

# PORTS *and* HARBORS

June, 1978 Vol. 23, No. 6



Zeebrugge (Outerport)

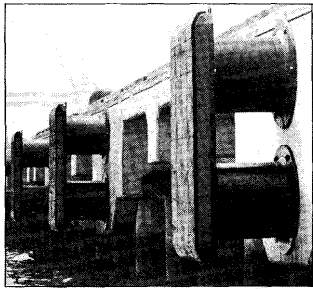
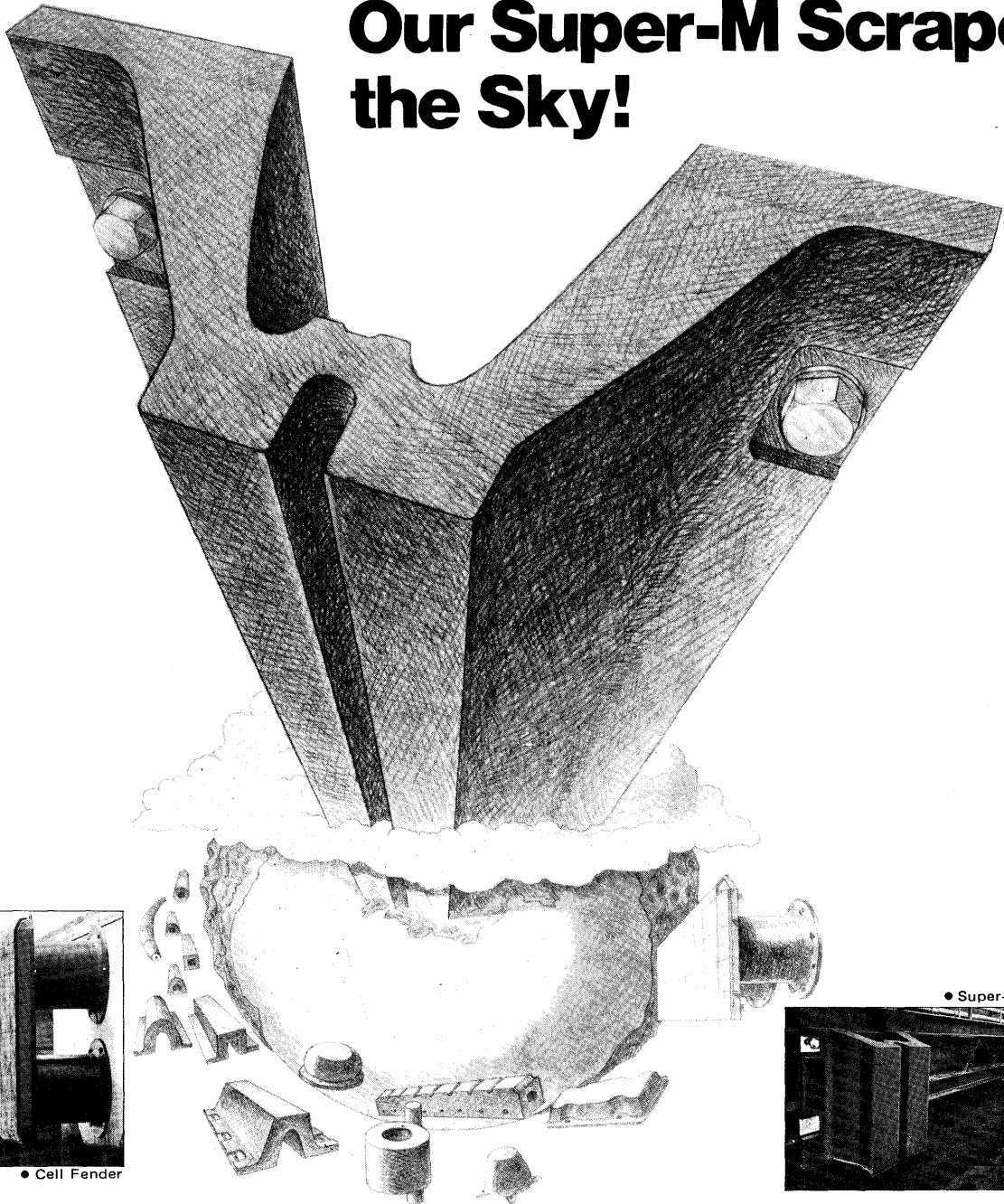
Belgium

## IAPH Conference Le Havre May 1979

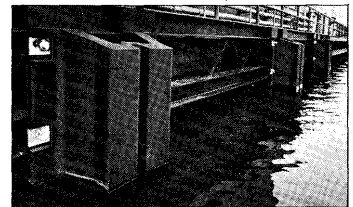
The Publisher: The International Association of Ports and Harbors

Kotohira-Kaikan Bldg. 2-8. Toranomon 1-chome, Minato-ku.  
Tokyo 105, Japan

# Our Super-M Scrapes the Sky!



● Cell Fender



● Super-M Fender

The new age of general cargo vessels demanding larger, and yet at the same time safer berthing, has brought forth the need for larger fenders. Our Super-M Fender is an answer to this need. It's excellent performance: high absorption of energy, low reaction force and wide application.

Since 1954, Bridgestone has developed many products responding to various conditions of use from the small Cylindrical Type to the world's biggest Cell Type, C3000H Marine Fender.

And now, Bridgestone introduces its Super-M Fender in its continuing efforts to keep the vessels and port facilities safer.

