the Committee's Chairman, Mr. J.K. Stuart, an article on the functions and activities of the World Bank. The article which is reproduced below will give Members an insight into the ways in which the Organisation approaches the question of port loan/credits for developments.*

The World Bank is a group of three institutions, the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), and the International Finance Corporation (IFC) having the common objective of raising the standards of living in developing countries by channeling resources from developed countries to the developing world.

The IBRD, established in 1945, is owned by the governments of 134 countries. The Bank, with capital subscribed by its member countries, finances its lending operations primarily from its own borrowings in the world capital markets. A substantial contribution to the Bank's resources comes from its retained earnings and the flow of repayments on its loans. Bank loans generally have a grace period of about five years and are repayable over 20 years or less. The interest rate the Bank charges on its loans is currently 7.95%.

The Bank lends only for productive purposes and to

stimulate economic growth in the developing countries where it lends. Each loan is made to a government or must be guaranteed by the government concerned. The use of loans cannot be restricted to purchases in any particular member country.

The IDA was established in 1960 to provide assistance for the same purposes as the Bank, but primarily in the poorer developing countries, mainly those with an annual, per capita, gross national product of less than US\$581 (in 1977 dollars). More than 50 countries are eligible under this criterion.

Membership in IDA is open to all members of the World Bank, and 121 of them have joined to date. The funds used by IDA, called credits to distinguish them from Bank loans, come mostly in the form of subscriptions, general replenishments from its more industrialized and developed members, special contributions by its richer members, and transfers from the net earnings of the World Bank. The terms of IDA credits, which are made to governments only, are 10-year grace periods, 50-year maturities, and no interest, but an annual service fee of 0.75% charged on the disbursed portion of each credit. Although legally and financially distinct from the Bank, IDA is administered by the same staff.

The IFC was established in 1956. Its function is to assist the economic development of less-developed countries by promoting growth in the private sector of their economies and by helping to mobilize domestic and foreign capital for this purpose. Membership in the IBRD is a prerequisite for membership in the IFC, which totals 109 countries. The Corporation has its own operating and legal staff, but draws upon the Bank for administrative and other services.

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(Continued from page 15)

times necessary, it was best short and sweet. However, government interference in shipping operations introduced bureaucracy, incompetent people in shipping and higher freight rates, as well as arbitrary measures, and resultant declining trade. Then again it must be said that before ordering ships, more and better marketing on a worldwide basis should generally be made necessary in the future, as well as the fairest possible cooperation in a more and more interdependent world.

Transport by whatever means must be infinitely flexible to adapt to the changing needs of supply and demand. In order to maintain efficiency, this flexibility must not be lost. This involves the capacity to take risks—and fast! One must not forget, especially now with the vital need for exports as well as imports, that transport is only a means to these ends and not an objective in itself.

This, of course, implies the fundamental importance of shipper and receiver, such as our hosts today. A shipper requires flexibility, freedom of choice, frequency of calls, reliability, speedy and efficient delivery, and competitive rates. These factors can often make the difference between business or no business for him and therefore the transport chain.

May I hope there will be fairer access to those anxious to enter the very complex profession of shipping and far less ignorance of the task this involves? I also hope shipping

operations do not become the floor of a political power struggle in a very fragile world situation, but an economic, competitive, and efficient means of transportation of goods by sea to enhance world trade and world development.

Comprehension of all this is urgent and necessary. Instead of 4.5 billion people today, we should be 6.5 billion in the year 2000. World needs will be doubled, as will be opportunities for many, which of course implies curtailing the appetites of some but rewarding those capable of drive, enterprise, effort and organisation.

It may appear strange for a port man to say what I have said today, but a major port feels, in a very modest way, the heart-throb of world trade economically as well as politically and socially.

It is purposely that I have been perhaps on the pessimistic side in order to try to picture with realism some of the challenges ahead. In reality, I am an optimist, because I am sure you will all face up to them and make world trade just plain sailing.

If I have felt it my duty to depict tomorrow's reality today, it will be the purpose of us all, and others, to forge the reality of tomorrow.

The World Bank has traditionally financed all kinds of capital infrastructure, such as roads and railways, telecommunications, ports and power facilities. Present developmental strategy places increased emphasis on investments that can directly affect the well-being of the masses of poor people of developing countries.

The cumulative lending operations of the IBRD and IDA to June 30, 1979 amounted to US\$51,697 million. Of this amount, some US\$11,700 million were lent for transportation projects comprising airlines and airports, highways, pipelines, ports and waterways, and railways. The ports and waterways projects totalled 100 with the amounts lent aggregating US\$1,820 million. The regional distribution of these funds was:

Region	Number of Lending Operations	Amount of Loans/Credits (US\$ million)
Eastern Africa	14	221
Western Africa	12	132
East Asia and Pacific	15	275
South Asia	18	210
Europe, Middle East and North Africa	22	792
Latin America and Caribbean	19	190
	100	1,820

For the current year (FY 1980) the World Bank plans to lend some US\$390 million for 9 port and waterways projects, and in FY 1981 over US\$400 million for 11 such projects (fishing ports have been excluded from these figures).

Typically a World Bank port loan/credit will finance only the foreign exchange component of a project which will usually be about 50% of the total cost. Hence the total cost of Bank-financed ports to June 1979 is of the order of US\$3,640 million. To the same date, the Bank has also lent over US\$500 million for shipping, both domestic and international.

The usual cycle of a Bank port loan is: study, identification, appraisal, negotiations, Bank Board presentation and supervision of the procurement/construction. The Bank requires that the project will be economically justified, financially viable, and efficiently managed and operated. The engineering preparation should be to the "final engineering" stage with cost estimates of  $\pm 5-10\%$  accuracy. Bank staff are prepared to discuss each of these aspects with potential borrowers and will be assisted by consultant specialists and mathematical modelling where appropriate.

Bank staff are aware of the "elasticity" of most ports, i.e., their ability to increase throughput without increase of physical facilities. This is, of course, important in assessing what additional investments are required to handle a projected volume of cargo. Not making full allowance for the "elasticity" of a port is likely to result in the construction of additional berths and/or the purchase of mechanical-handling equipment in greater numbers than required. The Bank is consequently very interested in the compilation of efficiency indicators which are not only essential tools for good management but helpful in port project appraisal.

As part of the appraisal process, the Bank has developed a simulation model "PORTSIM" which has proved most helpful in many of the port projects the Bank has financed.

Given the operational features of a port the model will indicate the optimum port characteristics under changing traffic levels. Copies of the model are available on request.

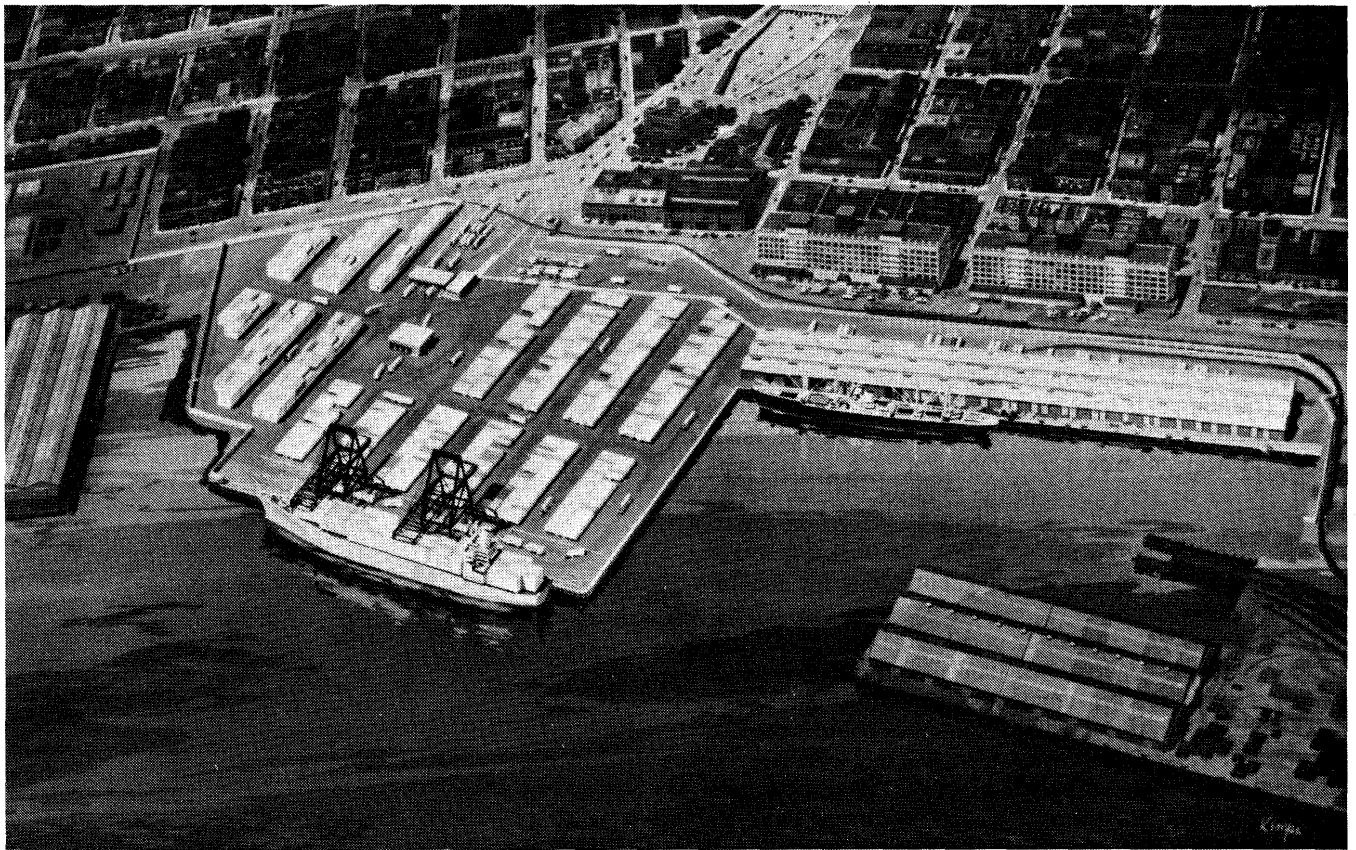
As stated above, financial viability is one of the objectives of the Bank's lending in ports. A reasonable return may be about 8% today, after deductions for depreciation and before service of debt but the return should be determined by the financial needs of the port. These would include adequate working capital, contributions to reserves, interest on and amortization of debt, and a material contribution to capital investments. The setting of tariffs to achieve these ends becomes of particular importance and, to assist in the understanding of the pricing mechanism by which port authorities can recover their costs and encourage efficient use of their facilities, the World Bank has, this year, published "Port Pricing and Investment Policy for Developing Countries". It is currently considering the practical applications of this research work and has completed two studies — Singapore and Tanjung Priok — to this end.

As the importance of ports in the transportation chain of all countries becomes increasingly recognized, the World Bank hopes to continue to play a constructive role in future port developments.

# The New Red Hook Container Terminal

Atlantic Basin-Brooklyn

Another major project undertaken  
for the Port of New York/New Jersey



**T**hrough the combined efforts of the State of New York, the City of New York and the Port Authority of New York and New Jersey, construction has begun on the 1,000,000 ton capacity Red Hook Container Terminal. Designed with the newest container facilities available, it will provide over 1,200 new jobs, contributing \$13 million to the Port economy.

**THE PORT AUTHORITY OF NY & NJ**

Marine Terminals Department



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## International maritime information: World port news:

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# Recommendations on the Safe Transport, Handling and Storage of Dangerous Substances in Port Areas : (1)

### Report of the 4th intersessional meeting of the Joint Ad Hoc Working Group, IMCO, 22-26 October 1979 (CDG XXXI/4)(extracts)

#### GENERAL

The object of the Group's fourth session was to formulate the operative text of a Recommendation on Safe [Practice on Dangerous Substances in Port Areas] [Transport, Handling and Storage of Dangerous Substances in Port Areas] taking into account the comments made on previous drafts thereof (mainly the draft contained in document MSC XL/22) by the Maritime Safety Committee and the Sub-Committees on Containers and Cargoes (twentieth session), Bulk Chemicals (fifth and sixth sessions), Fire Protection (twenty-third session), Radiocommunications (twentieth session), Standards of Training and Watchkeeping (eleventh session), Carriage of Dangerous Goods (thirtieth session) and Safety of Navigation (twenty-third session).

The Group expressed its gratitude to the participants from the Netherlands for having prepared a working document, collating all comments to the basic text so placed that they could be immediately considered with the appropriate parts of the latter which greatly facilitated the Group's work.

In its considerations the Group took into account the statement by the MSC to the effect that inclusion in the recommendations of provisions pertaining to petroleum products with a flashpoint below 60°C should be minimized.

The IAPH representative drew the Group's attention to the continuing review by IAPH of the conditions by which reception and storage of dangerous substances in port areas are authorized by port and harbour authorities. The powers available to ports and harbours and their representative organization, IAPH, to do this were not in question. Therefore, where the practices and procedures recommended currently by IMCO, by which reception and storage should be carried out, were less than clear or were in conflict with existing port policy, IAPH reserved its right to develop their appropriate guidance for its members. IAPH will provide IMCO with relevant documentation in the interests of securing harmonization of practices and procedures amongst the parties directly involved in the safe transport, handling and storage of dangerous substances in port areas.

#### DECISIONS BY THE MARITIME SAFETY COMMITTEE

The Group noted the relevant decisions of the Maritime

Safety Committee at its fortieth session, contained in MSC XL/26, division 22 and Annexes 26 and 27.

In particular, the Group took note of the paragraph of the latter reading as follows: "RECOGNIZING the desirability of a more comprehensive recommendation to include, besides dangerous goods in packaged form, also dangerous goods carried in bulk as referred to in the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (Resolution A.212 (VII)), the Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (Resolution A.328 (IX)) and the Code of Safe Practice for Solid Bulk Cargoes (Resolution A.434 (XI))."

#### INTRODUCTION OF NEW DOCUMENTS AND GENERAL DISCUSSION

The Chairman introduced the document referred to in paragraph above, which was adopted as the basic working paper for the meeting. He also introduced a paper containing a corresponding list of cross-references between paragraphs in MSC XL/22, Annex 2 and the comments contained in Annexes to the Agenda of the meeting. Finally he introduced an extract from ILO Convention 152 containing definitions considered to be of relevance to those used in the recommendation.

The Secretary, in accordance with a request received drew attention to the question of giving appropriate technical names to N(ot) O(therwise) S(pecified) substances referred to in document CDG XXX/16, Annex 2. The Group agreed to recommend to the Sub-Committee on the Carriage of Dangerous Goods that the matter be pursued with a high priority.

#### PREPARATION OF UP-DATED REVISED DRAFT RECOMMENDATIONS TAKING INTO ACCOUNT, IN PARTICULAR, THE COMMENTS OF SUB-COMMITTEES

The text of the operative Annex to the Resolution as recommended by the Group for adoption appears at Annex 3. Observations made by the Group in considering and agreeing on the individual paragraphs of the text appear at the Attachment to that Annex.

#### REPORT TO THE THIRTY-FIRST SESSION OF THE SUB-COMMITTEE ON THE CARRIAGE OF DANGEROUS GOODS FOR CONSIDERATION AND SUBMISSION TO THE FORTY-SECOND SESSION OF THE MARITIME SAFETY COMMITTEE

The Group in making its report to the Sub-Committee on the Carriage of Dangerous Goods, requested the Secre-

tariat to bring the contents thereof to the knowledge of the other sub-committees involved, i.e. BCH, BC, FP, COM, NAV, STW as soon as possible.

### ANNEX 3

## RECOMMENDATIONS ON THE SAFE TRANSPORT, HANDLING AND STORAGE OF DANGEROUS SUBSTANCES IN PORT AREAS

### INDEX

- |        |   |            |  |
|--------|---|------------|--|
| 1      | PREAMBLE  | 4.3.3      | Freight Containers, Portable Tanks and Vehicles              |
| 2      | APPLICATION AND DEFINITIONS                                     | 4.4        | HANDLING (ON BOARD SHIP AND ASHORE)                          |
| 2.1    | APPLICATION   | 4.4.1      | General Handling Precautions                                 |
| 2.2    | DEFINITIONS   | 4.5        | SPECIAL CATEGORIES   |
| 3      | GENERAL RECOMMENDATIONS   | 4.5.1      | Explosives   |
| 3.1    | GENERAL   | 4.5.2      | Radioactive Substances                                       |
| 3.1.1  | Acceptability of Dangerous Substances in Port Areas             | 5          | LIQUID BULK DANGEROUS SUBSTANCES (INCLUDING LIQUEFIED GASES) |
| 3.1.2  | Advance Notification  | 5.1        | GENERAL  |
| 3.1.3  | Inspections   | 5.1.1      | Certificate of Fitness                                       |
| 3.1.4  | Emergency Procedures  | 5.1.2      | Vapour Escape Control  |
| 3.1.5  | Fire Precautions  | 5.1.3      | Information for Operational and Emergency Purposes           |
| 3.1.6  | Reporting of Incidents  | 5.2        | SHIPS  |
| 3.1.7  | Berthing  | 5.2.1      | Watchkeeping   |
| 3.1.8  | Exemptions  | 5.2.2      | Repair Work  |
| 3.2    | SHIPS   | 5.2.3      | Portable Electrical Equipment                                |
| 3.2.1  | Signals   | 5.2.4      | Entry into Spaces  |
| 3.2.2  | Communications  | 5.2.5      | Compatibility  |
| 3.2.3  | Berthing  | 5.2.6      | Handling   |
| 3.2.4  | Watchkeeping  | 5.2.7      | Gas-freeing, Tank Cleaning and Inerting                      |
| 3.2.5  | Firefighting  | 5.2.8      | Containment of Spillage                                      |
| 3.2.6  | Ballast and Slops   | 5.3        | SHORE INSTALLATIONS  |
| 3.3    | SHORE INSTALLATIONS   | 5.3.1      | Repair Work  |
| 3.3.1  | Fire Precautions  | 5.3.2      | Warning Notices  |
| 3.3.2  | Berthing  | 5.3.3      | Compatibility  |
| 3.4    | HANDLING (ON BOARD SHIP AND ASHORE)                             | 5.3.4      | Communications   |
| 3.4.1  | Supervision   | 5.3.5      | Pipelines  |
| 3.4.2  | Weather Conditions  | 5.3.6      | Sources of Ignition  |
| 3.4.3  | Lighting  | 5.3.7      | Containment of Spillage                                      |
| 3.4.4  | Training  | 5.3.8      | Shore Electricity Supply to Ships                            |
| 3.4.5  | Protective Equipment  | 5.3.9      | Storage  |
| 3.4.6  | Intoxicated Persons   | 5.4        | HANDLING   |
| 3.4.7  | Handling Equipment  | 5.4.1      | Flexible Pipes   |
| 3.4.8  | Fire Precautions  | 5.4.2      | Preliminary Precautions                                      |
| 3.4.9  | Emergency Procedures  | 5.4.3      | Pumping  |
| 3.4.10 | Safety Precautions and Reporting of Incidents                   | 5.4.4      | Completion of Operation                                      |
| 4      | DANGEROUS GOODS   | 5.4.5      | Ship to Ship Transfer  |
| 4.1    | GENERAL   | 5.5        | SPECIAL CATEGORIES   |
| 4.1.1  | Repair Work   | 5.5.1      | Excess Pressure in Tanks Containing Liquefied Gases          |
| 4.2    | SHIPS   | 5.5.2      | Refrigerated Liquefied Gas                                   |
| 4.2.1  | Watchkeeping  | 5.5.3      | Highly Hazardous Substances                                  |
| 4.2.2  | Emergency Information   | 5.6        | COMBINATION CARRIERS   |
| 4.3    | SHORE INSTALLATIONS   | 6          | SOLID BULK DANGEROUS SUBSTANCES                              |
| 4.3.1  | Classification, Packaging, Marking, Labelling and Certification | 6.1        | Information for Operational and Emergency Purposes           |
| 4.3.2  | Safe Handling and Storage                                       | 6.2        | Repair Work  |
|        |   | 6.3        | Entry into Spaces  |
|        |   | 6.4        | Emission of Harmful Dusts                                    |
|        |   | 6.5        | Explosible Dusts   |
|        |   | 6.6        | Substances which React with Water                            |
|        |   | 6.7        | Oxidizing Substances   |
|        |   | APPENDIX 1 | — ADVANCE NOTIFICATION                                       |
|        |   | APPENDIX 2 | — TRANSPORT AND HANDLING OF EXPLOSIVES                       |
|        |   | APPENDIX 3 | — SEGREGATION FOR RADIOACTIVE SUBSTANCES ON SHORE            |
|        |   | APPENDIX 4 | — MODEL FORMS OF "SHIP/SHORE                                 |

# SAFETY CHECK LIST" AND "CARGO TRANSFER CHECK LIST FOR LIQUE- FIED GAS"

## ATTACHMENT — COMMENTS MADE BY THE WORK- ING GROUP TO SPECIFIC ITEMS OF THE ANNEX

**NOTE:** The attachment is **not** to be included in the completed recommendations.

### 1 PREAMBLE

1.1 The **TRANSPORT** of **DANGEROUS SUBSTANCES** into, within and out of **PORT AREAS** and their **HANDLING** and storage therein should be controlled to ensure the safety of persons working or living in or near **PORT AREAS** and the protection of port installations and environment.

1.2 The safety of life at sea and the safety of the **SHIP**, its cargo and its crew in **PORT AREAS** are directly related to the care which is taken with **DANGEROUS SUBSTANCES** prior and subsequent to loading and unloading, and during their **HANDLING**.

1.3 Having regard to the fact that the total **TRANSPORT** chain consists only partly of the marine element, involving the sea leg and **HANDLING** in the **PORT AREAS** at each end, it is essential that every care is taken by those responsible for the classification, containment, identification, and documentation of **DANGEROUS SUBSTANCES** and in the case of **DANGEROUS GOODS** also the marking and labelling thereof, and that all relevant information is passed on to the carriers involved in the **TRANSPORT** chain and to the final consignee. Attention should be paid to the possible different requirements of different modes of transport.

1.4 A standard framework is given in these Recommendations for use in the preparation of regulations to ensure the safe **TRANSPORT**, **HANDLING** and storage of **DANGEROUS SUBSTANCES IN PORT AREAS**. The aim of these recommendations is that they should be of an operational nature and not deal with aspects of ship's construction and equipment.

1.5 Attention is drawn to the following internationally recognized codes and guides, which are of direct relevance to the safe transport and handling of dangerous substances in port areas, and which may serve as valuable sources of information in the development of national regulations:

- International Maritime Dangerous Goods Code (IMDG Code)
- IMCO/WHO/ILO Medical First Aid Guide for Use in Accidents Involving Dangerous Goods
- IMCO/ILO Guidelines for Training in the Packing of Cargo in Freight Containers
- Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
- Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk
- Code for Existing Ships Carrying Liquefied Gases in Bulk
- Code of Safe Practice for Solid Bulk Cargoes

- ICS Tanker Safety Guide (Liquefied Gas)
- ICS Tanker Safety Guide (Chemicals)
- International Safety Guide for Oil Tankers and Terminals (I.S.G.O.T.T.)
- Code of Safety and Health in Dock Work (ILO)

These codes and guides are under continuous review and updating procedures. It is imperative that only the most up-to-date editions are used.

### 2 APPLICATION AND DEFINITIONS

#### 2.1 APPLICATION

These Recommendations should apply to **DANGEROUS SUBSTANCES** in **PORT AREAS** as defined hereunder, with the exception of the **SHIP'S** own stores and equipment.

#### 2.2 DEFINITIONS

For the purpose of these Recommendations, the following definitions apply:

- "**BERTH**" — means any berth, dock, pier, jetty, quay, wharf, mooring, anchorage, or offshore terminal.
- "**BERTH OPERATOR**" — means the operator of the berth on a day-to-day basis or the installation owner or the port authority when acting such as appropriate.
- "**BULK DANGEROUS SUBSTANCES**" — means any dangerous substance, carried without any intermediate form of containment, in a tank or cargo space which is a structural part of a ship or in a tank permanently fixed in or on a ship.
- "**CERTIFICATE OF FITNESS**" — means a certificate issued by or on behalf of an administration in accordance with the relevant codes for the construction and equipment of a type of ship certifying that the construction and equipment of the said ship are such that certain specified dangerous substances may be carried in the ship.
- "**DANGEROUS GOODS**" — means any dangerous substance contained in a receptacle, portable tank, freight container or vehicle. The term includes an empty receptacle, portable tank or tank vehicle which has previously been used for the carriage of a dangerous substance unless such receptacle or tank has been cleaned and dried or, when the nature of the former contents permits with safety, has been securely closed.
- "**DANGEROUS SUBSTANCES**" — means any substance, whether packaged or in bulk, intended for carriage or storage, and having properties coming within the classes listed in the IMCO "International Maritime Dangerous Goods Code" (IMDG Code).  
Furthermore, it means any substance shipped in bulk not coming within the IMDG Code classes but which is subject to the requirements of the IMCO "Code

for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk", the IMCO "Codes for the Construction and Equipment of Ships carrying Liquefied Gases in Bulk" or Appendix of the IMCO "Code of Safe Practice for Solid Bulk Cargoes" in so far as such a substance may constitute a hazard to those in the port area or the port environment as described in the preamble to these Recommendations.

**NOTE:** Attention is drawn to the fact that there are also substances being shipped in bulk which do not constitute any hazard when stored ashore, but which may create problems affecting safety subsequent to their loading into a ship. In this connexion the necessity of complying with the provisions of the IMCO Code of Safe Practice for Solid Bulk Cargoes is stressed.

\* It should be noted that the qualifying flashpoint for flammable liquids is 60°C for bulk cargoes and 61°C for packaged goods.

**"DESIGNATED PORT OFFICER"** — means a person duly appointed by the port authority for designated duties or any person having authority so to act.

**"FLEXIBLE PIPE"** — means a flexible hose or an articulated pipeline assembly and associated pieces used for the purpose of transferring dangerous substances.

**"HANDLING"** — means the operation of loading and unloading of a ship, railway wagon, vehicle, etc., transfer to, from or within a storage area or within a ship and trans-shipment between ships, and any ancillary operations.

**"MASTER"** — means the master of a ship, and a tug-master in charge of an unmanned tow and includes any person, other than a pilot, having charge of a ship.

**"PIPELINE"** — means all connecting pipes, connexions, valves and other ancillary plant apparatus and appliances in the port provided or used for or in connexion with the handling of a dangerous substance, but does not include any part of the ship's pipes apparatus or equipment other than the termination of those parts of the ship's pipes apparatus or equipment to which a flexible pipe is connected.

**"PORT AREA"** — means the land and sea area established through legislation.

**"PORT AUTHORITY"** — means any person or body of persons empowered to exercise effective control over port operations in a port area.

**NOTE:** It should be recognized that in some countries the effective control referred to is exercised by more than one authority which may not necessarily include the "Port Authority" in the common sense of that phrase.

**"REGULATORY AUTHORITY"** — means the national, regional or local authority empowered to make regulations in respect of a port area and having powers to enforce regulations.

**"RESPONSIBLE PERSON"** — means a person appointed by the employer or the master of the ship and empowered to take all decisions relating to his specific task, having the necessary knowledge and experience for that purpose.

**"SHIP"** — means any seagoing or inland water craft including any floating objects used for the carriage of dangerous substances as cargo.

**"SKILLED PERSON"** — means a person having the knowledge and experience to perform a certain duty.

**"TRANSPORT"** — means the movement by one or more modes of transport in port areas.

**"UNSTABLE SUBSTANCE"** — means a substance which may present a hazard under transport or storage conditions due to spontaneous reaction (e.g. polymerisation, decomposition, etc.), unless the necessary specific precautions are taken to prevent such a hazard (e.g. inhibition, dilution, refrigeration or other equally effective measures).

### 3 GENERAL RECOMMENDATIONS

#### 3.1 GENERAL

##### 3.1.1 ACCEPTABILITY OF DANGEROUS SUBSTANCES IN PORT AREAS

3.1.1.1 The REGULATORY AUTHORITY should determine the categories and quantities of DANGEROUS SUBSTANCES which may be permitted to enter a PORT AREA by any mode of transport and the conditions under which they are to be handled having regard to the facilities available for reception and storage of DANGEROUS SUBSTANCES and the location of the PORT AREA in relation to nearby centres of population.

3.1.1.2 The PORT AUTHORITY should be empowered to refuse DANGEROUS SUBSTANCES intended for storage within, or transit through, the PORT AREA, if it is considered that their presence would endanger life or property because of their condition, the condition of their containment, the condition of their mode of conveyance, or the conditions in the PORT AREA. Notwithstanding this provision all reasonable effort should be made to aid a SHIP in distress, particularly when the lives of its crew are in danger.

3.1.1.3 If any DANGEROUS SUBSTANCE within the PORT AREA constitutes an unacceptable hazard, the PORT AUTHORITY should be able to order the removal of, or to remove, any such substance or any SHIP, package, freight container, portable tank or vehicle containing it.



3.1.1.4 An UNSTABLE SUBSTANCE should be accepted only when all conditions necessary to ensure its safe TRANSPORT and HANDLING have been met and it is so certified in the transport documents.

### 3.1.2 ADVANCE NOTIFICATION

3.1.2.1 The REGULATORY AUTHORITY should establish a system whereby the PORT AUTHORITY is notified in good time, but generally not less than 24 hours in advance of the TRANSPORT OF DANGEROUS SUBSTANCES. Information which should be notified is given at Appendix 1. The system should enable the PORT AUTHORITY to make special arrangements or grant exemptions as appropriate for certain categories and/or quantities of DANGEROUS SUBSTANCES, for certain modes of transport, and for short voyages.

### 3.1.3 INSPECTIONS

3.1.3.1 The PORT AUTHORITY should be empowered to:

- .1 Inspect documents and certificates concerning the safe TRANSPORT, HANDLING, stowage and storage of DANGEROUS SUBSTANCES in the PORT AREA.
- .2 Inspect DANGEROUS SUBSTANCES in the PORT AREA, when it is safe and practical so to do.

3.1.3.2 The PORT AUTHORITY should make such inspections as are necessary to ensure enforcement of the safety precautions in the PORT AREA.

### 3.1.4 EMERGENCY PROCEDURES

3.1.4.1 The REGULATORY AUTHORITY should ensure that appropriate emergency arrangements are made and brought to the attention of all concerned. These arrangements should include:

- .1 procedures for notification of an incident or emergency to the appropriate emergency services within and outside the PORT AREA;
- .2 procedures for notification of an incident or emergency to the PORT AREA users both on land and water;
- .3 the provision of emergency equipment appropriate to the hazards involved;
- .4 the provision of appropriate alarm and emergency controls;
- .5 the formation of a local emergency team to co-ordinate actions in the case of a major emergency and to deal with any day-to-day minor emergency such as a leak or spillage of DANGEROUS SUBSTANCES;
- .6 suitable arrangements for the release of the SHIP in case of an emergency;
- .7 arrangements to ensure adequate access at all times.

### 3.1.5 FIRE PRECAUTIONS

3.1.5.1 The REGULATORY AUTHORITY should impose regulations for designating areas where certain DANGEROUS SUBSTANCES are handled or stored as areas where smoking and other sources of ignition are prohibited and where, if any, only certified safe electrical equipment can be used.

### 3.1.6 REPORTING OF INCIDENTS

3.1.6.1 Any person having charge of any DANGEROUS SUBSTANCE should inform the DESIGNATED PORT OFFICER immediately of any incident relevant to such substance that occurs within the PORT AREA and might endanger life, property or the environment.

### 3.1.7 BERTHING

3.1.7.1 The DESIGNATED PORT OFFICER should be empowered:

- .1 to direct when and where a SHIP having any DANGEROUS SUBSTANCE on board should anchor, moor, berth or remain within the PORT AREA;
- .2 to direct, in an emergency, a SHIP having any DANGEROUS SUBSTANCE on board to be moved within the PORT AREA, or to be removed therefrom having due regard to the safety of the ship and its crew;
- .3 to attach such conditions to his directives as are appropriate to local circumstances and the quantity and nature of the DANGEROUS SUBSTANCE or SUBSTANCES involved.