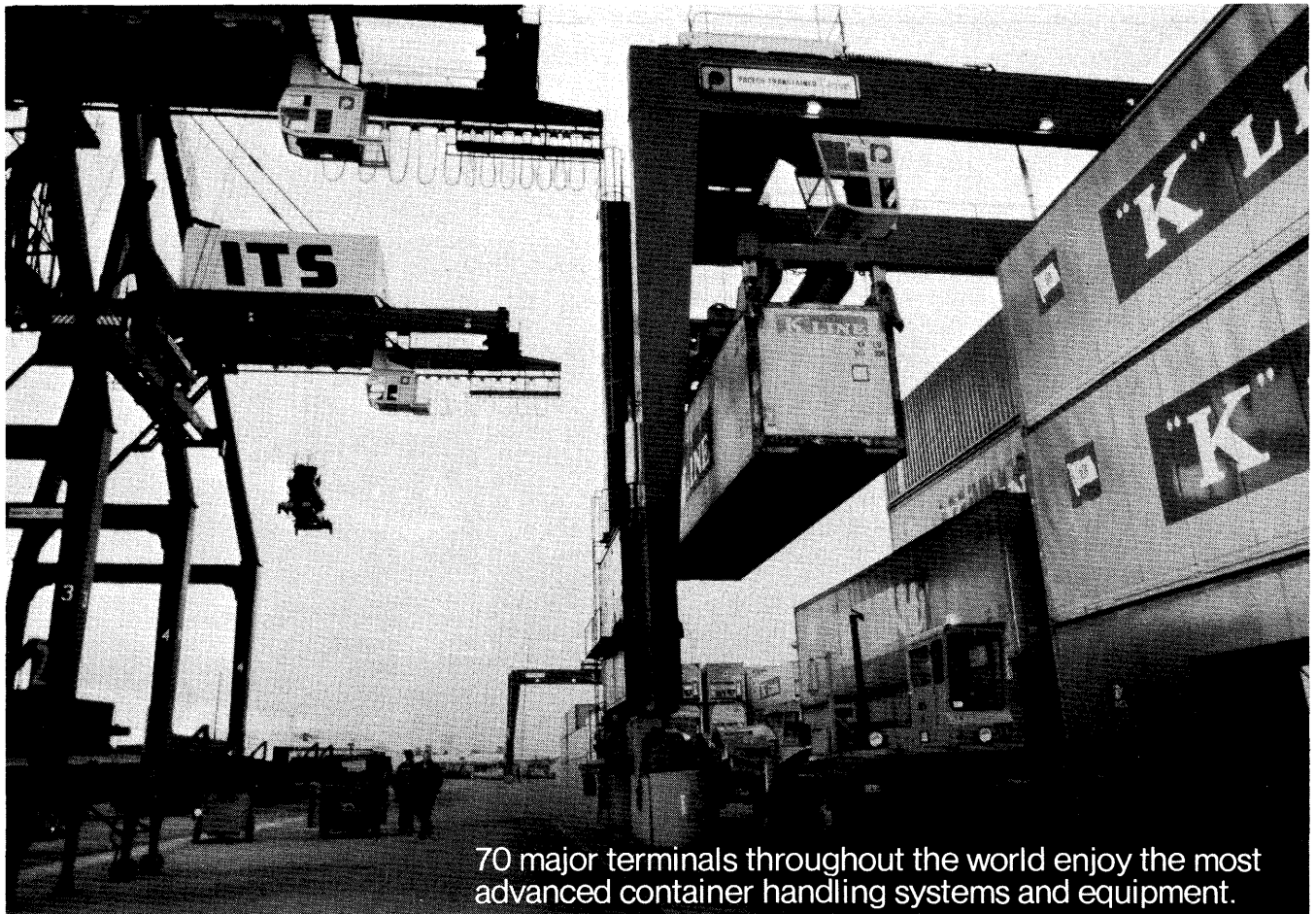
■ For further information, please write or call to our following office.

HEAD OFFICE Bridgestone Tire Co., Ltd.	No. 1, 1-chome, Kyobashi, Chuo-ku, Tokyo, Japan Tel: 567-0111 Cable: "BSTIRE TOKYO" Telex: J22217, J23207, J23227 BSTIRE
Bridgestone Tire Co., Ltd. Dublin Office	29, Eaton Square, Monkstown, Co. Dublin, Ireland Tel: 800213 Telex: 4733 BSEI Cable: BSTIRE DUBLIN
Bridgestone Tire Co., Ltd. Bahrain Office	Room 203, Sena Building, Bahrain Tel: 53799 EX.23 Telex: 8215 Kanoo GJ
Bridgestone Tire Co., Ltd. Singapore Branch	No. 2, Jurong Port Road, Jurong Town, Singapore, 22 Republic of Singapore (P. O. Box 2450 Singapore) Tel. 655875, 651777 Cable: BIESUTAIYA SINGAPORE Telex: 21386 BSTIRE RS 21-386
Bridgestone Tire Company of America, Inc.	2160W, 190th Street, Torrance, Calif. 90504, U.S.A. Tel: (213)320-6030, (213)775-8505 Telex: 0691372 Cable: LABSTIREL TRNC

■ BRIDGESTONE'S MARINE PRODUCTS

- Marine Fender    ● Oil Fence    ● Oil Skimmer
- Marine Hose    ● Sleeve-Joint Hose    ● Others

**BS BRIDGESTONE®**



70 major terminals throughout the world enjoy the most advanced container handling systems and equipment.

# EVERY YEAR MORE PORTS TURN TO PACECO TRANSTAINER® SYSTEMS -- Performance leaders since 1960.



Now there are more than 200 Transtainers in service. A rapidly increasing number of ports favor PACECO Rail-Mounted or Rubber-Tired Transtainer systems because:

- Up to 5 times more storage capacity
- Handling costs cut up to 80% over chassis or carrier equipment
- Exclusive features—including dual-lift spreaders
- Less container and trailer damage
- High reliability

- Minimum maintenance costs

Transtainer equipped ports are assured against obsolescence since only Transtainers are designed for automated service of the future. We call it MACH—Modular Automated Container Handling.

Contact PACECO or any licensee listed below for Transtainer details and delivery dates. If it's not built by PACECO or a PACECO licensee, it's not a TRANSTAINER.

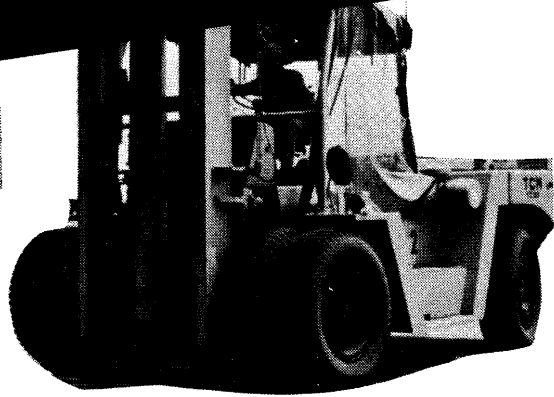
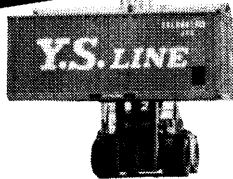


*The Only Manufacturer Offering A Complete Line Of Container Handling Systems And Equipment With World-Wide Sales And Service.*



Contact PACECO or the office nearest you. **Headquarters Office**—PACECO, Dept. 24-F, Alameda, CA 94501, (415) 522-6100, Telex 335-399 • **New York Representative**—ROBERT MOORE CORP., 350 Main St., Port Washington, N.Y. 11050 • **PACECO European Sales Office**—PACECO INTERNATIONAL LIMITED, London, Tel: 01-681-3031/4 • **PACECO Licensees:** **Australia**—VICKERS HOSKINS DIVISION, Perth. **Brazil**—MECHANICA PESADA S.A., Rio de Janeiro. **Canada**—DOMINION BRIDGE COMPANY LIMITED, Montreal. **France**—ATELIERS ET CHANTIERS DE BRETAGNE, Paris. **India**—BRAITHWAITE & CO., LIMITED, Calcutta. **Italy**—REGGIANE O.M.I. S.p.A., Reggio Emilia. **Japan**—MITSUI ENGINEERING & SHIPBUILDING CO., LTD., Tokyo. **Korea**—HYUNDAI INTERNATIONAL, INC., Seoul. **South Africa**—DORMAN LONG VANDERBIJL CORPORATION LIMITED, Johannesburg. **Spain**—FRUEHAUF S.A., Madrid. **United Kingdom**—VICKERS ENGINEERING GROUP LIMITED, South Marston, Swindon, Wiltshire.