### 3.1.8 EXEMPTIONS

3.1.8.1 The REGULATORY AUTHORITY should take account of the varying degrees of hazard presented by DANGEROUS SUBSTANCES and, as appropriate, make exemptions from the provisions of these recommendations. Exemptions should have regard to the kind and amount of the DANGEROUS SUBSTANCE(S) involved and the specific circumstances of the PORT AREA. Some products should be subject to most recommendations while others of minimal hazard may be exempt. In any case it should be ensured that such exemptions will not give rise to a substantial hazard.

## 3.2 SHIPS

### 3.2.1 SIGNALS

3.2.1.1 The REGULATORY AUTHORITY should decide if and when a SHIP, engaged in the TRANSPORT of DANGEROUS SUBSTANCES, shall exhibit by day or by night and signals.

3.2.1.2 In making such a decision consideration should be given to:

- .1 the type of ship;
- .2 the traffic situation;
- .3 the layout of the PORT AREA; and
- .4 the categories (classes) and quantities of DANGEROUS SUBSTANCES transported.

3.2.1.3 If signals are to be exhibited, they should be:

- .1 by day flag "B" of the International Code of Signals; and
- .2 by night an all-round fixed red light.

### 3.2.2 COMMUNICATIONS

3.2.2.1 The PORT AUTHORITY should ensure that every

SHIP engaged in the TRANSPORT of DANGEROUS SUBSTANCES can maintain effective communications with the PORT AUTHORITY. When appropriate and practicable such communications should be carried out by VHF in accordance with the provisions of the 1974 SOLAS Convention, Chapter V, Regulation 18 and Chapter IV, Regulation 17 and complying with the Operational Standards set forth in IMCO Assembly Resolution A.385(X) and the requirements of the REGULATORY AUTHORITY.

### 3.2.3 BERTHING

3.2.3.1 The MASTER of a SHIP having DANGEROUS SUBSTANCES on board should ensure that the moorings used in securing the SHIP are of sufficient strength, type and number for the size of the SHIP and the local conditions.

3.2.3.2 Unless exempted by the DESIGNATED PORT OFFICER, the MASTER of a SHIP which has to display the signals referred to in paragraph 3.2.1.1 should, at all times, while it is berthed in the PORT AREA:

- .1 provide towing wires of adequate size and length at the bow and the stern ready for immediate use and properly secured to mooring bitts with the towing eyes passed outboard and kept at about water level;
- .2 ensure that the mooring arrangements are such that the SHIP can be released quickly in an emergency;
- .3 ensure that boiler fires and other machinery, necessary for the safety of the SHIP or the HANDLING of cargo or ballast, are properly maintained and attended, and that funnel uptakes and boiled tubes are not blown without the permission of the DESIGNATED PORT OFFICER.

### 3.2.4 WATCHKEEPING

3.2.4.1 The MASTER of a SHIP having DANGEROUS SUBSTANCES on board should ensure that at all times there is sufficient crew on board to maintain a proper watch and to operate the appropriate shipboard appliances in case of an emergency.

3.2.4.2 In organizing the watches full account should be taken of the "Recommendation on Principles and Operational Guidance for Deck Officers in Charge of a Watch in Port" (Resolution 3) and the "Recommendation on Principles and Operational Guidance for Engineer Officers in Charge of an Engineering Watch in Port" (Resolution 4) adopted by the International Conference on Training and Certification of Seafarers, 1978;

### 3.2.5 FIRE-FIGHTING

3.2.5.1 The MASTER of a SHIP should ensure that adequate and properly tested fire-fighting facilities, appropriate to the DANGEROUS SUBSTANCES, are readily available on board the SHIP; and that the crew is trained and practised in the use of fire-fighting equipment.

### 3.2.6 BALLAST AND SLOPS

3.2.6.1 The MASTER of a SHIP carrying or which has

carried DANGEROUS SUBSTANCES, should ensure that contaminated ballast, bilge water or slops are retained on board, or discharged in accordance with the requirements of the REGULATORY AUTHORITY.

## 3.3 SHORE INSTALLATIONS

### 3.3.1 FIRE PRECAUTIONS

3.3.1.1 The BERTH OPERATOR should ensure that:

- .1 the SHIP and all parts of the BERTH are at all times accessible to emergency services;
- .2 audible alarms for emergency use are installed in the vicinity of the SHIP or other means of rapid communication with emergency services is available;
- .3 the BERTH is fitted with an international ship/shore connexion to supply water to the SHIP's fire-fighting equipment;\*
- .4 all areas used for HANDLING and storage of DANGEROUS SUBSTANCES are kept clean and tidy;
- .5 before DANGEROUS SUBSTANCES are handled, the MASTER of a SHIP is informed of the location of the nearest means of summoning emergency services.

### 3.3.2 BERTHING

3.3.2.1 The BERTH OPERATOR should ensure that:

- .1 adequate and safe mooring facilities are provided;
- .2 safe access is provided between the SHIP or BERTH and the shore.

\*Refer to Regulation 5(h) of Chapter II-2, Part A of the 1974 SOLAS Convention.

## 3.4 HANDLING (ON BOARD SHIP AND ASHORE)

### 3.4.1 SUPERVISION

3.4.1.1 As soon as practicable after the berthing of the SHIP, the MASTER and the BERTH OPERATOR within their respective areas of responsibility, should ensure that a RESPONSIBLE PERSON is appointed to supervise the HANDLING of DANGEROUS SUBSTANCES, who is aware of the hazards involved and the steps to be taken in an emergency, and who maintains any necessary contact with the MASTER and the BERTH OPERATOR.

### 3.4.2 WEATHER CONDITIONS

3.4.2.1 The MASTER of a SHIP and the BERTH OPERATOR within their respective areas of responsibility should not permit DANGEROUS SUBSTANCES to be handled in weather conditions which may seriously increase the hazards presented by such substances.

### 3.4.3 LIGHTING

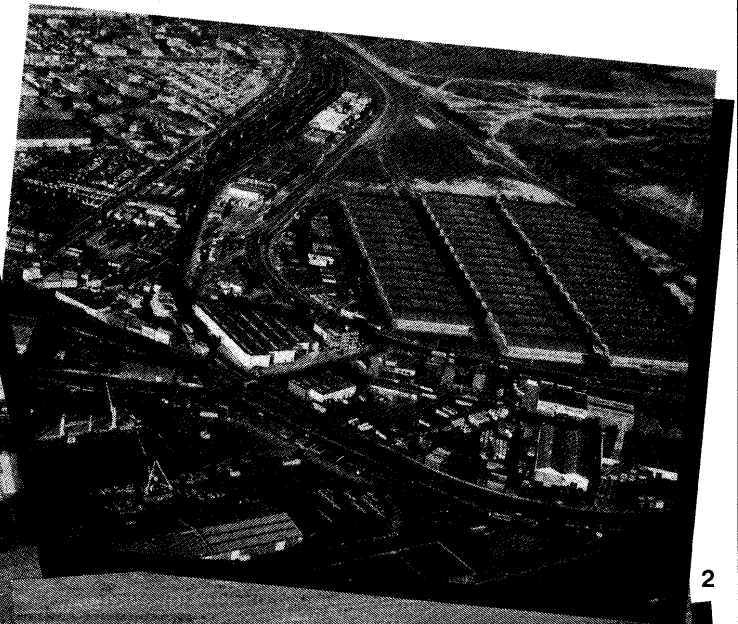
3.4.3.1 The MASTER of a SHIP and the BERTH OPERATOR within their respective areas of responsibility should ensure that the area where DANGEROUS SUBSTANCES are handled or where preparations are being made to handle DANGEROUS SUBSTANCES is [ . . . *The rest of the text is missing.* ]

(Continued on page 26)

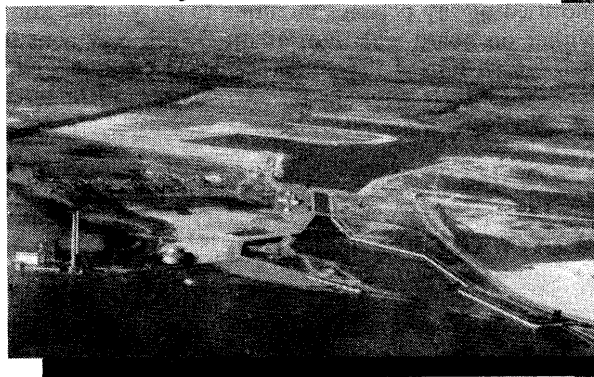
# antwerp: where growth is not just a planner's dream.



4



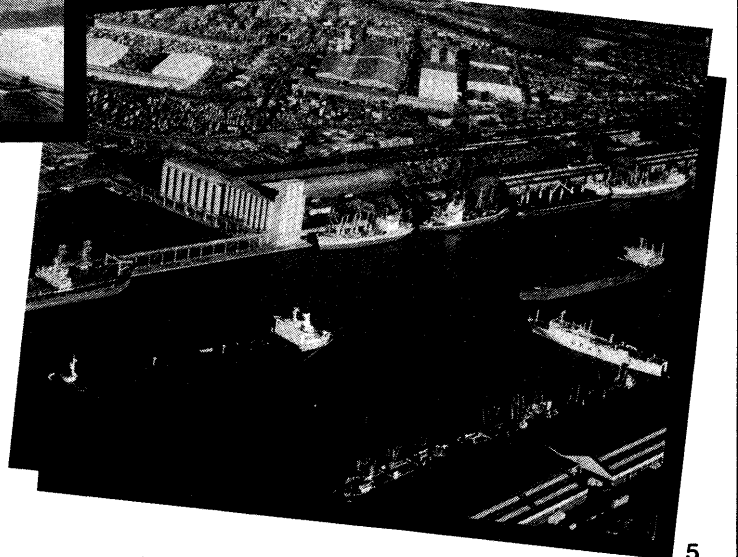
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5

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5. Streamlined traffic development

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(Continued from page 24)

**3.4.4 TRAINING**

3.4.4.1 The MASTER of a SHIP and the BERTH OPERATOR within their respective areas of responsibility should ensure that personnel involved in the HANDLING or storing of DANGEROUS SUBSTANCES are properly trained commensurate with their respective duties.

**3.4.5 PROTECTIVE EQUIPMENT**

3.4.5.1 The MASTER of a SHIP and the BERTH OPERATOR within their respective areas of responsibility should, when necessary, provide a sufficient quantity of appropriate protective equipment for the personnel involved in the HANDLING of DANGEROUS SUBSTANCES.

3.4.5.2 Such equipment should provide adequate protection against the hazards specific to the DANGEROUS SUBSTANCES handled, and may amount to full protective clothing and self-contained breathing apparatus.

**3.4.6 INTOXICATED PERSONS**

3.4.6.1 The MASTER of a SHIP and the BERTH OPERATOR within their respective areas of responsibility should ensure that no person under the influence of drink or drugs to such an extent that his judgement or actions are impaired is allowed to participate in any operation involving the HANDLING of DANGEROUS SUBSTANCES and is kept clear of the immediate areas where DANGEROUS SUBSTANCES are being handled.

**3.4.7 HANDLING EQUIPMENT**

3.4.7.1 The MASTER of a SHIP and the BERTH OPERATOR within their respective areas of responsibility should ensure that all equipment used in HANDLING DANGEROUS SUBSTANCES is suitable for such use and used only by SKILLED PERSONS.

**3.4.8 FIRE PRECAUTIONS**

3.4.8.1 The MASTER of a SHIP and the BERTH OPERATOR within their respective areas of responsibility should ensure that:

- .1 smoking is prohibited, except in designated places;
- .2 conspicuous notices prohibiting smoking are clearly visible at all locations and at a safe distance where smoking would constitute a hazard.

3.4.8.2 The MASTER of a SHIP and the BERTH OPERATOR within their respective areas of responsibility should ensure that:

- .1 fire-fighting equipment is ready for immediate use;
- .2 each informs the other of their fire-fighting arrangements.

3.4.8.3 The lighting and other electrical equipment in areas where DANGEROUS SUBSTANCES are present should comply with the requirements of the REGULATORY AUTHORITY.\*

**3.4.9 EMERGENCY PROCEDURES**

3.4.9.1 The MASTER of a SHIP and the BERTH OPERATOR within their respective areas of responsibility should ensure that information on measures to be taken to deal with DANGEROUS SUBSTANCES incidents is immediately available.\*\*

\* Reference is made to the Recommendations published by the International Electrotechnical Commission and, in particular, Publication 92—Electrical Installations in Ships.

\*\* Reference is made to MSC/Circ. 275.

**3.4.10 SAFETY PRECAUTIONS AND REPORTING OF INCIDENTS**

3.4.10.1 The MASTER of a SHIP and the BERTH OPERATOR within their respective areas of responsibility should ensure that, if anything occurs during the HANDLING of DANGEROUS SUBSTANCES which might affect the safety of personnel, the person having charge of HANDLING immediately causes the operation to be stopped if it is safe to do so and prevents it being resumed until adequate safety measures have been taken. The MASTER of a SHIP and the BERTH OPERATOR should impose upon every member of their respective personnel the obligation of reporting, to the person having charge of the operation, any incident seen to occur during the HANDLING of DANGEROUS SUBSTANCES.

**4 DANGEROUS GOODS****4.1 GENERAL****4.1.1 REPAIR WORK**

4.1.1.1 The PORT AUTHORITY should ensure that it is notified of any person's intention to carry out repair work, either on board a SHIP or ashore, which may constitute a hazard because of the presence of DANGEROUS GOODS, and that such work is authorized only when it can be carried out without creating such a hazard.

**4.2 SHIPS****4.2.1 WATCHKEEPING**

4.2.1.1 The MASTER of a SHIP having DANGEROUS GOODS on board, should, in organizing safe watchkeeping arrangements, take full account of the nature, quantity, packing and stowage of the DANGEROUS GOODS and of any special conditions on board, afloat and ashore.

**4.2.2 EMERGENCY INFORMATION**

4.2.2.1 The MASTER of a SHIP should ensure that information on the quantity, correct technical names, classification, stowage of such DANGEROUS GOODS on the SHIP, and information on measures to be taken to deal with incidents, is in possession of the officer on duty and is available for use in emergencies.

**4.3 SHORE INSTALLATIONS****4.3.1 CLASSIFICATION, PACKAGING, MARKING, LABELLING AND CERTIFICATION**



4.3.1.1 The BERTH OPERATOR should ensure that DANGEROUS GOODS entering his premises have been duly certified or declared by the shipper of the goods as being properly classified, packaged, marked and labelled so as to comply with the appropriate provisions of the IMDG Code or, alternatively with appropriate national or international standards applicable to the relevant mode of transport.

#### 4.3.2 SAFE HANDLING AND STORAGE

4.3.2.1 The BERTH OPERATOR should take all necessary measures for the safe HANDLING and storage of DANGEROUS GOODS including the segregation of incompatible commodities in accordance with guidelines established by the REGULATORY AUTHORITY.

4.3.2.2 The BERTH OPERATOR should ensure that areas where packages are deposited are properly supervised and packages are regularly inspected for leakage or damage. Any leaking package should be handled under the supervision of a RESPONSIBLE PERSON.

#### 4.3.3 FREIGHT CONTAINERS, PORTABLE TANKS AND VEHICLES

4.3.3.1 The BERTH OPERATOR should:

- .1 ensure that freight containers, portable tanks and tank vehicles used for carrying DANGEROUS GOODS have been approved in accordance with either the International Convention for Safe Containers(CSC), 1972, when applicable, or with the relevant provisions of sections 12 and 13 of the General Introduction to the IMDG Code, or by a certification or approval system of an appropriate authority;
- .2 check, by external examination, the physical condition of each freight container, portable tank or vehicle, in so far as its strength may be affected and also for the presence of any sign of leakage of contents. If any of these checks reveal a deficiency which may affect the safe HANDLING or storage of a freight container, portable tank or vehicle, it should be thoroughly inspected to determine whether it is fit for further HANDLING or storage.

4.3.3.2 The BERTH OPERATOR should check that each freight container, portable tank or vehicle containing DANGEROUS GOODS is properly labelled in accordance with IMDG Code or placarded in accordance with the IMDG Code or the appropriate national or international standards applicable to the mode or transport concerned. Freight containers and vehicles destined for sea transport should, when applicable, be provided with a Container Packing Certificate or Vehicle Declaration, as appropriate.

4.3.3.3 The BERTH OPERATOR should ensure that no person, without reasonable cause, opens or otherwise interferes with any freight container, portable tank or vehicle containing DANGEROUS GOODS. When a freight container, portable tank or vehicle is opened by a person authorized to examine its contents, the BERTH OPERATOR should ensure that the person concerned is aware of the possible dangers arising from the presence of DANGEROUS GOODS or SUBSTANCES.

#### 4.4 HANDLING (ON BOARD SHIP AND ASHORE)

##### 4.4.1 GENERAL HANDLING PRECAUTIONS

4.4.1.1 The MASTER of a SHIP and the BERTH OPERATOR within their respective areas of responsibility should ensure that:

- .1 every person engaged in the HANDLING of DANGEROUS GOODS exercises reasonable care to avoid damage to packages;
- .2 whilst DANGEROUS GOODS are being handled precautions are taken to prevent unauthorized access to HANDLING areas;
- .3 except in the case of DANGEROUS GOODS packed in a freight container and loaded on board specially designed container ships, no goods are lifted into or out of the SHIP over any DANGEROUS GOODS stowed on deck or on the BERTH unless such DANGEROUS GOODS are effectively protected against impact;
- .4 if any DANGEROUS GOODS escape from a package, every practical step is taken to minimize injury to the health of persons in the vicinity.

4.4.1.2 The MASTER of a SHIP and the BERTH OPERATOR within their respective areas of responsibility should ensure that before personnel enter any enclosed space appropriate precautions are taken against the possible presence of dangerous vapours or oxygen depletion.

#### 4.5 SPECIAL CATEGORIES

##### 4.5.1 EXPLOSIVES

4.5.1.1 The REGULATORY AUTHORITY should establish specific requirements for the HANDLING of explosives, having regard to the hazards involved and the population density in the vicinity of the PORT AREA and any other relevant circumstances.

4.5.1.2 The precautions for loading and unloading of explosives as provided in the Introduction to Class 1 of the IMDG Code should be taken into account.

4.5.1.3 Additional basic items for consideration by the REGULATORY AUTHORITY are given at Appendix 2.

##### 4.5.2 RADIOACTIVE SUBSTANCES

4.5.2.1 Packaged radioactive substances should not be brought into the PORT AREA unless they are in complete conformity with the International Atomic Energy Agency's (IAEA) Regulations for the Safe Transport of Radioactive Materials.

4.5.2.2 Packages containing radioactive substances should be so stowed or stored as to prevent harmful effects to persons and possible interaction between packages. Guidance on segregation distances required on board sea-going ships is given in Class 7 of the IMDG Code, and for on shore is given at Appendix 3.

#### 5 LIQUID BULK DANGEROUS SUBSTANCES (INCLUDING LIQUEFIED GASES)

## 5.1 GENERAL

### 5.1.1 CERTIFICATE OF FITNESS

5.1.1.1 The DESIGNATED PORT OFFICER should in accordance with regulations of the REGULATORY AUTHORITY be able to:

- .1 prohibit the entry into a PORT AREA of the SHIP carrying liquid BULK DANGEROUS SUBSTANCES to which the Codes for the Construction and Equipment of Ships carrying Dangerous Chemicals or Liquefied Gases in Bulk are applicable, unless the MASTER is in possession of a valid CERTIFICATE OF FITNESS.
- .2 prohibit the loading of liquid BULK DANGEROUS SUBSTANCES into a SHIP subject to the Codes referred to in .1 above unless the MASTER is in possession of a valid CERTIFICATE OF FITNESS for that SHIP and those DANGEROUS SUBSTANCES.

5.1.1.2 The REGULATORY AUTHORITY should establish appropriate arrangements for the inspection of the SHIP, to ensure that it complies with the CERTIFICATE OF FITNESS, where there is reason to believe that the SHIP may not comply with the CERTIFICATE OF FITNESS.

### 5.1.2 VAPOUR ESCAPE CONTROL

5.1.2.1 Subject to the requirements of the REGULATORY AUTHORITY the DESIGNATED PORT OFFICER may require that whenever certain liquid BULK DANGEROUS SUBSTANCES are handled, suitable and safe measures are taken to prevent or control the escape of vapour into the atmosphere.

**NOTE:** Local circumstances and operating procedures should be taken into account in deciding whether to require any vapour return line or vapour disposal system. If such a system should be required due attention should be given to avoiding additional hazards.

### 5.1.3 INFORMATION FOR OPERATIONAL AND EMERGENCY PURPOSES

5.1.3.1 The MASTER of a SHIP and the BERTH OPERATOR within their respective areas of responsibility should have immediately available the following information with respect to each DANGEROUS SUBSTANCE handled, stored or transported:

- .1 the correct technical name of the substance, the UN Number (where available) and a description of the relevant physical and chemical properties (including reactivity) necessary for the safe containment and HANDLING of the substance;
- .2 procedures for cargo transfer, gas-freeing, inerting, ballasting and tank cleaning when changing cargoes;
- .3 special equipment needed for the safe HANDLING of a particular substance; and
- .4 emergency procedures, including
  - action to be taken in the event of a spillage or leak;
  - countermeasures against accidental personnel contact; and

— fire-fighting procedures and suitable fire-fighting media.

## 5.2 SHIPS

### 5.2.1 WATCHKEEPING

5.2.1.1 The MASTER of a SHIP having BULK DANGEROUS SUBSTANCES on board should ensure that a safe deck watch and a safe engineering watch are maintained by the ready availability on board of a duly qualified officer or officers and ratings where appropriate, even when the SHIP is safely moored or safely at anchor in the PORT AREA.

### 5.2.2 REPAIR WORK

5.2.2.1 The MASTER of a SHIP, after having consulted the BERTH OPERATOR, where appropriate, should ensure that he is in possession of a certificate of approval issued by the DESIGNATED PORT OFFICER, before any repair work consisting of the use of hot rivets, welding, burning and power tools, and any other repair work which may lead to a hazard because of the presence of DANGEROUS SUBSTANCES, is carried out on a SHIP.

5.2.2.2 The MASTER of a SHIP after having consulted the BERTH OPERATOR, where appropriate should ensure that tools or equipment, when used in an area where a flammable atmosphere may exist or may develop, are used in such a manner that no fire or explosion can be caused.

### 5.2.3 PORTABLE ELECTRICAL EQUIPMENT

5.2.3.1 The MASTER of a SHIP should ensure that only portable electrical equipment, including any used for sampling or ullaging, of a type certified safe\*) for use in a flammable atmosphere is used in any area or space in which a flammable atmosphere may occur.

5.2.3.2 The MASTER of a SHIP should ensure that electrical equipment on a wandering electrical lead is not used in the areas or spaces described in 5.2.2.1 above.

### 5.2.4 ENTRY INTO SPACES

5.2.4.1 The MASTER of a SHIP should ensure that no person enters a cargo space, cargo tank, void spaces around such tank, cargo handling space, or other enclosed space which has contained or may contain hazardous vapour unless:

\*) Reference is made to the Recommendations published by the International Electrotechnical Commission and, in particular, Publication 92—Electrical Installations in Ships.

- .1 the space is free of hazardous vapour and not deficient in oxygen, and is certificated to this effect by a person trained in the use of the relevant equipment and sufficiently knowledgeable to interpret correctly the results obtained. (This person should record the measurements taken), or
- .2 where it is necessary for operational purposes to enter a space which cannot be freed of hazardous vapour within a reasonable time and which, therefore, cannot be

certificated as provided in .1 above, or it is unlikely that the space will remain free of hazardous vapours, then entry should only be made by personnel using a self-contained breathing apparatus and other necessary protective equipment and clothing and the entire operation should be under the close supervision of the responsible officer, provided with self-contained breathing apparatus, protective equipment and rescue harness. The breathing apparatus, protective and rescue equipment should not be of such a type as to introduce a source of ignition into the space.

5.2.4.2 The MASTER of a SHIP should ensure that entry into a space mentioned in 5.2.3.1 above follows carefully established procedures which are contained in internationally recognised Guides.\*)

### 5.2.5 COMPATIBILITY

5.2.5.1 The MASTER of a SHIP should ensure that any liquid BULK DANGEROUS SUBSTANCE carried in a space which may react in a hazardous manner with other bulk substances should:

- .1 be separated from such other substances by means of a cofferdam, void space, pump room, empty cargo space, or a mutually compatible substance;
- .2 have separate pumping and piping systems which should not pass through cargo spaces containing incompatible substances, unless encased in a tunnel; and
- .3 have a separate cargo space vent system.

\*) ICS Tanker Safety Guide (Liquefied Gas)  
ICS Tanker Safety Guide (Chemicals)  
International Safety Guide for Oil Tankers and Terminals (I.S.G.O.T.T.)

5.2.5.2 The MASTER of a SHIP should ensure that no bulk dangerous liquid comes into contact with any tank, pipe, valve or any other equipment in the SHIP which may cause a hazard by weakening, chemical reaction or any other means.

### 5.2.6 HANDLING

5.2.6.1 The MASTER of a SHIP should ensure:

- .1 that precautions are taken at all times to prevent flammable and/or toxic vapour from entering service or control stations spaces, accommodation and machinery spaces on a SHIP;
- .2 except for vents designed to prevent excess pressure or vacuum within a cargo space, all openings from cargo spaces are, except with the permission of the DESIGNATED PORT OFFICER, kept closed during HANDLING of flammable and/or toxic substances, or ballast water contaminated with such substances; and
- .3 that any tools or equipment used, e.g. for sampling or ullaging are used in a manner so as not to cause ignition.

5.2.6.2 Except where closed gauging is required sighting or ullage parts may be kept open for operational purposes, provided any such opening is protected by an efficient flame arrester which is kept clean and in good condition. Sighting or ullage parts in partially enclosed spaces should be opened only with the approval of the DESIGNATED

PORT OFFICER and should be closed immediately after use. Sighting or ullage ports in enclosed spaces should not be opened.

5.2.6.3 The MASTER of a SHIP should ensure that, should an incident occur during the HANDLING of liquid BULK DANGEROUS SUBSTANCES or ballast water contaminated with liquid BULK DANGEROUS SUBSTANCES which necessitates a repair to the cargo piping system or connections, or which interferes in any way with the uninterrupted flow of liquid BULK DANGEROUS SUBSTANCES or ballast water, such HANDLING is stopped and not resumed until adequate safety measures have been taken.

### 5.2.7 GAS-FREEING, TANK CLEANING AND INERTING

5.2.7.1 The MASTER of a SHIP carrying or having carried liquid BULK DANGEROUS SUBSTANCES should ensure that gas-freeing, tank cleaning (including crude oil washing), or purging with inert gas is carried out in accordance with the SHIP's operating manual which lays down the correct procedure to be employed. Such operating manuals should deal comprehensively with the procedure to be employed.

5.2.7.2 No gas-freeing, tank cleaning and inerting should be carried out without the permission of the DESIGNATED PORT OFFICER and, where appropriate, the BERTH OPERATOR.

### 5.2.8 CONTAINMENT OF SPILLAGE

5.2.8.1 The MASTER of a SHIP carrying liquid BULK DANGEROUS SUBSTANCES should ensure that during HANDLING operations all scuppers are kept closed except to the extent that it is necessary to allow water to drain off, and that the scuppers are inspected regularly. Scuppers on a SHIP may be kept open if permitted by the DESIGNATED PORT OFFICER. Where corrosive liquids or refrigerated gases are being handled, the scuppers may be kept open, provided that an ample supply of water is available at all times in the vicinity of the manifolds.

**(To be concluded in the next issue)**



PORT: \_\_\_\_\_

3. GANG IDLE TIME SUMMARY SHEET  
(per ship call)

Date: \_\_\_\_\_ from \_\_\_\_\_ to \_\_\_\_\_

Refers to month      

CAUSE (code)	IDLE GANG HOURS	TOTAL
01		
02		
.		
.		
29		
30		
99		
TOTAL		

SHIP NAME: \_\_\_\_\_

REG. SEQUENCE No.: \_\_\_\_\_

SHIP TYPE: \_\_\_\_\_

AGENCY: \_\_\_\_\_

4. MONTHLY GANG IDLE TIME FORM

MONTH: \_\_\_\_\_

GANG IDLE TIME IN HOURS RELATED TO:

	Ship Movements	Preparation Ship	Goods	Labour	Ship/Port Equipment Breakdown	Shore Transport	Meteo	Mesc.	Total
<div style="border: 1px solid black; padding: 2px;"> Refers to to Codes  Reg. Seq. No. </div>	01 08	02 07 03 09 04 10 06	11 15	12 23 13 24 22	05 25 14 26 21	16 17 18	27	19 29 20 30 28 99	Σ
	TOTAL MONTH								

SHEET

[illegible]

PORT:  
 ZONE:  
 MONTH:

**6. BERTH THROUGHPUT/PORT TRAFFIC FORM**  
 DATE:          from          to

SHEET:

Date	Berth	Ship name	Berth throughput						Port traffic						
			Discharged	Loaded	Shifted ship	Shifted via quay	Trans-shipment	Total	Inward		Outward		Trans-shipment		Total
									National	Transit	National	Transit	National	Inter-national	
SUB-TOTAL or TOTAL															



**BERTH:**

## 7. WEEKLY REGISTER OF BERTH OCCUPATION


DATE: FROM: TO:

[illegible]

\*CODE: 1 - vacant; 2 - occupied not working; 3 - occupied working; 4 - occupied not workable

PORT:  
ZONE:  
MONTH:

## 8. BERTH OCCUPANCY FORM

SHEET 

DATE FROM: TO:

DATE	BERTH No.	TIME (HOURS)				
		VACANT	OCCUPIED NOT WORKING	OCCUPIED WORKING	OCCUPIED NOT WORKABLE	CHECK TOTAL
SUB-TOTAL OR TOTAL PERCENTAGE						

SUB-TOTAL OR  
TOTAL

PERCENTAGE

**PORT:**

## 9. CARGO MANIFEST SUMMARY

SHIP NAME:  
REG. SEQUENCE No.:  
SHIP TYPE:  
FLAG:

REFERS TO MONTH:

[illegible]

#### 10. CONTAINER STATISTICS MATRIX (BOTH FOR UNITS AND TONNAGES)

[illegible]

PORT:  
BERTH No.:

SHIP NAME:  
REG. SEQUENCE No.:  
SHIP TYPE:  
AGENCY:

## 11. CONTAINER TRAFFIC SHEET ONE

NUMBER OF UNITS HANDLED

..... FOOT CONTAINERS				
	IN- WARD	OUT- WARD	TRANS-SHIP- MENT (IN ONLY)	TOTAL
FULL				
EMPTY				
TOTAL				

..... FOOT CONTAINERS				
	IN- WARD	OUT- WARD	TRANS-SHIP- MENT (IN ONLY)	TOTAL
FULL				
EMPTY				
TOTAL				

..... FOOT CONTAINERS				
	IN- WARD	OUT- WARD	TRANS- SHIP- (IN ONLY)	TOTAL
FULL				
EMPTY				
TOTAL				

PORT:  
BERTH No.:

SHIP NAME:  
REG. SEQUENCE No.:  
SHIP TYPE:  
AGENCY:

## 12. CONTAINER TRAFFIC SHEET TWO

**TONNAGE (net weight)**

	IN- WARD	OUT- WARD	TRANS-SHIP- MENT (IN ONLY)	TOTAL
20'				
40'				
TOTAL				

CONTAINER TYPE (in units)

	20°				40°			
	4'	8'	8'6"	+8'6"	4'	8'	8'6"	+8'
Dry								
Insulated								
Refrigerated								
Flat rack								
Liquid bulk								
Open top								
Bulk container								
.....								
.....								
.....								