# The Y.S. Line fleet is an active one.

Steady growth over 60 years has built an operational fleet of 170 vessels for Y.S. Line.

This diversified fleet has enabled us to reach new heights in service and experience, so today we can claim to have one of the world's finest shipping operations serving practically every need in ocean transportation.

- Containerships •Cargo Liners •Heavy Cargo Carriers •Tramps
- Lumber Carriers •Timber Carriers •Chip Carriers •Coal Carriers
- Ore Carriers •Automobile Carriers •Ore and Coal Carriers
- Ore and Oil Carriers •L.P.G. Carriers •Tankers



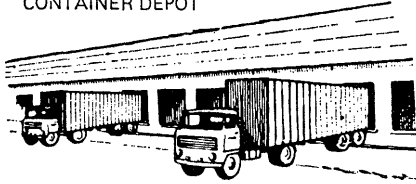
## **Y.S. LINE**

**YAMASHITA-SHINNIHON STEAMSHIP CO., LTD.**

**Head Office:** Palaceside Building, Tokyo Japan, Tel. (03) 282-7500

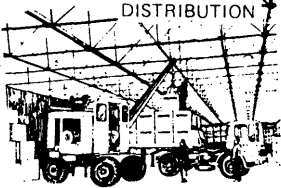
**Overseas Offices:** New York, San Francisco, Los Angeles, Seattle, Chicago, Vancouver, Toronto, London, Düsseldorf, Kuwait, Teheran, Sydney, Melbourne, Nakhodka and Hong Kong

CONTAINER DEPOT

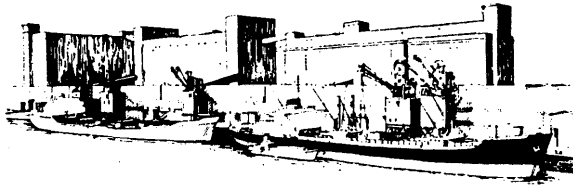


# CLYDEPORT

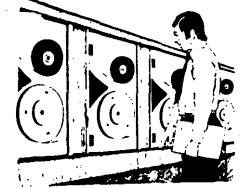
WAREHOUSING/  
DISTRIBUTION



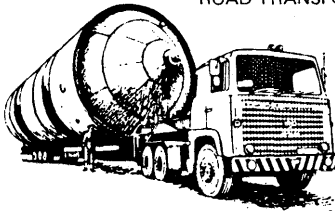
BULK TRAFFICS



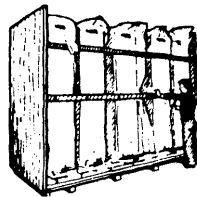
COMPUTER SERVICES



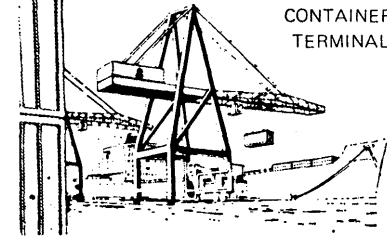
ROAD TRANSPORT



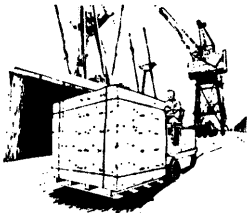
EXPORT PACKING



CONTAINER  
TERMINAL



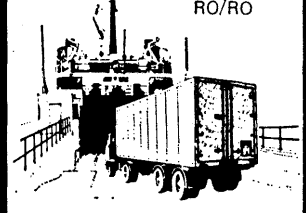
GENERAL CARGO



DEEP WATER



RO/RO



## steadily building its services to industry - on land and sea



Clydeport is not only a superb natural estuary with every modern quayside facility. It also offers a growing range of shore-based activities which provide a comprehensive transport and business service.