FCL – LCL (in units)

	INWARD*	OUTWARD	TOTAL
FCL			
LCI			

\* INCLUDES TRANS-SHIPMENT CARGO

PORT:

BERTH No.:

SHIP NAME:  
REG. SEQUENCE No.:  
SHIP TYPE:  
AGENCY:

**13. CONTAINER TRAFFIC SHEET THREE**  
**CAPTIVE AND TRANSIT TRAFFIC**

NUMBER OF UNITS AND TONNAGES HANDLED

	NATIONAL		TRANSIT		TOTAL	
	IN- WARD	OUT- WARD	IN- WARD	OUT- WARD	IN- WARD	OUT- WARD
FULL 20' TONNAGE						
FULL 40' TONNAGE						
TOTAL UNITS TOTAL TON- NAGE						

PORT:  
BERTH No.:  
ARRIVAL DATE/TIME AT BERTH:  
SAILING DATE/TIME FROM BERTH:  
TIME SHEET SEQUENCE NUMBER:

SHIP NAME:  
REG. SEQUENCE No.:  
SHIP TYPE:  
AGENCY:

## 14. CONTAINER TERMINAL TIME SHEET

DATE:                      SHIFT:                      FROM:                      TO:

CRANE NUMBER	BAY	OPERATION	CONTAINER SIZE	NUMBER	E/F

UNLASHING TIME:  
LASHING TIME:

No. OF MEN EMPLOYED: .....

IDLE TIME			
CRANE No. ....	.....	HOURS ( .....	) CAUSE .....
CRANE No. ....	.....	HOURS ( .....	) CAUSE .....
CRANE No. ....	.....	HOURS ( .....	) CAUSE .....
CRANE No. ....	.....	HOURS ( .....	) CAUSE .....
CRANE No. ....	.....	HOURS ( .....	) CAUSE .....

SHIP NAME:  
REG. SEQUENCE No.:  
SHIP TYPE:  
AGENCY:

15. CONTAINER TERMINAL PERFORMANCE REPORT  
REFERS TO MONTH | | |

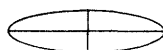
ARRIVAL DATE/TIME AT BERTH:

SAILING DATE/TIME FROM BERTH:

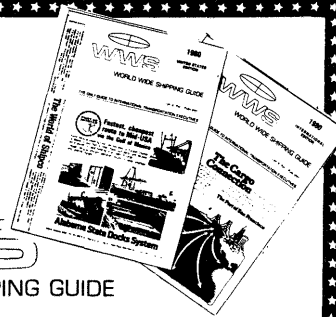
$$\text{TERMINAL PERFORMANCE} = \frac{\text{NUMBER OF TOTAL MOVES}}{\text{DISPATCH TIME - AGREED TIME CORRECTIONS}} = \text{MOVES/HOUR}$$

Moves:	Containers discharged	.....
	Containers loaded	.....
	Containers shifted on board	.....
	Containers discharged and reloaded (2 moves)	.....
	Hatch-covers discharged and reloaded (2 moves)	.....
	<b>Total moves</b>	<u>.....</u>
<hr/>		
Dispatch time:	Total time from landing gangway until lashing finished	..... hrs
	Total crane/hours made available:	
	No. of cranes x hours scheduled plus overtime	.....
Time corrections:	*Time deductions for delays caused by terminal operator e.g. operational delays, equipment breakdowns, mealbreaks, etc.	.....
	*Time deductions due to external factors e.g. fog, storm, main power supply failure, customs clearance, health inspection, etc.	.....
	*Delays caused by shipping line:	
	Late arrivals	.....
	Lack of information	.....
	Damaged containers	.....
	Off-standard containers	.....
	Miscellaneous	.....
	<b>sub-total</b>	<u>.....</u>
	Total time deductions	.....
	Agreed time corrections:	
	$\frac{\text{total time deductions (crane/hours)} \times \text{dispatch time}}{\text{total crane/hours made available}}$	<u>.....</u> hrs
	Dispatch time - agreed time corrections	<u>.....</u> hrs

## 1980 Edition



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# United Nations Conference on International Multimodal Transport

**Geneva, 12-13 November 1979**

A United Nations Conference of Plenipotentiaries met in Geneva for three weeks from November 12, 1979, to prepare and adopt a Convention on International Multimodal Transport. The Conference opened by Gamani Corea, Secretary-General of UNCTAD, had before it a draft Convention prepared by a 68 member Intergovernmental Preparatory Group (IPG) established by the Trade and Development Board of UNCTAD in response to a request of the Economic and Social Council.

As port facilities and internal transport infrastructures of developing countries expand and improve, scope for growth in multimodal transport is expected to increase rapidly. The Convention would establish an international legal regime to which multimodal contracts and documents divided hitherto by commercial interests (which now form the basis for multimodal transport operations) would conform. It would in particular establish internationally legally binding norms of liability and operation for multimodal transport operators (MTOs); and endorse the principle of "through liability" which makes the MTO responsible for goods from the time he takes charge until delivery.

The draft Convention contains eight substantive parts dealing with: general provisions; documentation; liability of the multimodal transport operator; liability of the consignor; claims and actions; supplementary provisions; customs matters (transit); and final clauses. In addition, there are draft preambular clauses and further provisions/guidelines on customs matters whose exact treatment and location in the final text of the Convention has yet to be resolved.

The convening of the present Conference was the outcome of six sessions of the IPG since 1973. The IPG was established under the auspices of UNCTAD in response to representations by developing countries who felt that earlier efforts in other fora to elaborate a Convention in the late 1960s and early 1970s were addressing themselves insufficiently to their special problems. Those efforts had focussed mainly on problems of liability, whereas the developing countries felt that deeper economic and social problems underlay the apparently purely technical legal issues with which earlier draft Conventions dealt. In the event, as the result of a "Common Understanding" reached in the IPG among developed, developing and socialist planned-economy countries, the scope of the draft Convention was extended to cover, within the terms of that Understanding, issues which the developing countries considered vital to their national interest. These interests, as reflected in the draft Convention, include provisions on an equitable regime of liability and documentation; the regulation and control at the national level of MTOs and multimodal transport operations; consultation before the introduction of new technologies and services, on terms and conditions of services: the licensing of new technologies and services, on terms and conditions of service; the licensing of MTOs, and other steps in the national and economic interest.

The 90-country United Nations Conference on a Convention on International Multimodal Transport adjourned on November 30 after three weeks of negotiation with agreement to reconvene from May 8-23 to complete its work.

In addressing the concluding plenary, the Chairman, Erling Selvig (Norway) noted that the Second Committee had dealt successfully with the provisions of the proposed Convention dealing with customs guidelines and had drawn up a set of preambular clauses which constituted virtually an agreed text.

However, the results of the work of the First Committee, to which were entrusted considerations of the substantive body of the Convention, were not so encouraging. Whereas half of the draft articles within its terms of reference were discussed — including such key issues as scope of application, documentation and period of responsibility of the multimodal transport operator — the Chairman said there was "a notable absence of real progress on that part of the subject matter where it had not previously been possible to develop generally acceptable solutions".

Though in all honesty Mr. Amado Castro could not say that great progress had been made in the first session, he was confident that in May the Conference would succeed in adopting a Convention that would benefit the international community as a whole.

## Seminar & Conferences

1. "The 16th International Seminar on Port Management in the Netherlands"—A joint enterprise of the International Institute for Hydraulic and Environmental Engineering, Port Authorities of Amsterdam and Rotterdam and International Technical Assistance Department of the Netherlands' Ministry of Foreign Affairs.

Delft/Rotterdam/Amsterdam, 9 April to 17 May 1980

Details from:

The International Institute for Hydraulic and Environmental Engineering, Oude Delft 95,  
P.O. Box 3015, 2601 DA Delft,  
Netherlands, tel. 015-783406;  
cables: Interwater, Delft

2. "The 4th International Conference on Roll-on/Roll-off Transportation" Monte Carlo Convention Centre, 15-17 April 1980

Details from:

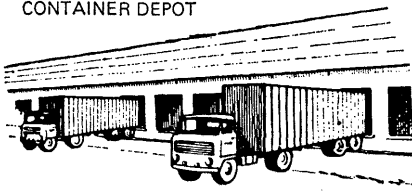
Ro-Ro 80 Secretariat, BML Business Meetings Ltd,  
2 Station Road, Rickmansworth,  
Herts WD3 1QP England; tel. (09237) 76363;  
telex 924312

3. "The 2nd Inter Island Shipping Conference and Exhibition" sponsored by United Nations ESCAP & Maritime Industry Authority of the Philippines (MARINA), organised by "Maritime Asia" journal.

Themes: Current Issues in Inter Island Shipping; Regional Co-operation in Inter Island Shipping; Efficient Ports for

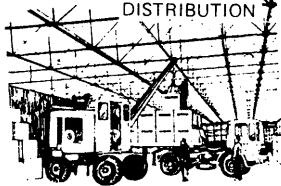
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CONTAINER DEPOT

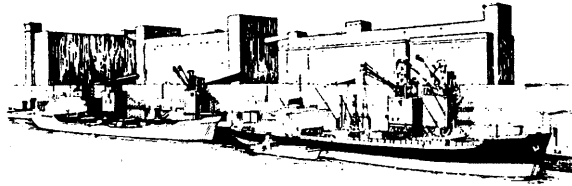


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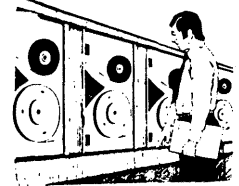
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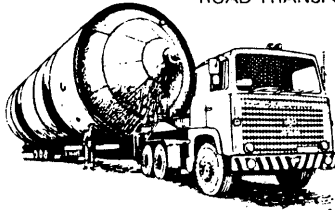
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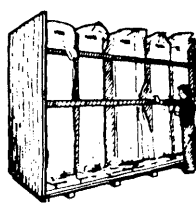
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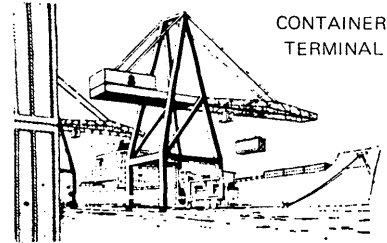
ROAD TRANSPORT



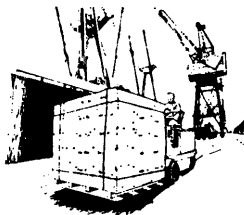
EXPORT PACKING



CONTAINER  
TERMINAL



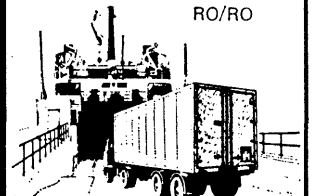
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(Continued from page 34)

Inter Island Shipping. Ramada Hotel, Manila Philippines,  
11-14 March 1980

Details from:

Intec Press Ltd., 51-53, Chipstead Valley Rd.  
Coulson, Surrey, CR3 2RB England; tel. 668 1306;  
telex 887120 INTEC G

## Publications

1. "Standards for Marine Cargo Security" by the American Association of Port Authorities.

Some of the subjects included in this new publication are: pilferage problems, physical cargo area security, security personnel, and gate pass procedures.

Price US\$15.00

American Association of Port Authorities  
1612 K Street, N.W., Suite 502, Washington,  
D.C. 20006, U.S.A.

2. "Basic Documents volume 1 (1979 edition)"

Convention on the Inter-governmental Maritime Consultative Organization; Rules of Procedure of the Assembly; Rules of Procedure of the Council; Rules of Procedure of the Maritime Safety Committee; Rules of Procedure of the Marine Environment Protection Committee; Rules Governing Relationship with Non-Governmental International Organizations; Guidelines on the Grant of Consultative Status.

Sales No.79.02.E price £3.00(English), Sales No.79.02.F price £4.00 (French)

"Supplement relating to the Annex to the Convention on Facilitation of International Maritime Traffic, 1965" Notifications by Contracting Governments concerning differences between national practices and Convention Standards; Notifications by Contracting Governments concerning adoption of Recommended Practices; Text of Article VIII of the Convention on Facilitation of International Maritime Traffic, 1965.

Sales No.79.05.E price £1.75(English), Sales No.79.05.F price £2.00 (French)

IMCO Secretariat, Publications Section,  
101-104, Piccadilly, LONDON W1V 0AE

## "Maritime Cargo Loss Prevention" published by the U.S. Department of Transportation

A recent report by the U.S. Department of Transportation covers port security from a very different perspective than AAPA's port security manual. The report, entitled Maritime Cargo Loss Prevention, is the result of an 18 month survey and analysis of security at the Port of Oakland. The study used management system techniques to analyze the total seaport operation from paper flow to the availability of local law enforcement resources.

The result is a two volume handbook which lays out a step-by-step procedure for conducting a security system analysis (SSA). Such an analysis identifies risk points in various port operations. Once these risk points are isolated, the SSA develops loss prevention guidelines to reduce the risks. The handbook describes this method of cargo loss prevention and provides guidelines and procedures to be used by individual terminal operators.

## Port Caucus undertaking dredging survey

During the past several months, the U.S. Congressional Port Caucus chaired by Congressmen Murphy and Johnson has been working closely with the American Association of Port Authorities on the problems of federal-port relations—especially those arising from the bewildering maze of laws, agencies (federal, state and local), procedures and regulations which weigh so heavily on port development and operations.

The effort is now focusing on dredging. The Caucus is undertaking a major survey of dredging problems at U.S. ports. The purpose is to gather data on how the Corps of Engineers issues permits, impacts of the delays encountered, and the impact of dredging regulations on port projects. The results will be compiled and analyzed by the most sophisticated research services, available. This will be followed by oversight hearings.

## Action Group formed for urban waterfront revitalization

There is growing interest in the redevelopment of urban waterfronts which for a variety of economic and social reasons have been allowed to deteriorate physically and aesthetically over the years. Some fifty U.S. cities have undertaken urban waterfront revitalization projects ranging in cost from \$10,000 to \$10 million aimed both at enhancing economic and aesthetic values and the cultural, historic and recreational benefits of these long neglected urban assets.

In an effort to coordinate federal programs useful to the revitalization movement and to help cities in planning, funding and implementing projects and proposals, a number of federal agencies and private organizations have formed an Urban Waterfront Action Group. The agencies include, among others, the Corps of Engineers, Maritime Administration Office of Coastal Zone Management, Environmental Protection Agency, and the Department of Transportation.

## AAPA submits formal comments on proposed dredge site guidelines

The American Association of Port Authorities, under the direction of the Ad Hoc Dredging Committee, has submitted formal comments to the Environmental Protection Agency on its proposed guidelines for the specification of disposal sites for dredged and fill material. AAPA's basis for argument is that the proposed regulations would place severe restriction and prohibitions on dredging operations which stand to seriously affect, or even cause shutdowns at many ports. The statement notes that nine per cent of the U.S. GNP is directly related to international trade. Accordingly, the nation can ill-afford any unreasonable and unwarranted restraints on the flow of commerce.

AAPA's statement argues that the guidelines would create a complex, vague, and cumbersome process that would be enormously time consuming and expensive to implement. It raises objections to EPA's position that the guidelines are in fact regulatory in nature and exempt from the requirement for regulatory analysis. Strong exception is taken to EPA's position that the guidelines are in fact regulatory in nature and exempt from the requirement for regulatory analysis. Strong exception is also taken to EPA's



premise that dischargers should bear the burden of proving that discharges will not have an unacceptable environmental impact. As for the proposed regulation's testing provisions—particularly bioassay testing of dredged material—AAPA contends that the procedure is still primitive, unreliable and tends to impose unnecessary burden, expense, and delay in many cases without achieving any real benefit.

## **ICC/FIATA Asian Transport Conference looking into the future**

The First Asian Transport Conference organised jointly by the International Chamber of Commerce (ICC) and the Regional Secretariat for Asia of the International Federation of Freight Forwarders Associations (FIATA) was held in New Delhi from 10 to 12 December, 1979. The Conference was supported by the Ministry of Commerce of the Government of India and was attended by over 200 participants representing transport and commercial interests as well as Governmental authorities from Asia and other areas of the world and intergovernmental organisations.

The purpose of the Conference was to attempt to define an approach to transport development in the Asian region by combining the forces of the private sector and governmental authorities and to find practical avenues of cooperation to solve transport problems.

The Conference conclusions with regard to maritime and intermodal transport were as follows.

### **Maritime Transport**

The Conference noted that sea transport would continue to account for the largest proportion of international trade movements over the coming years and should continue to receive the closest possible attention of the countries in the Asian region. This would be particularly necessary in view of the problems affecting shipping. With a view to resolving problems in a coordinated manner, the Conference identified the need to assist individual countries within the Asian region and to support intergovernmental bodies such as ESCAP and others:

1. in the development and formulation of national maritime laws/regulations and in the implementation of national and international legislation;
2. in the development of port infrastructure in step with trade growth and technological advancement, and in the development of port information systems;
3. in the promotion of professionalism and expertise amongst all those parties connected with trade and transport operations;
4. in the promotion of close cooperation between shippers, shipowners and other concerned interests of the region;
5. in securing a legitimate and fair participation of developing countries in bulk and liner shipping through their own national tonnage;
6. in the promotion of a better understanding of the role of freight forwarders;
7. in the establishment and operation of chartering organisations in the region.