Marketing Department

**CLYDE PORT AUTHORITY**

16 Robertson Street, Glasgow G2 8DS, Scotland

Telephone 041-221 8733 Telex 778446

# Hitachi container terminals.

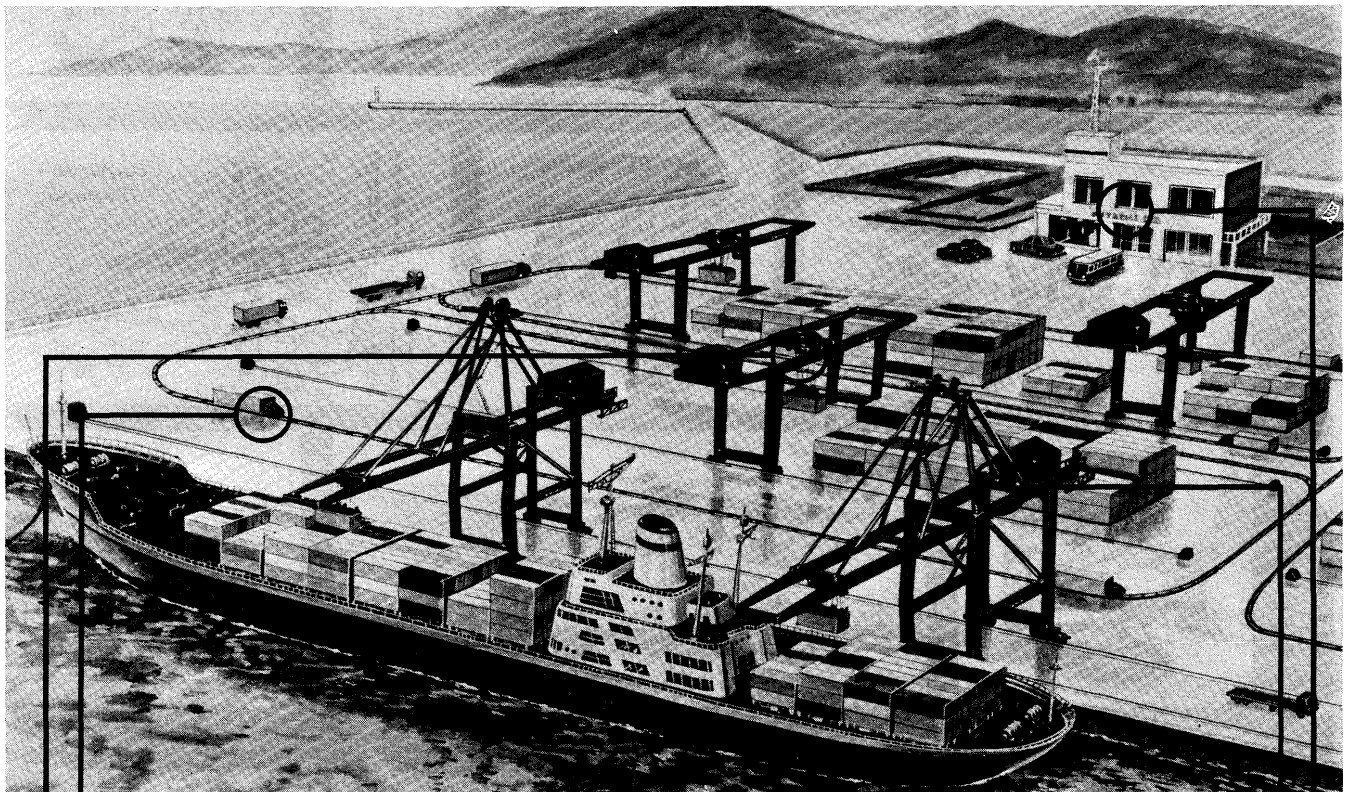
## Computer designed. Computer controlled.

### Efficiency oriented.

Computerization is the key to utmost container terminal efficiency. Hitachi achieves it. In design, with computer simulation analyses to develop the optimum layout and equipment capacities. In operation, with computer control of all terminal functions and equipment to minimize manpower requirements, speed handling and

increase accuracy.

Hitachi achieves container terminal efficiency like this through its experience as a leading maker of cranes and handling systems. Computers and computer systems. And electrical machinery and equipment. So we supply everything. And that's about as efficient a system as you can find.



#### Unmanned marshalling equipment

Intra-yard transport can be accomplished by automatically controlled linear motor cars in place of conventional chassis units or straddle carriers to reduce manpower requirements.

#### Completely automated yard cranes

Cranes are rail-mounted for easy positioning for gantry and trolley travel, and equipped with sensors on the spreaders to allow unmanned operation. Multi-stage stacking greatly improves stacking efficiency.

#### 60% increase in handling efficiency, container sway reduced to $\pm 5$ cm in 5 seconds

Quay cranes are equipped with Hitachi's exclusive Sway Stop System which dampens container sway to  $\pm 5$  cm in 5 seconds, a Memory System for high-speed cell guide positioning and an Independent Loading/Unloading System for ships and trucks which increases handling efficiency of container buffers by 60%.

#### Centralized computer control

Used to monitor and control all yard and equipment operations, prepare lists for ship loading and unloading, manage containers in the yard, and handle clerical operations for optimum terminal efficiency.



# PORTS *and* HARBORS

Editor: Yoshio Hayashi

Published monthly by

**The International Association of Ports and Harbors**

N.G.O. Consultative Status, United Nations (ECOSOC, UNCTAD, IMCO)

**President:**

**George W. Altvater**  
Executive Director  
Port of Houston Authority

**Executive Committee**

**Chairman:**

**George W. Altvater**  
President, IAPH

**Members:**

**A.S. Mayne**  
1st Vice-President, IAPH  
Chairman  
Melbourne Harbor Trust Commissioners

**Paul Bastard**  
2nd Vice-President, IAPH  
Director-General  
Bureau of Ports and Harbours  
Ministry of Equipment, France

**Anthony J. Tozzoli**  
3rd Vice-President  
Director of Marine Terminals  
The Port Authority of NY & NJ

**Howe Yoon Chong**  
Immediate Past President, IAPH  
Chairman/General Manager  
The Port of Singapore Authority

**Robert Boeuf**  
Ingenieur General des Ponts et  
Chaussees, France

**R.W. Carr**  
Chairman  
Auckland Harbour Board

**J.H.W. Cavey**  
Director of Ports  
Ministry of Transport, Canada

**Col. Charles R. Clark**  
Director, Transportation and Terminals  
Panama Canal Company

**J.P. Davidson**  
Dy. Chairman & Managing Director  
Clyde Port Authority  
U.K.

**Ir. J. den Toom**  
Managing Director  
Port Management of Amsterdam

**P.K. Kinyanjui**  
Chairman  
Kenya Harbours

**J.H. McJunkin**  
General Manager  
Port of Long Beach

**Fumio Kohmura**  
Executive Vice-President  
Nagoya Port Authority, Japan

**Parviz Saffari**  
Managing Director  
Ports & Shipping Organization, Iran

**Gengo Tsuboi**  
Vice-President  
The Japanese Shipowners' Association

**Alhaji B.M. Tukur**  
General Manager  
Nigerian Ports Authority

**J.M. Wallace**  
President, The Maritime Services  
Board of N.S.W., Australia

**W. Don Welch**  
Executive Director  
South Carolina State Ports  
Authority, U.S.A.

*Secretary General:* Dr. Hajime Sato

Head Office:

Kotohira-Kaikan Bldg.  
2-8, Toranomom 1-chome, Minato-ku  
Tokyo 105, Japan

Tel.: TOKYO (591) 4261

Cable: "IAPHCENTRAL TOKYO"

Telex: 2222516 IAPH J

**June, 1978 Vol. 23, No. 6**

## CONTENTS

	Page
<b>IAPH Head Office Announcements:</b> .....	7~13
Large Ships Committee Meets in Glasgow in May—ESCAP's Staff Service for Shipping & Ports 1978—Port Management Course to be organized in French at Antwerp, October-December, 1978—IMCO Publications—Visitor—Membership Notes—IMCO/ILO Guidelines for Cargo Packing in Freight Containers—Transport Policy of the European Communities.....	13
<b>Industrial Ports and Economic Transformations—4</b> (by Paul Hanappe and Michel Savy) .....	14
<b>Topics:</b>	
Com/Nav Equipment, Policy and Rules Subjects of 2nd Annual Event in N.Y. (MAPONY).....	26
A Fitting Celebration (From "Port of Melbourne Quarterly") .....	43
Tanker Rules in New Zealand Must Be Reviewed, Urges Mr. Lorimer (Auckland Harbour Board).....	45
<b>Ports:</b>	
Congress Urged to Appropriate A Sum for 3 Channel Improvements (The Port Authority of NY & NJ).....	27
Port of Dunkerque in the limelight.....	32
Heavy Load Traffic in Le Havre (Port of Le Havre Series No. 3).....	35
Bremen News.....	37
Port of Gothenburg Topics.....	39
Sharjahport, U.A.E.....	41
Ports Authority of Fiji .....	46
<b>Orbiter Probe (International News):</b> .....	21~48

**The Cover:** The Outer Port of Zeebrugge, Belgium. See photos on page 31 also.

Price US \$2.50 per copy  
US \$25.00 per year

**Port of**

**Kobe**



THE MOST ACTIVE PORT, KOBE

**PORT OF KOBE is**  
not only the place providing . . . . .  
**Highest Business Facilitation for the Users,**  
**Best Work-Environment for the Labor,**  
but also . . . . .  
**A Most Friendly Neighbor to Any of You,**  
giving the visitors quite at-home feeling  
and pleasant reminiscences !



**Port and Harbor Bureau, Kobe City Government**

Main Office: Port & Harbor Bureau  
Kobe City Government  
7, Kano-cho 6-chome, Ikuta-ku, Kobe, Japan  
(Cable Address) "JAPANGATE"  
(Phone) 078-331-8181

London Office: London Office  
Port of Kobe Authority  
7th Floor, D Section Plantation House  
31/35, Fenchurch Street  
London EC3M 3DX, United Kingdom  
(Phone) 01-623-5110



# PORTS *and* HARBORS

**IAPH Head Office Announcements :** Pages 7~13

## Large Ships Committee Meets in Glasgow in May

Following the first meeting held in New York last September, the second of the planned trio meetings of the Special Committee on Large Ships (COLS) will be called in Glasgow on May 16 through 18 at the Clyde Port Authority, U.K., according to a letter reached the Head Office recently from Mr. F.L. Dixon, Jr., Chairman of the Committee.

The third meeting will be held in Sydney on December 5 through 7, this year, and this will be the final meeting before the 11th Conference in Deauville in May of 1979. (TKD)

October	Tokyo	Seminar on Ship Management
October	Bangkok	Seminar on Port Management and Planning
30 Oct.—10 Nov.	Bangkok	Regional workshop: Exercises
7 November	Bangkok	SUCOP Advisory Group, 13th Meeting
14—22 Nov.	Bangkok	Committee on Shipping, and Transport and Communications

SSSP carries the following main items of maritime affairs in the region:

Port Development:	Management training seminars Impact of containerization and new technologies Port information systems Port congestion—solutions Port engineering, development Multimodal transport Shipping management—fleet development, Shippers' co-operation
Advisory services:	Freight study unit Shipping statistics Data and information services
Maritime policy:	Establishing of training centres Seminar programme on shippers' co-operation, fleet development and freight booking
Manpower development:	Senior management training seminars Technical assistance programmes Study programmes—vessel design and efficiency, river problems, planning efficiency
Inland Waterways:	Fleet capacity utilization Optimal shipping network Regional co-operation Review of shipping developments
Merchant marines:	Ship Users' Co-operation Project Development of shippers' councils Seminar programmes for shippers
Shippers' organization:	

For further details, please write to: SSSP, ESCAP, United Nations, Bangkok, Thailand. (rin)

## ESCAP's Staff Service for Shipping & Ports 1978

SSSP (Staff Service for Shipping & Ports) of ESCAP announced their calendar of meeting for 1978 as follows:

9—10 February	New Delhi	Presentation of Liner 1977
1 March	Bangkok	APCC/COCOTECH (participation)
3—8 April	Kuala Lumpur	Country-level workshop
7—8 April	Colombo	ANRPC Sixth Assembly
17—21 May	Manila	FASC Annual Meeting (participation)
23—26 May	Singapore	Country-level workshop
29 May—3 June	Suva	Subregional workshop
6—7 June	Bangkok	Second Meeting of Chief Executive
8 June	Bangkok	Consultation between Regional Shippers and Shipowners
9 June	Bangkok	First Meeting of Shipowners' Association
12 June	Bangkok	SUCOP Advisory Group, 12th Meeting
14—30 June	Gothenburg	Participation in UNCTAD follow-up Seminar on Training Courses in Port Management
19—24 June	Bangkok	Intergovernmental Consultative Meeting on the Multimodal Transport Management
15—25 August	Karachi	Country-level workshop
28 Aug.—8 Sept.	Bangkok	Regional workshop: Negotiations
2—13 October	Dacca	Country-level workshop

**The July-August shall be a combined issue to be published on the 20th of July, 1978—Head Office.**

## Port Management Course to be organized in French at Antwerp, October-December, 1978

A 10-week Training Course for Port Management in French will be organized at Antwerp for the period from October 2nd till December 10th, this year, according to the latest information from Mr. L.M. Vleugels, Director-General of the Port, City of Antwerp.

The organizer, Antwerp Port Engineering and Consulting (APEC), has recently been established as a non-profit body with the purpose of assisting developing countries.

While the course with English as vehicular language is planned for the spring of 1979, the first course will be for those from the French-speaking zone in answer to a need which was felt for many years, says the organizer.

A pamphlet on the details of the course in French "Programme de formation a la gestion et a l'organisation portuaire a Anvers (belgique) will be available by writing to:

A.P.E.C. vzw Antwerp Port Engineering and Consulting  
Brouwersvliet 33, 2000 Anvers (belgique) (TKD)

## IMCO Publications

### 1. Standard Marine Navigational Vocabulary

(44 pages) (English only)

As reported in the June 1974 issue, the vocabulary is designed to assist in the greater safety of navigation and conduct of ships and to standardize the language used in communication for navigation at sea, in port-approaches, in waterways and harbours. It is not intended that use of the vocabulary shall be mandatory, but rather through constant repetition in ships and in training establishments ashore, that the phrases and terms used will become normally accepted and commonplace among seamen and port-men. (Price: £1.50 per copy)

### 2. International Convention for Safe Containers

(23 pages) (English only)

The Convention formalizes structural requirements to ensure safety in the handling, stacking and transporting of containers in the course of normal operations. (Price: £1.25 per copy)

### 3. International Conference on Safety of Fishing Vessels

1977 (204 pages) (English, French or Spanish)

The Conference establishes in common agreement uniform principles and rules concerning the construction and equipment of fishing vessels directed to the safety and their crews, recognizing that fishing vessels are exempt from almost all the requirements of the international conventions relative to safety and safe conduct, including the International Conventions for the Safety of Life at Sea and also the International Conventions on Load Lines in Promoting the Safety of Ships. (Price: £3.25 per copy)

The above publications will be obtainable by writing, together with the relevant amount of costs, to the IMCO Secretariat, Publications Section, 101-104, Piccadilly, London W1V OAE, England. (rin)

## Visitor

Mr. Robin Crawshaw, Managing Director, Sharjah Port Authority, United Arab Emirates (UAE) visited IAPH Head Office on April 6th.