### **Intermodal transport**

The Conference noted the wide interest in the development of intermodal transport policy and operation within the region with respect to both commercial arrangements

and planned intergovernmental instruments. The Conference identified the need in particular;

1. to consider intermodal transport laws and regulations and commercial procedures not only from the point of view of protecting nation interests but also from the point of view of encouraging efficient indigenous intermodal transport operators from the regions;
2. to examine thoroughly commercial, documentary and customs procedures linked to intermodal transport to facilitate operations as far as possible;
3. to consider the development of all forms of intermodal transport in the region: sea/road, sea/rail, sea/air, air/road, rail/road;
4. to develop the infrastructure facilities necessary to intermodal transport including inland transport facilities of rail, road and waterway feeder systems as well as ports, airports and inland depots;
5. to ensure an efficient system of consultation between commercial interests and also with governmental authorities in the development of intermodal transport policy and techniques;
6. for the ICC in cooperation with regional interests to organise specific seminars in Asian countries on intermodal transport policy, operations and problems.

## **General cargo, container records: Port of Montreal**

General cargo traffic, the most lucrative for the Port of Montréal has reached a record 4.5 million metric tonnes during 1979, for an increase of 23.3% over the preceding year.

In making this announcement today on the occasion of a press conference, Port of Montréal General Manager, Mr. N. Beshwaty stated that with these results, the Port of Montréal ranks in fourth place among North Atlantic American ports for the handling of general cargo and container traffic.

In his comments on the evolution of traffic during the last twelve months, the General Manager indicated that the Port had registered an increase in all areas of its activity, except in the grain category which has reported a significant decrease of 49.2% as a result of an extended work stoppage by grain handlers during the year under review.

Despite this unfortunate work stoppage, total cargo tonnage handled at the port reached 20 million tonnes, for a volume slightly lower by 1.5% over the preceding year.

Containerized traffic continued its upward trend in the number of units and volume of cargo handled to reach a record 245,000 units, for an increase of 38.1% over the preceding comparable period.

## **Container terminal expansion —1980: Saint John**

Port general manager G.C. Moulard said the expansion of Rodney Container Terminal will be a major project for the port in 1980.

Mr. Moulard was commenting on an announcement made by the Hon. J. Robert Howie, Minister of State (Transport).

Mr. Howie had said the port will receive a loan of \$7.5 million for the expansion, which will increase the terminal's handling capacity by 55,000 units.

The General Manager explained the expansion would

extend the portainer crane rails and the pier six hundred feet (183 meters) to the south. This will include pier ten and about half of the present pier eleven. The transit sheds number nine which does not have a pier and number ten will be removed for the expansion the general manager said.

When completed in 1981 the expansion will allow the terminal to handle three large class container vessels at one time.

### Trans-lake ferry service a step closer

Resing fuel costs, highway congestion and the growth of trailer traffic across the Niagara River border have at last created an opening for the much talked about trans-lake ferry service between Toronto and Rochester, according to a recent study commissioned by the U.S. Maritime administration (Mar-Ad).

Examining the feasibility of a trailer ship operation between the two ports, the report noted that more than 600,000 trailers—about six million tons of cargo—travelled the overland route in 1973 and this figure is now approaching one million trailers.

Toronto was selected for the purposes of the study because the city is the Canadian terminus for much of the Niagara frontier traffic.

"There is a lot of potential for a trans-lake service here in Toronto," said Jim Brewster, executive assistant for the Toronto Harbour Commission's terminal operations department.

"This kind of operation could bring far-reaching financial benefits for the entire waterfront community in terms of cargo handling charges, customs and packaging services," he said.

Examining the potential saving in diesel fuel for the Toronto service, the study found that depending on the vessel used, it would take between 11 and 27 gallons to move a loaded trailer. Truck carriage on the overland route requires about 37 gallons a trailer.

The study considered three vessel variations for the trans-lake operation: conventional roll-on roll-off craft capable of carrying up to 58 standard, 40 or 45-foot trailers; a specially designed barge pushed by a tug (80 trailers), and a towed barge (140 trailers).

### Baltimore records second busiest year in its history

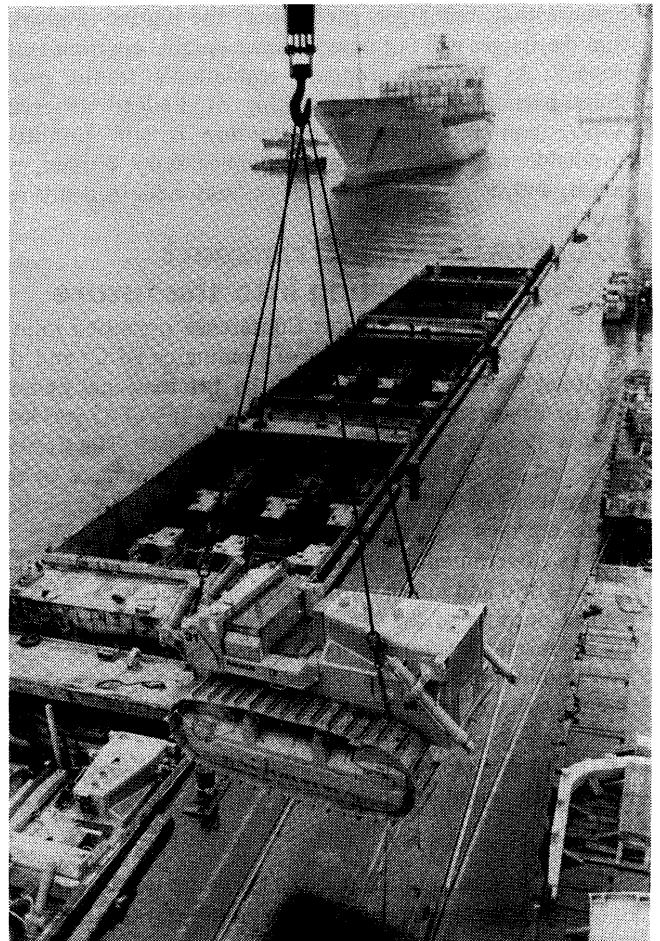
Record tonnages in coal, grain and container cargo moving through the port of Baltimore made 1979 the second busiest year in the history of the port, the Maryland Port Administration reported in a year-end review of trade activities.

Exports also hit a record high during the year, up an impressive 23.3 per cent over the export figure for 1978.

"This was an excellent year for the port of Baltimore," W. Gregory Halpin, Maryland Port Administrator said. "While other ports experienced declines in commerce, Baltimore's cargo volumes continued a pattern of expansion which has been growing from the beginning of this decade."

The MPA estimates that 39 million tons of import-export cargo were handled in Baltimore during 1979. This total, which includes bulk as well as general cargo, represents an increase of 15.4 per cent over the 34 million tons handled in 1978.

Exports rose from 14.4 million in 1978 to 17.7 million



**EXPEDITING EXPORTS**—There was no recession in sight as the Port of Charleston began a new decade of service in January. A typical dock scene in the new year is the loading of heavy equipment aboard LASH barges at Columbus Street Terminal. Here, one of 44 Fiat-Allis units bound for Tartous, Syria, is loaded by the South Carolina State Ports Authority's 75-ton gantry crane. The shipment, handled by Prudential Lines' local agent, Street Brothers, Inc., consisted of nine barge loads of motor graders and crawler tractors weighing more than 2.7 million pounds.

in 1979. At the same time imports rose 9.5 per cent—from 19.2 million in 1978 to 21 million in 1979.

"These figures demonstrate Baltimore's impact on the country's balance of trade," Mr. Halpin said. "The 54-46 ratio of imports to exports is one of the best trade balances in the world and is important to those members of the maritime community who service customers moving cargo in both directions."

### Trade conference to feature government control debates: South Carolina Port

A subject which tends to arouse controversy whenever mentioned in transportation circles will be the theme of the 1980 South Carolina International Trade Conference.

"Government Control—Era of Crisis?" will be the focus of the debate format. Eight prominent shipping specialists will speak on several major aspects of the theme.

The seventh annual Charleston event, scheduled May 13-15, features three full-scale business sessions, including a nuts-and-bolts workshop.

Among proposed subjects to be debated are "Non-Regulated or Regulated Water Transport—Growth or Stagnation?", "Federal Maritime Commission—Help or Hindrance?", "Trucking Deregulation—Dream or Nightmare?", "International Commerce Protection—More or Less?", and "Air Deregulation—Tool or Trouble?".

The topic selected for the keynote speaker is "Multilateral Trade Negotiations and Their Effect on Trade in the 1980s".

## **New T-shaped platform for ro/ro ships completes**

The concrete surface on Jacksonville Port Authority's new roll on/roll off platform at Blount Island Terminal scarcely had time to dry before the first stern-ramp vessel arrived (Dec. 17) to take on a shipment of mobile homes for export to South America.

The T-shaped platform, built at a cost of just under \$1 million, is designed to handle the heaviest and bulkiest cargoes which can be moved on ro/ro ships, according to JPA Managing Director John R. Mackroth.

## **Citizen Advisory Committee's recommendation presented to the Board of Los Angeles**

The Los Angeles Board of Harbor Commissioners recently adopted the recommendations of the Citizen Advisory Committee for the development of the West Channel/Cabrillo Beach Recreational Complex at the Port of Los Angeles. The proposed Complex is part of the Port's five-year, \$405 million capital development project.

As approved, the plan includes 29 separate elements and is scheduled for construction in two phases. Substantial enhancement of the existing Cabrillo Beach is planned, as are a salt marsh, youth camp, and two new parks with considerable area devoted to public walkways and plazas.

Particular care was exercised by the Committee and the Harbor Commission to balance the recreational and environmental needs of the community. The resultant plan is, as described in a letter from a spokesman for the U.S. Fish and Wildlife Service, "successful in avoiding significant environmental issues."

Appointed by the Harbor Commission in March 1979, the Advisory Committee is composed of representatives of community groups, businesses, homeowner groups, unions and environmental concerns. Chaired by Dominic Comparsi, the group has worked with Harbor Department project coordinators to provide guidance and assistance in the overall development of the plan. This extensive reliance upon the input of a citizen's committee has been cited by Dan Garcia, President of the City Planning Commission, as a "forward step for city administration and . . . a model for other city departments to follow."

Approval of the Advisory Committee's report is only the first phase of the Cabrillo Beach development. Work will begin immediately on the preparation of an Environmental Impact Report (EIR) with public hearings to follow. After responding to public comment of the plan and EIR, construction is expected to begin late in 1980. The entire project is scheduled for completion in 1985.

## **New Act focuses on Customs Procedural Reforms; Many Regulations now modernized, simplified**

The United States Customs Service is currently moving into a new era of greater efficiency and simplification because of a law recently enacted by Congress—the Customs Procedural Reform and Simplification Act of 1978. Hampered by antiquated laws promulgated 50 years ago, Customs officials are looking forward to working with the modern procedures, as do the importers and customs brokers who are primarily affected by the law.

As with all federal legislation, Congress provides a framework—an outline—into which the specific details are added by those agencies most conversant with the subject matter. In the case of this Customs Act, the Treasury Department provides the particulars for the regulations; the Customs Service administers the new law.

At Customs Region II, which includes the New York-New Jersey Port, John F. Kennedy International Airport, and Newark International Airport, most of the new regulations are already in effect. Key Customs personnel at Region II, as well as all the other eight regions of the country, have been trained in Washington, D.C. on the intricacies of the procedures so that they can return to their respective regions and train other employees. To ensure a greater understanding of the new regulations on the part of the public, Customs officials in New York, where \$2.3 billion out of Customs total 1978 revenues of \$8 billion were collected, have met with importers and customs brokers to explain the changes and answer specific questions on the new act.

One of the significant changes in the Customs procedural reform gives the importer, broker, or other authorized agent a degree of flexibility by requesting that *either* the date of filing of the immediate delivery application, now known as the "entry," be considered the official date of entry, *or* that the formal entry, "entry/summary," be the official date. This enable the importer to take advantage of any impending changes in duty assessments falling close to the time period that the entry is to be made.

Another boon to the importer is the liberalization of the penalty procedures which, under the Tariff Act of 1930, had been extremely harsh for even inadvertent clerical errors. The new law reduces the maximum amounts importers may be fined for negligence and bars any penalty for "non-negligent" clerical errors or mistakes in fact.

In the area of record keeping, the new law is stricter than previous legislation. The importer, owner, consignee or agent must keep records pertaining to any importations for a period of five years and make them available for inspection. Most businessmen voluntarily keep records on their transactions; the law makes such retention mandatory.

Although some aspects of the Customs Act of 1978 may require additional amplification and clarification before Customs personnel, the business community and the general public can best utilize the new regulations to the fullest, the atmosphere of genuine approval and cooperation seems to herald an era of harmony and trust between the U.S. Customs Service and those who import through the New York-New Jersey Port.

## MARAD releases new containership study

The U.S. Maritime Administration has published a new study that examines the present and future impact of containerships on both international and domestic commerce. Entitled "Container Vessel Capacity in the U.S. Oceanborne Trade—Foreign and Domestic," the 39-page MARAD study predicts that there will be a 50 percent increase in container capacity over the next three years. The study reports that the greater part of this increase will occur in the Pacific Coast—Far East trade. The study also anticipates an increase in the employment of full containerships, including super containerships capable of transporting more than 2,000 TEU's (twenty-foot equivalent units). An increase is also seen in the use of combination/ro-ro ships.

Among the many observations in the new study is the report that of the 85 containership operators currently serving the United States, only 13 percent are U.S.-flag operators.

## Abolition of the National Ports Council

Norman Fowler, Minister of Transport, recently announced that he will abolish the National Ports Council, which costs the Ports Industry over £1m a year, and has a total staff of about 65.

Answering a Parliamentary Question from Mr. Peter Fraser (South Angus), the Minister said,

"I have examined the activities and functions of the National Ports Council. They have brought about considerable improvements over the years, but much remains to be done. I have concluded that the Council, whose annual cost to the ports exceeds £1m, will not be able to achieve the further improvements in the efficiency of the ports which the country needs. I have therefore concluded that the Council should be wound up, and that responsibility for the efficiency of the Ports Industry must now be put firmly on the ports themselves.

"I am consulting the British Ports Association, the port users and others concerned about the means of discharging those functions of the Council which still need to be carried out.

"The legislation, which I shall introduce as soon as I am satisfied with the industry's arrangements for improving its efficiency and productivity, will include any necessary provision for NPC staff whose functions will be discontinued. I would like to pay tribute to all those who have served as members and staff of the Council."

## New Freightliner railhead now in operation at Clydeport

A new Freightliner railhead, redeveloped by the Clyde Port Authority at a cost of £660,000, has come into service at the Clydeport Container Terminal in Greenock.

The Freightliner terminal is now capable of handling three trains a day, instead of one, increasing its potential throughput to 25,000 boxes a year.

"This new facility will be of considerable benefit to our existing customers and will provide an added incentive for shippers and shipowners to route their traffic through Greenock," Clydeport's Deputy Chairman and Managing

Director Mr. James P. Davidson said today.

"Rising fuel costs, the lorry drivers' wage settlement last winter and new restrictions on their hours of work have greatly increased the cost of road haulage," he added, "and so we anticipate a growing demand for facilities to move containers by rail."

Redevelopment work carried out over the past year has included the up-grading of the approach tunnel and track at the Freightliner terminal, the rebuilding of the bridge across Brougham Street, Greenock, which links the railhead with the container terminal and the provision of a Transtainer for loading and discharging boxes from trains.

Half the cost of the entire project has been met by a grant from the Secretary of State for Scotland under the Railways Act of 1974.

## King-Pins, Insiders and Floaters—a former docker looks back to the 'good old days'

Having recently taken severance after 43 years in the docks at Southampton, I have been able to think over the changes that have taken place over the years.

My introduction to cargo work was late in 1935, when we attended 'musters' three times a day, at 7.45 a.m., 12.45 p.m. and 4.45 p.m., in the hope of obtaining perhaps four hours work at least.