He was on business tour, meeting Japanese shipowners

and inducing their lines to Sharjah.

Sharjah has two seaports, Khalid on the Gulf and Khor Fakkan on the Indian Ocean, which, he stresses, constitute ideal transshipment points to service for the whole Gulf region.

Port Khalid, opened in August 1976, now has extensive facilities for handling almost every kind of cargo, he explained. The seven berths for container cargoes with a total length of 363 meters have two 30-ton gantry cranes and are supported by a 35-acre storage area and LCL facilities adjacent to the quay. The four berths for conventional freighters have a total length of 720 meters and the ro/ro berth extends 235 meters in length.

Port Khor Fakkan on the Indian Ocean is scheduled to open in July 1978 and is designed as a specialist transshipment container terminal serving the Gulf.

Mr. Crawshaw attended the 10th Conference in Houston last April and his Port Authority is expected to join IAPH to be the second Regular member of the Association from UAE following Mina Zayed, Abu Dhabi. (TKD)

## Membership Notes:

### New Members

### Regular Members

Port of Launceston Authority  
P.O. Box 257C, Launceston  
Tasmania 7250, Australia  
Office Phone: 003-31. 7144  
Telex. AA 58730  
Cable: PORT LAUN  
(Mr. J.K. Edwards, General Manager)  
Gladstone Harbour Board  
P.O. Box 259, Gladstone  
Queensland, Australia 4680  
Office Phone: 72.2011  
(Mr. B.J. Jordan, Secretary)

### Obituary

Colonel Howard W. Quinn, Life Supporting Member, passed away in Washington D.C. and his funeral service was announced to be held on April 28, 1978, according to the telex information received from the office of President Altwater, Houston on April 27th.

Colonel Quinn, the then Executive Director, Port of Callao Authority, Peru, was one of the 126 participants to the first IAPH conference in Los Angeles, November, 1955 and since then he has contributed greatly to the development of the Association.

# IMCO/ILO Guidelines for Cargo Packing in Freight Containers

*A comprehensive guideline was issued for the widest possible distribution by IMCO recently on Safe Handling of Goods in Packing into Freight Containers as useful aid for training personnel (IMCO Document No. MSC XXXVIII/8/1).*

*IMCO Sub-Committees on Containers and Cargoes and the Carriage of Dangerous Goods have approved the text based on the draft provided by the secretariat, taking into account comments and suggestions made by ILO.*

*The guidelines furnish the "Container Ports" with useful advice under 5 sub-heads, including "Advice on Stowage Planning", "Special Advice on Dangerous Goods" and others.*

*Complying with the request of the Sub-Committee, this office introduces hereunder the full text of the guidelines. (D.S.G.)*

## INTRODUCTION

Whilst the use of freight containers substantially reduces the physically hazard to which goods are exposed, improper or careless loading of goods into a container may be the cause of personal injury when the container is handled or transported; in addition serious and costly damage may occur to the goods inside or to equipment. The person who packs and secures goods into the container for export may be the last person to look inside the container until it is opened by the consignee at its final destination. Consequently, a great many persons will rely on his skill; road vehicle drivers and other highway users when the container is carried by road, railway personnel and others when the container is carried on a rail-car, dock workers when the container is lifted on or off a ship, and crew members of the ship which may be taking the container through its most difficult conditions; as well as shippers and consignees etc. All may be at risk from a poorly packed container, in particular, one which is carrying dangerous goods.

## Scope

This publication is intended as a short guide to the essentials of safe packing for use as a training aid by those responsible for the packing and securing of cargo in freight containers. It is not intended to cover the filling or emptying of bulk containers or portable tanks, or the transport of bulk cargo in dry freight containers. Nor is it intended to replace or supercede any existing regulations or recommendations which may be in effect concerning the carriage of cargo in containers, in particular, those which may relate to the carriage of dangerous goods. The users of these guidelines are advised to consult their national administrations for detailed advice concerning the shipment of dangerous goods. Also it is recommended to consult the transport operator concerning the packing and securing of particularly bulky or heavy goods and the use of special purpose containers (e.g. tank containers, refrigerated containers etc.).

For the purpose of these guidelines a freight container is defined as an article of transport equipment that is of permanent character and accordingly strong enough to be suitable for repeated use. It is designed to transport a

number of packages or cargo units together from the loading point to the destination by road, rail and sea without intermediate separate handling of each package or unit.

## 1. VISUAL EXAMINATION OF THE CONTAINER

### INTRODUCTION

The international transport of containers usually includes a sea voyage of varying length and severity. Consequently, a combination of forces are exerted on the cargo and container which are not found in either road or rail transport. A ship at sea may move in six different directions (heave, yaw, sway, pitch, surge and roll) ensuring that the container will move up and down, side to side, and forward and backward during the course of its journey. Cargo should be packed and secured in a container with this in mind.

The container should be inspected both inside and out before it is loaded with cargo. Containers that are damaged may pose a safety risk to personnel handling or transporting them. If a container appears to be severely damaged the container operator should be contacted with a view to obtaining a replacement. The following checklist may be used as a guide to inspecting the container before loading cargo:

### 1.1 Interior

- 1.1.1 The container should be free from major damage or broken floor planks or protruding nails that can damage the cargo.
- 1.1.2 The container should be clean, dry and free of residue and persistent odours from previous cargoes.
- 1.1.3 The container should be weatherproof (unless it is so constructed that this is obviously not required—e.g. flats). The risk of water leaking into the container may be checked by entering the container, closing the doors and seeing if any light comes through. In particular, previous patches or repairs should be checked for possible leakage. If this type of check is carried out care should be taken to ensure that a person does not inadvertently become locked inside.
- 1.1.4 Ventilation openings, if fitted, should be securely closed unless specifically instructed otherwise.
- 1.1.5 Cargo tie-down cleats or rings where provided should be in good condition and well anchored.
- 1.1.6 Folding containers or other containers with moveable or removeable main components should be correctly assembled. Care should be taken to ensure that removable parts not in use are packed and secured inside the container.

### 1.2 Exterior

- 1.2.1 The doors of the container should be checked to see that they work properly and can be securely locked and sealed. Door gaskets and weather strips should be checked to see that they seal tightly upon closing the doors.
- 1.2.2 The corner fittings usually on both the top and bottom of the container are extremely important for the safe handling and transport of the container. They should be free of damage and there should be

no visible cracks at the hole.

- 1.2.3 It is important that the walls, floor and roof are in good condition, intact and not distorted.
- 1.2.4 The structural strength of the container depends to a great extent on the metal bottom and top rails and vertical posts which form the frame of the container. If they are bent this may be evidence that the container is severely weakened and should not be used.

## 2. ADVICE ON THE STOWAGE PLANNING, PACKING AND SECURING OF GOODS IN CONTAINERS

### 2.1 Before Packing

- 2.1.1 When a container on a vehicle is manoeuvred up to a loading dock or bay the vehicle's brakes should be applied or wheels chocked before loading of the container begins. If a container on a semi-trailer is positioned at a loading bay and the tractor unit is removed the trailer may become unstable and pivot about the trailer landing legs during the loading process, particularly if a fork lift truck is used inside the container. In such circumstances, a suitable prop should be positioned under the fifth wheel plate of the trailer.
- 2.1.2 The full stowage of a whole container should be considered before packing begins and cargo packages of an appropriate strength and type selected to be placed adjacent to each other so as to gain the desired tightness of stow and compatibility between items so far as is practicable.
- 2.1.3 The planned load of the container should not exceed the container's weight capacity which is usually marked on the container. In addition the relevant highway or road axle weight limitations in both country of loading and unloading should not be exceeded. In addition, the relevant highway or road axle weight limitations in country of loading, destination or transit should not be exceeded.
- 2.1.4 When cargo comprises heavy units it may be necessary to spread their weight over the container floor using timber, steel plates or other arrangements. In this regard the size of the bearing area upon which the weight presses against the floor in relation to the design strength of the container is the most important factor.
- 2.1.5 Unboxed machinery should be belted on a skid made of sound timbers so that the lower members extend lengthwise in the container so as to distribute the weight.
- 2.1.6 Particular care should be taken when securing heavy units within a container to prevent their movement. Battens nailed to the wood floor (where fitted), securing against corner post or longitudinal rails, lashings to the built-in securing points or combination of any of these should be used to ensure proper securing of the cargo.

### 2.2 Packing and Securing

- 2.2.1 It is essential to make the cargo in the container secure against movement from any reasonable cause and therefore all cargo should be blocked tightly against adjacent goods or surfaces.
- 2.2.2 In the first instance it is best to obtain a tight stow by using the cargo itself and bulding with a reasonable solidity from side-wall to side-wall. This may

mean some space has to be left but each item should be in contact with some part or other. If this cannot be the case intervening spaces should be filled with appropriate dunnage material, e.g. timber, folded cardboard, hardboard, air bags etc. Where timber is used, due account should be taken of any quarantine regulations applying in the country of destination.

- 2.2.3 Cargo weight should be evenly distributed over the floor of the container. Where the cargo items of varying weight are to be packed into a container or where the container will not be full (either because of insufficient cargo or because the maximum weight allowed will be reached before the container is full) then the stow should be arranged and secured so that the approximate centre of the weight of the cargo is close to the mid-length of the container. In no case should more than 60% of the load be in less than half of the length of the container.
- 2.2.4 Heavy goods should not be placed on top of lighter goods; where possible the centre of gravity should be below the half height.
- 2.2.5 Stowing of incompatible goods in the container should be avoided. For example, dust producing goods such as cement should not be stowed next to or on top of goods which are susceptible to damage by dust, e.g. foodstuffs or fine machinery. Goods with sharp projections or unusual shapes should be stowed apart from other types of packages, particularly bags. If possible, separation timber should be used to avoid damage.
- 2.2.6 Barrels and drums should usually be packed with bungs uppermost. Proper stowage for barrels is on their side, laid on battens with bilge free and each securely quoined. Vented packages should be packed so that the vent is in no way blocked.
- 2.2.7 In order to avoid cargo damage from condensation, wet cargoes, moisture inherent cargoes, or cargoes liable to leak must not be loaded with goods susceptible to damage by moisture. Wet dunnage, pallets or wet packaging should not be used.
- 2.2.8 Damaged packages should not be loaded into a container unless there is clear evidence that the contents will not be spilled or leaked.
- 2.2.9 Permanent securing equipment incorporated in the design of the container should be used wherever necessary to obtain tight stowage and prevent cargo movement.

### 2.3 On Completion of Packing

After the packing of the container is completed, steps should be taken to ensure that the cargo will not fall out when the doors are open. Suitably positioned lashing points and wire rope or strapping bands should be used to weave a restraining net across the face of the cargo or a gate should be positioned to prevent direct pressure on the door. Where medium sized packages are concerned care should be taken to interweave the cargo itself so as effectively to build a wall and so reduce the need for a reliance upon lashings or nets alone.

- 2.3.1 If goods are packed in wooden receptacles or wood is used for securing purposes and the goods are destined for Australia, New Zealand or other countries with wood treatment quarantine regulations it has proved a useful practice to place a copy of the wood



treatment certificate in a conspicuous place in the container.

### 3. SPECIAL ADVICE ON THE PACKING, STOWAGE AND SECURING OF DANGEROUS GOODS IN CONTAINERS

#### INTRODUCTION

Proper packing of cargo into a container is important; it is essential when the cargo consists of dangerous goods.

The recommendations of this section apply to containers in which dangerous goods are packed. They should be observed in addition to the general advice on the packing of goods in containers applicable to all types of cargoes.

“Section 12 of the International Maritime Dangerous Goods (IMDG) Code<sup>1</sup> particularly refers to the use of containers for carrying Dangerous Goods and must be strictly complied with. It may also be necessary to comply with national or other regulations.”

Certain dry dangerous goods in bulk may be carried in containers specially approved for this purpose by the competent authorities.

Dangerous goods are divided into the following classes according to their hazard:

#### – Classification

Dangerous goods are divided into the following classes:

Class 1 – Explosives.

Class 2 – Gases: compressed, liquefied or dissolved under pressure.

Class 3 – Inflammable<sup>2</sup> liquids.

Class 4.1 – Inflammable solids.

Class 4.2 – Substances liable to spontaneous combustion.

Class 4.3 – Substances emitting inflammable gases when wet.

Class 5.1 – Oxidizing substances.

Class 5.2 – Organic peroxides.