These musters took place at various sites, both in and outside the docks, and if you were unlucky at one, you jumped on your bike and raced to another. For the Union-Castle service, muster was held at 7.55 a.m., 12.55 p.m. and 5.55 p.m.; the reason for this last call being later than the others was because the call-stand was situated in the 'Old' (Eastern) Docks between 36 and 39 Berths, outside the Union-Castle offices and the furthest point from the Dock Gate.

The musters at the U.C. were usually pretty orderly, and the men stood their ground; but at other places, I have many times been in a *melée*, and have seen the foreman rushed, which obliged him to throw the work tickets in the air and turn and run to escape being injured in the rush. Such were the 'good old days'.

If one was not fortunate to get a start inside the docks, you came back to the 'Shed', a large building still standing in Canute Road, where preference was given to the Southern Railway's registered men who worked on a rota system; this was normally for quayside work anywhere in the docks, or for work on the Railway ships plying to and from the Channel Islands.

Here I must mention the old steam train that took us to work from the Green Hut to 36 Berth, and back at the end of the day to pay off.

Inside the 'Shed' were several gangways raised about 5ft. from the floor, and the man taking on labour would walk along these, pick out a man here and there and give him a work tally. Although there was always a scramble, he was safe from being bowled over as he was looking down on the jostling mass of men.

The system in those days was for work priority to be given to the 'perms' on the SR. These men were the 'King-pins'; they knew exactly what was wanted for each job and got on with it, such as laying out cargo, laying out the sheds for passengers, keeping things clean, attending to passengers' baggage and doing loading and Customs work.

These men, alas, are no more; they were absorbed in the package deal.

Next in priority were the 'Inside' men. These were specialists in their own particular job—timber, grain, meat, etc. They were not permanent, but were always given preference. Next came the registered tally men who were known as SR shed men, or 'floaters' like myself, who 'floated' around the call stands.

If you did not work, you signed on at the Labour Exchange, and you did this every day except Sundays, Christmas Day and Good Friday; these were the only days you were not compelled to attend muster. Even so, although Christmas Day and Good Friday were not payable on the dole, they were used as 'linking up' days to make up three days in any six for dole payment.

When a man was employed, he was guaranteed four hours pay, but he could be paid off at the end of any four-hour shift, even if the job was not completed, and he could be replaced for the next shift. He was always paid off in hard cash.

There were no such things as tea breaks or annual holidays. These things came about during the war. To get a cup of tea one had to dash up the stairs to Sam's at No. 1 Berth, or to Bennetts' canteens at various sites in the docks. They were open all day then, but you had to be careful the foreman did not catch you or you could be paid off on the spot.

On returning to the docks after war service, we found a great many changes had taken place. The labour was now controlled by the National Dock Labour Corporation, later

'Board'; there were now only two call stands—at the Labour Exchange (Albert Road) for the 'Old' (Eastern) Docks, and at 101 Berth for the 'New' (Western) Docks. If we did not work we had our books stamped or 'bumped', and were paid 5/- (25p) for half a day.

Those were the days of piece-work, and in those strenuous times men were maimed and killed themselves in their efforts to earn that bit extra and keep pace with the other gangs, bearing in mind that in those days every piece of cargo had to be manhandled (the fork trucks came later). More cargo handled meant more wages.

Then came the package deal following the Devlin recommendations in 1966, and the greatest change of all time. We were down to a five-day week and four weeks holiday a year, and the pay was the same if one worked or 'bumped'; piece work was a thing of the past. Now there is an issue of clothing, wet weather gear, safety footwear and safety helmets, and there are quite a few fringe benefits. It's a far cry from the time when we had to charge all over the docks for half-a-day's work in the 'Good Old Days'.

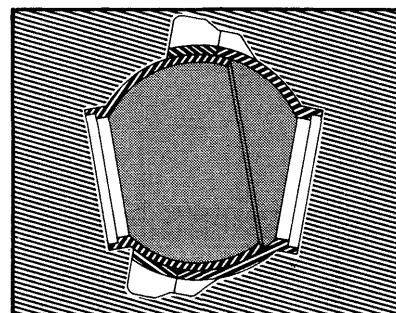
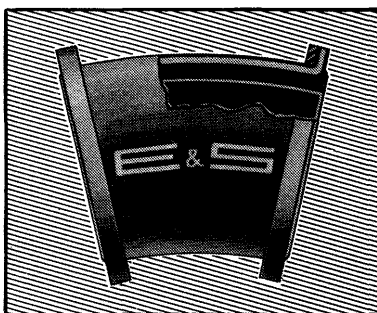
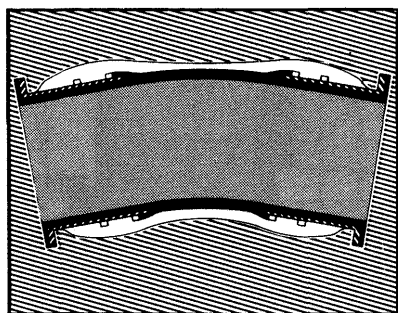
**Bill Barnes**, retired dock foreman, Southampton.

### Balance sheet positive: Dunkerque

The total tonnage in the first six months in 1979 is increasing by more than 2 million tonnes compared with the same period of 1978 which, it should be remembered, was a record year.

However, it should be underlined that this increase is a result of imports of crude oil, ore, coal and exports of refined oil products and coke.

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The transport of heavy lifts should be noted also: tubes for Russia and the Mediterranean, coils for U.S.A., etc. . . .

The sugar terminal is exporting to the full: Iran, Syria, China . . . grain traffic is also doing well.

#### 6 months traffic

Inward traffic	15 498 938
Outward traffic	4 033 869
Total traffic	19 532 807

### An absolute tonnage record: Port of Dunkerque

For the second year in succession, the port of Dunkerque has beaten its absolute tonnage record with 40.8 MT, with a considerable growth in exports and imports, the biggest percentage since 1973. This strengthens its position as the 3rd Port of France and the 1st, excluding hydrocarbons, with 18 MT. In fact, for inward traffic, Dunkerque keeps the high record: +15% (32.7 MT) and confirms its role as supplier of industry in raw materials. For outgoing traffic, the 1978 record has been exceeded by 11% (8.1 MT).

### Container traffic at Marseilles-Fos

For the first six months of the year 1979, the Port's container traffic totalled 108,321 TEU, Fos accounting for 63,817 TEU and Marseilles for 44,504 TEU. At Marseilles itself, the distribution of container traffic was roughly as follows: 60% at the Mourepiane Terminal, 30% at the Léon Gourret Mole and 10% at the other quays. The container facilities available in 1980 will offer the following ca-

pacities:

— Fos Dock 2:

950 meters of quays five container gantries, giving a capacity of 200,000 to 250,000 movements p.a.

— Fos Dock 3 (Brûle Tabac Quay):

650 meters of quays with mobile cranes (and perhaps one gantry), giving a capacity of 10,000 to 15,000 movements p.a.

— Mourepiane Terminal:

570 meters of quays with one gantry and several mobile cranes, giving a capacity of 50,000 to 60,000 movements p.a.

— Léon Gourrent Mole:

970 meters of quays with mobile cranes, giving a capacity of 20,000 to 30,000 movements p.a.

— Pinède Terminal: under construction (in service by 1982).

— Other quays at Marseilles: 700 movements p.a.

### Leading European outlet for cereals: Port of Rouen

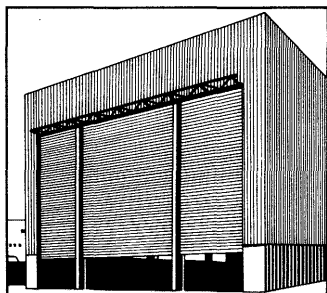
Cereal trade from Rouen can confidently be said to be flourishing. According to our most recent figures available at the time of going to presse, during the recent trading year (1st August 1978 to the 31st July 1979, to be exact) Rouen has exported about 3,318,600 tonnes as against 2,669,100 tonnes in the corresponding period in the 1977-1978 year. This amounts to a 24% increase.

The Port of Rouen's cereal exports exceeded the 2,5 m. figures for 1978 for the first time, and this meant that

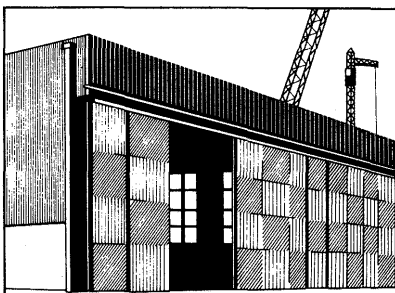
## Matex manufactures and installs industrial doors

rolling doors – sliding doors – overhead doors – folding doors

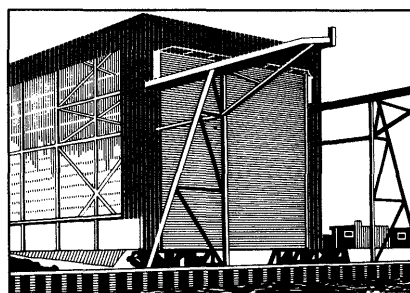
Matex also manufactures outside doors:



**rolling door** 27,3 meters wide and 17 meters high, on the premises of B.V. Scheepswerf- & Machinefabriek de Merwede, in Hardinxveld-Giessendam.



**sliding door** 40 meters wide and 10 meters high, at Nieuwe Noord-nederlandse Scheepswerven in Groningen.



**rolling door** 18 meters wide and 18 meters high with small doors above the rail for gantry installation, without gale strut, at Scheepswerf Jac, den Breejen & Zn, Hardinxveld-Giessendam.

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tel. 05478-1875

nearly one fifth of French exports passed through the Port that held a very, very prominent position, being responsible for nearly half the tonnage shipped abroad.

## News from Bremen and Bremerhaven

### • Some 43% generals with containers in 1985

Oswald Brinkmann, Bremen's Senator for Ports, Shipping and Traffic, reckons with record maritime cargo traffic figures in 1979 for Bremen and Bremerhaven which will exceed all previous results, including those on the 1974 boom-year: 28 million tons, 17 of which being highly valuable general-cargo (5.6 in containers). By the end of October 1979 Bremen/Bremerhaven cargo quantities were 14.4% up on the previous year; up 9.2% for generals, 15% for containers and 22.9% for bulk commodities. Brinkmann's forecast, which 'tends towards the pessimistic', estimates a total handling in five years (1985) for the Bremen/Bremerhaven port-group of some 33 million tons, of which alone 19 will be generals—8 being in containers = 43 percent.

### • Investment of DM 580 millions

The President of the Senate of the city-state, Hans Koschnick, announced, in his Government-declaration for the new 1980-83 legislature-period, port investments totalling DM580 millions—the biggest 4-yearly rhythm investment in the history of Bremen's ports.

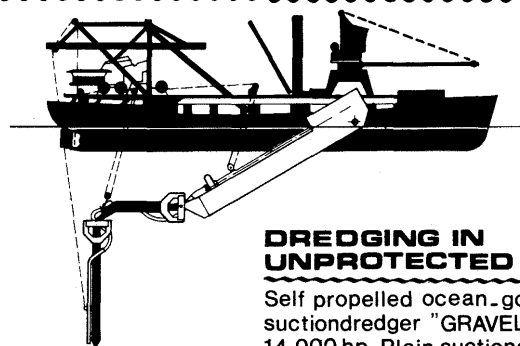
### • BACO-Liners successful

"BACO-Liner 1" (21,800 tdw), which has seen constant service since August 1979 in the Europe/West-Africa trade is getting reinforcement: "BACO-Liner 2", which has been completed meantime, will be trading on this route from January 1980. With the, as the press puts it, 'sea-transport system without port-times' two modern transportation systems are joined. 12 800-ton lighters dock in and out of the hull of the ship through the large bow-doors, by flooding and emptying her ballast tanks; whilst 500 containers (or bulky general-cargo items) can be stowed on the flat, spacious deck. (Barges and Containers = BACO.)

### Tops in container traffic: Bremerhaven/Bremen

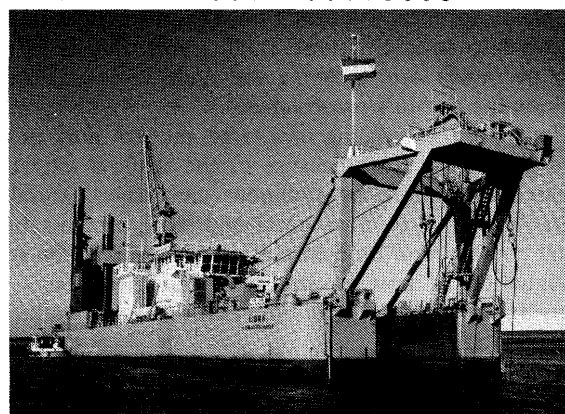
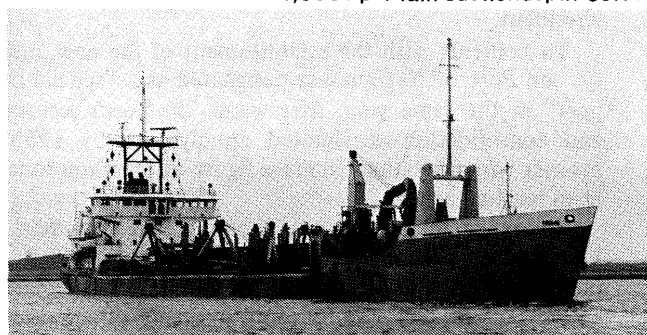
In 1979 the Bremen/Bremerhaven portgroup, with a good 6 million tons of general-cargo in 451,000 containers, again led all the German ports. In general, cargo-handling in the Bremen ports increased in 1979 by 13% over 1978—to 28.1 million tons, of which 16.7 were generals (=59.4%). Port-senator Oswald Brinkmann advises the Free Hanseatic City of Bremen will, between 1979 and 1983, invest some DM 580 millions in the port installations.

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# A Short History of the Port of Nagoya

## Introduction

At the Post-Conference Board meeting of the International Association of Ports and Harbors, held on April 1977 in Houston, the Port of Nagoya was selected as the site for the 12th Conference of the Association. The Year 1977 also was the 70th anniversary of the opening of the Port of Nagoya, and the remarkable progress which the port has made each year could be seen in the fact that the amount of cargo tonnage handled exceeded 100 million tons.

The Port of Nagoya decided to become a candidate to host the 12th IAPH Conference in 1981 as a way of commemorating this important year. It thus sought to gain recognition, both in name and in fact, of the port's increasing international importance.

The Port of Nagoya has a history of but 70 years. However, for those who can trace the port's development from 1907, when it was first designated as an international trading port, through the ensuing difficult 70 years to the present day, its selection as the site for an IAPH Conference is an event which fills one with deep emotion.

## From the Opening of the Port to the End of World War II

The Port of Nagoya was opened on November 10, 1907, but actual port development works began 11 years earlier in 1896.

Nagoya city had long been a prosperous feudal capital of Central Japan and counted as one of Japan's three major economic centers along with Tokyo and Osaka. Shallow waters created problems in harbor construction, yet despite this handicap, local business groups eagerly sought to make Nagoya into an international trading port. Finally in 1896 their proposals were accepted and Aichi Prefecture started work on the harbor's construction.

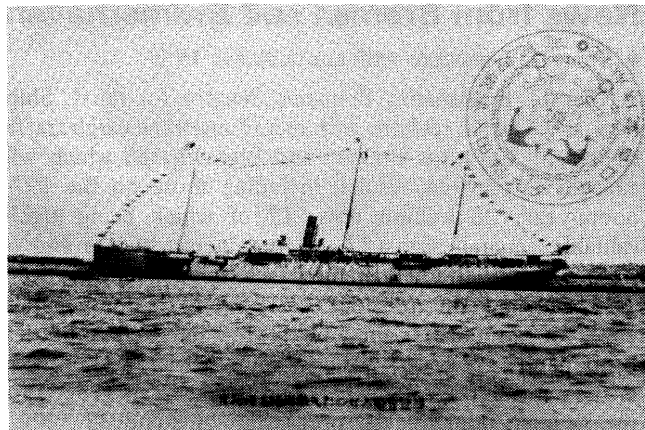
However, the building of a large, modern port encountered great difficulties because of the shallow waters and repeated disruptions by typhoons and other natural disasters. High construction costs and slow progress in the actual construction brought considerable opposition to the continuation of port construction, and there was a time when it was doubtful if the international port would ever be completed.

In 1906 a floating fair ship the Rosetta Maru (3,875 tons), an enormous ship for that time, entered the port and brought sudden wide recognition of Nagoya's excellent facilities. Its official authorization as an open port came on November 10 of the following year.

Despite occasional disasters following the port's opening, the completion of facilities proceeded smoothly and the annual volume of cargo handled came to far exceed original estimates, reflecting the economic boom of the late 1910's.

Under such auspicious conditions, trade gradually increased during the 1920's and by 1926 Nagoya was one of the four major trading ports in Japan. In 1936, the annual number of ships entering the port exceeded 50,000; in 1937, cargo tonnage reached 8 million tons. Both figures were pre-war records.

However, as the war intensified in the 1940's, the port's function was drastically reduced. At the conclusion of the



1. The floating fair ship Rosetta Maru (3,875 tons) enters the port, opening up the Port of Nagoya to the world.

war in 1945, port facilities had for the most part been destroyed, not only by the ravages of war but also by the disastrous earthquakes in the Nagoya district the previous year.

## Post-war Reconstruction and the Establishment of the Nagoya Port Authority

Post-war reconstruction work proceeded very slowly but speeded up during the 1950's with the reopening of private foreign trade. Also, the volume of cargo grew rapidly as a result of the sudden outbreak of war in Korea.

The Port and Harbor Law, which the new post-war government modeled on Occidental port authority systems, was enacted and incorporated in the Nagoya Port Authority.

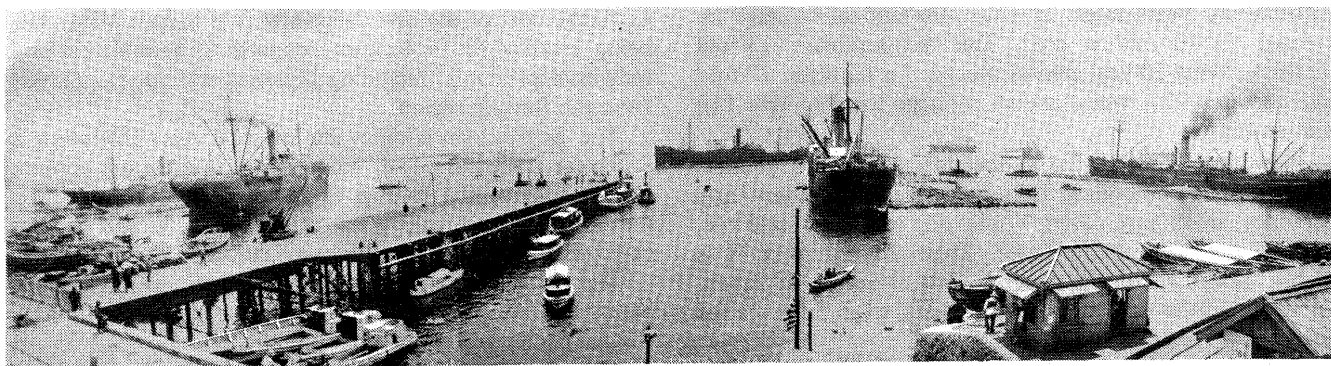
Until this time, Aichi prefecture had been responsible for the building and operation of the port, but when the Nagoya Port Authority was established on September 8, 1951, Nagoya city became a joint managing partner of the port with the prefecture. The Governor of Aichi and the Mayor of Nagoya were to serve alternate 2-year terms as President.

To coincide with the establishment of the new authority, the Port of Nagoya was designated as a "special major port" in the same year. Afterwards, the port's restoration and consolidation accelerated rapidly and by 1955 the pre-war cargo handling tonnage figure of 8 million tons had been reached again.

Following these advances, the first long-term port and harbor plan began in 1956 and the Inae Pier, a foreign trade pier equipped with all the latest facilities, was completed in 1957. This project was followed by many others designed to improve facilities at the port.

## The Great Ise Bay Typhoon and the Emergence of the Modern Port of Nagoya

At a time when trade was steadily increasing, an unexpected and unprecedented typhoon struck the Port of



## 2. The Port of Nagoya in the 1930's.

Nagoya on September 26, 1959. Called the Great Ise Bay Typhoon, its wind velocities of 50.2 meters per second and high tide levels of 5.31 meters devastated the port facilities and seriously damaged the city area behind. It left 4,700 people from the port area dead or missing, and, for several weeks following the disaster, the port was totally paralyzed. Nevertheless, immense efforts were devoted to immediate recovery work.

To aid in reconstruction, a project was carefully organized with the aim of modernizing the port. The main work consisted of developing new, large-scale industrial port facilities which could be added to the commercial port facilities already there. Construction of disaster prevention facilities became another central feature of the project.

The project, based on a long-term port and harbor plan effective 1961, virtually provided the framework for the present Port of Nagoya. Thus a misfortune was turned into a blessing. For disaster prevention, an 8 km breakwater to prevent high tides at the port's entrance and a 21 km tidal wall along the coastline were built.

Furthermore, the large, commercially-based Kinjo Pier was set up in the heart of the Port of Nagoya. On each of its sides, Coastal Industrial Zones (South and West) were established. After nearly 10 years, construction was finally completed in the early 1970's.

The Kinjo Pier serves as the overall commercial center and can moor 35 large ships at the same time. Landscaped and office building areas have been generously allocated in the center of the Kinjo and there is an International Exhibition Hall which also serves as a trade promotion center. Berths for container ships and large passenger liners are among the pier's facilities, and they meet the standards of any modern port today.

To achieve its goal of becoming a full-scale industrial port, the Port Authority has developed the South Coastal Industrial Zone as a heavy industrial area. Iron and steel, shipbuilding, petroleum, and electrical power industries are located there. On the other hand, the West Coastal Industrial Zone has become a center for light industry, and a lumber business complex with a special timber port has been built in its Center.

Facilities such as long-distance ferry terminals (three 10,000-ton berths), sea berths for large tankers (two 250,000-ton berths), and container terminals (two 35,000-ton berths) have also been completed. Almost any kind of vessel can now enter the port.



3. The main facilities of the Port of Nagoya in the 1950's—the completed Inae Pier and Inae Pier No. 2 under construction.



4. An overview of the Port of Nagoya today.

With the installation of such facilities the volume of cargo handled rapidly increased. When the Nagoya Port Authority was established in 1951, the annual cargo tonnage was only 5,300,000 tons; yet 10 years later, in 1961, it had expanded almost four times to 20 million tons.

Another 10 years later, in 1971, the annual tonnage increased to 70 million tons. This extraordinary 13-fold increase over a 20-year period preceded a fantastic 20-fold increase in 1979, when annual tonnage handled was 110 million tons.

Now, the export cargo at the Port of Nagoya consists mainly of automobiles, iron and steel, machinery and ceramics; in import cargo, crude oil, iron and steel ore, lumber and coal predominate. This cargo movement is highly indicative of the general trade structure of Japan. Of commodities traded in recent years, export figures for automobiles have been outstanding.

Today's Port of Nagoya can be considered basically complete. Apart from the addition of new facilities, the Port Authority will no doubt give attention in its future building to the replacement of obsolescent equipment and to measures for environmental conservation.

One of the main priorities of this port which has been built and developed to meet the demands of the local district residents will be to gain wider recognition from such organizations as the International Association of Ports and Harbors. Another important task in the Port's future will be to make contributions to the development of the surrounding district.

### **ADB approves \$53.8 million loan to Malaysia for Bintulu deepwater port project**

The Asian Development Bank recently approved a \$53.8 million loan to Malaysia to finance a part of the foreign

exchange cost of the first deepwater port in East Malaysia—being established to facilitate exports of agricultural and industrial products, including liquefied natural gas (LNG) from the Bintulu region.

The Bank's loan is repayable over 20 years (including a four-year grace period) at 7.6 per cent interest per annum. It will finance the foreign exchange cost of constructing outer and inner breakwaters, as well as LNG and general cargo wharves and of installing navigational aids in the port.

The total cost of the Project—which is located in Sarawak State—is estimated at \$227.4 million, including a foreign exchange cost of \$164.6 million.

The new Bintulu Port will serve a comparatively remote and economically less developed, but potentially rich region of Malaysia. With nearby agricultural and mineral resources, Bintulu is planned to be the focal point of a new regional growth center.

The development of the region is expected to require a total work force of about 13,000 people by 1995. The Bintulu Port Project itself will provide 1,600 jobs.

### **Port Khalid wins new Gulf ro-ro service**

Sharjah's Port Khalid in the UAE has won a new regular ro-ro service link from Japan.

The port's purpose-built ro-ro berth, 20-acre back-up area and round-the-clock operating cycle provides a total customer service which was instrumental in attracting a new monthly service by Japan's NYK Line. Port Khalid is the sole UAE call on the new service.



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Port Authority Managing Director. Mr. Phillip Forrest, commented: "Since opening in early 1978, Port Khalid's ro-ro berth has acquired a reputation for fast and efficient service and terminal support operations. This important new business from NYK is further evidence of our optimum location and capability as a receiving and transshipment centre for UAE and Gulf-bound vehicle shipments."

### A record amount of cargo and shipping during 1979: Gladstone

Councillor A.W. O'Rourke, M.B.E., the Board's Chairman, said that during the year, the total Cargo throughput amounted to 17.5 million tonnes, a 21% increase over the previous year. The mammoth tonnage is the largest ever handled by a Queensland Port in 12 months.

The record Tonnage was carried in 474 vessels; an increase of 76 over 1978.

Mr. O'Rourke said the 1980's would see greater growth in the Port than has occurred at any other time in its history. The Gladstone Harbour Board would ensure that development occurred in such a way as to provide the best use of the Port's enormous potential.

Apart from the requirement to provide Harbour Facilities for Industry, Mr. O'Rourke said one of the major undertakings of the 1980's would be the establishment of the new Boat Harbour Complex and Public Use areas within the bunded area adjacent to Auckland Inlet.

### PSA Training Course 1980

1. The Port of Singapore Authority (PSA) offers to share its experience in port management and operations through a number of training courses designed especially for participation by local and overseas personnel who are in the port and port-related industries. These courses provide a useful forum for participants from various countries to exchange ideas and experiences.
2. See chart below.
3. Methods of instruction include lectures, discussions and programmed visits to operational and administrative departments of the PSA and other institutions/organisations in the Republic. Training aids will be extensively used and participants will be provided with comprehensive lecture notes on subjects covered.
4. The medium of instruction is ENGLISH and participants are expected to have a good working knowledge of the English Language.
5. Should you have further enquiries regarding these courses, please write to:—

"MANAGER (TRAINING)  
TRAINING DEPARTMENT  
PORT OF SINGAPORE AUTHORITY  
P O BOX 300 MAXWELL ROAD  
SINGAPORE 9005

(Continued on next page bottom)

### 2 PSA Course Calendar 1980

COURSE TITLES	FEES S\$	DURATION IN WEEKS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b>PORT OPERATIONS COURSES</b>														
Training for Operations Instructors														
a) Winch/Deck Crane Instructors' Course	\$500	3			3-21									
b) Forktruck/Tractor Instructors' Course	\$500	3			24-11									
c) Mobile Crane Instructors' Course	\$350	2				14-2								
Ships' Lifting Systems	\$500	3				14-2					1-19			
Cargo Operations at Conventional Wharves	\$650	3					5-23				22-10			
Attachment Training at PSA's Conventional Wharves	\$450	2					26-6					13-24		
Planning & Operations of a Container Terminal	\$650	3										27-14		
Attachment Training at PSA's Container Terminal	\$450	2						9-20					17-28	
Winch/Deck Crane Operators' Course	\$600	3												
<b>MANAGEMENT &amp; ADMINISTRATION COURSES</b>														
Maintenance & Management of Port Equipment	\$450	2				21-2								
Supervisory Management	\$450	2						9-20						
Systems Analysis & Work Study	\$450	2							7-18					
Port Management & Operations	\$850	4									1-26			
Port Policing & Security	\$650	3											27-14	
<b>SAFETY COURSES</b>														
Ship Inspection	\$200	1				7-11					1-5			
Principles of Fire-Fighting	\$200	1				14-18					8-12			
Shipboard Fire-Fighting and Prevention	\$250	1				21-25					15-19			
Oil Spill Control	\$250	1				28-2					22-26			

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## VOICE — "I would like to know"

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### Answers by Mr. M.A. Mulholland, Manager Port Trade, Vancouver Port Authority to the Question 8001 (refer to Jan.-Feb. issue. 1980)

1. The Port Authority operates a number of bonded on-dock warehouses and terminal areas. Goods are not allowed to be removed from these facilities unless they have been cleared through customs. As the Port Authority issues arrival notices and collects ocean bills of lading and any charges against the goods, they are also in a position to control, with customs, the documents pertaining to release of the goods. In order to be removed from the terminal, the documents covering the goods must be stamped by the customs authorities as being cleared. The only other alternative is that the goods are separately manifested to be removed from the terminal in bond, to another bonded facility.

With respect to outward bound goods, in general there are no restrictions. The goods moving out over the terminal are generally of local manufacture and are, therefore, of little or no concern to the customs and can be brought onto the terminal for loading without any reference to customs. Occasionally, shipments from outside the country are brought onto the dock in bond, for subsequent shipment. These goods are reported to the customs authorities on the dock by the exporter and, in due course, are cleared, as far as customs documentation is concerned, outward, by reporting on the outward ship's customs manifest. This function would, of course, be handled by the shipping agent.

2. The period of free time allowed cargo on the terminals within the harbour is determined primarily by the Port

Authority, who establish an acceptable free time for the goods moving in each direction (five days on imported cargo, ten days on export cargo). The customs authorities have a separate arrangement covering the amount of time goods may remain in the in-transit facilities on the dock prior to clearance (30 days).

3. Manifests, covering goods arriving by vessel, are submitted by the shipping agent to the Port Authority a minimum of two days in advance of arrival. This is required for the preparation of the necessary arrival notices and cargo control documents. A copy of the arrival notice is filed by the shipping agent with the customs authorities immediately after the arrival of the vessel, and it is against this copy of the arrival notice that ultimate clearance of the goods is made.
4. The Port Authority does not become involved in the collection of duty on inward cargo. This is completely the responsibility of the customs. The only inter-action between the two parties in this connection is that the Port will not release goods for delivery from their terminals until they are satisfied that the necessary clearance has been arranged with customs. (See question 1).
5. The chief function on the docks of the customs authorities is that of inspection of cargo, appraisal of cargo, and dealing with the paper work necessary to control the movement of cargo. Customs obviously maintain a separate department for the inspection of vessels and crews, but other than in these areas, the customs have no involvement in port operations.
6. Attached are copies of the Port of Vancouver's operating by-law and regulations, together with copies of the more commonly used tariffs or by-laws covering charges assessed against both the vessels and cargo interests.

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### Port of Kobe to feature 180 day PORTOPIA '81 in commemoration of the completion of "Port Island"

Kobe City, which is the largest trade port in Japan, will soon see the completion of "Port Island", a sea-based town equipped with all the facilities necessary for urban life; it is the first of its kind in the world.

To commemorate the completion of this new town, the Kobe Port Island Exposition will be held for 180 days from March 20th, 1981.

This exposition, along with its main theme: Creation of a New "Cultural City on the sea", will be aimed at introducing this new port island to both Japanese and foreign people as well as contributing to the Japanese economy through enhancing the culture and planning rapid progress of economic conditions.

#### • Summary of PORTOPIA '81

Official Name: Kobe Port Island Exposition

Popular Name: "Portopia '81"

Sponsored by: Kobe Island Exposition Association

Supporting

Organization: Ministry of Foreign Affairs

Place and size: Port Island's International Square, South Park and Leisureland located at Minatojima Naka-machi, Ikuta-ku, Kobe, covering approximately 90 acres and a parking area of 35 acres.

Period: March 20th (Friday)

~ September 15th (Tuesday), 1981; for 180 days

Visitors: 4,500,000 people (Supposed attendance)

### Mr. Stanley Johnson appointed as European agent of Northland Harbour Board

The Northland Harbour Board, New Zealand, have appointed Mr. Stanley Johnson as their Agent in Europe. Mr. Johnson is a former Vice-President of I.A.P.H. and Managing Director of the British Transport Docks Board.



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