Class 6.1 – Poisonous (toxic) substances.

Class 6.2 – Infectious substances.

Class 7 – Radioactive substances.

Class 8 – Corrosives.

Class 9 – Miscellaneous dangerous substances, that is, any other substance which experience has shown or may show to be of such a dangerous character that the provisions of the other Classes do not apply to it.

<sup>1</sup> Published by the Inter-Governmental Maritime Consultative Organization (IMCO)

101-104 Piccadilly,  
London, W1V OAE

<sup>2</sup> “Inflammable” has the same meaning as “flammable”.

#### 3.1 Before Packing

3.1.1 Containers into which dangerous goods are to be packed should be examined visually for damage and if there is evidence of material damage the container should not be packed. Containers should be clean, dry and fit for use. Irrelevant dangerous goods labels should be removed or masked over before packing begins.

3.1.2 Information should be provided by the shipper about the hazardous properties of the dangerous goods to be handled. The shipper should also ensure that dangerous goods are packaged, marked and labelled in accordance with the IMDG Code. Dangerous goods should not be handled unless packaged, marked and labelled in accordance with these regulations.

3.1.3 Dangerous goods should only be handled, packed and secured under direct and identifiable supervision of a responsible person who is familiar with the risks involved and knows which emergency measure should be taken. He should also ensure that any necessary protective equipment is available.

3.1.4 Smoking should be prohibited while work is going on.

3.1.5 Suitable fire precaution measures should be taken.

3.1.6 Packages should be examined and any found to be damaged, leaking or sifting should not be packed into a container. Packages showing evidence of staining etc. should not be packed into a container without first determining that it is safe and acceptable to do so. Water, snow, ice or other matter adhering to packages should be removed before packing into a container.

3.1.7 If goods are palletized or otherwise unitized they should be compact and secured in a manner unlikely to damage the individual packages comprising the unit load. The materials used to band the unit load together should be compatible with the substances unitized and retain their efficiency when exposed to moisture, extremes of temperature and sunlight.

3.1.8 Where dangerous goods are packed in temperature controlled containers, the power supply and the machinery must be of a type unlikely to cause hazard to the goods or adjacent containers.

3.1.9 A container intended to carry dangerous goods under temperature control should be inspected and operated to ensure that the machinery is in proper working order before the shipment is made. A record of the inspection should be made.

#### 3.2 Packing and Securing

Special care should be taken during handling to ensure that the packages or receptacles are not damaged.

3.2.1 If a package containing dangerous goods is damaged during handling so that the contents leak out, the immediate area should be evacuated until the hazard potential can be assessed. The damaged package should not be transported.

3.2.2 If leakage from dangerous goods results in the risk of explosion, spontaneous combustion, poisoning or similar danger, personnel should immediately be moved to a safe place and the emergency response organization (e.g. the fire service) be notified.

3.2.3 Where Class 4.3 substances, i.e. substances emitting inflammable gases when wet, are to be packed in a container, the possibility that the container could suffer from heavy condensation on the internal surfaces should be kept in mind. The degree of such condensation is dependent upon the amount of moisture contained within the closed container and on the temperature differences experienced during transport. The risk is minimized if the moisture content of the packaging and securing material (e.g. dunnage) is kept low.

3.2.4 Dangerous goods should not be packed in the same container with incompatible substances. Guidance of both a general and particular nature on this matter may be found in the IMDG Code.

3.2.5 It is also possible that in some instances goods of the same class should not be packed into the same container as they are incompatible. For example, Peroxides and Permanganates are both oxidizing

agents (Class 5.1). However, they may interact dangerously in the event of an accident.

- 3.2.6 Dangerous goods which may cause damage by taint, odour or contamination to other products should not be packed in the same container as goods susceptible to such damage.
- 3.2.7 When dangerous goods in Class 6.1 (Poisons) and Class 8 (Corrosives) are handled, consumption of any form of food or drink should be prohibited.
- 3.2.8 Special packing instructions detailed on individual packages or otherwise available must be strictly observed, e.g.  
Goods marked "protect from frost" should be stowed away from the walls of the container.  
Goods marked "this way up" should be packed accordingly.  
When a dangerous goods consignment forms only part of the load of a container, it should preferably be packed so as to be accessible from the doors of the container.

#### 4. ON COMPLETION OF PACKING OF DANGEROUS GOODS

##### 4.1 Marking and Labelling of the Container

- 4.1.1 The containers should be sealed prior to dispatch. However, they should not be locked, unless specifically required and agreed to by the container operator. In such cases a key should be readily available at all times.
- 4.1.2 Containers in which dangerous goods are packed should bear IMCO Dangerous Goods Code class labels (placards) not less than 250 mm by 250 mm in size<sup>3</sup>.

<sup>3</sup> Will include IMCO dangerous goods labels in final publication.

Except where not required by the IMDG Code there should be at least four such labels (placards) placed externally in conspicuous places, one on each side and one on each end. Labels for the sides of the container should be affixed in such a position that they are not obscured when the container doors are opened.

- 4.1.3 It is preferable that the container should also bear externally the correct technical name of each of the dangerous substances packed therein.
- 4.1.4 Additional labels may be required by rail and road transport authorities.

##### 4.2 Packing Certificates

Those responsible for the packing of the dangerous goods into a container should provide a "Container Packing Certificate" certifying that this has been properly carried out and embodying the following provisions:

- 4.2.1 That the container was clean, dry and apparently fit to receive the goods.
- 4.2.2 No incompatible goods have been packed in the container.
- 4.2.3 All packages have been externally inspected for damage and only dry, sound packages packed.
- 4.2.4 All packages have been properly packed in the container and secured and suitable securing material used.
- 4.2.5 The container and packages are properly marked and labelled.
- 4.2.6 The dangerous goods in the container are those for which acceptance has been specifically obtained with

the shipment in question.

- 4.2.7 The consignor of the dangerous goods has in each case issued a dangerous goods declaration as to the nature of the hazard and that the goods are suitably packaged for transport by sea.
- 4.2.8 The Container Packing Certificate should be forwarded with the container to be available at time of loading on board ship.

#### 5. GENERAL ADVICE ON RECEIPT OF CONTAINERS CONTAINING DANGEROUS GOODS

Containers containing dangerous goods should be unpacked with care, always bearing in mind that the cargo may have been damaged in transit. Before the doors are opened this possibility should be borne in mind in relation to the properties of the cargo. For example, depending on the contents of the container, there may exist the possibility that leakage has caused an unsafe concentration of toxic, inflammable or explosive vapour, or to have produced an oxygen enriched (or depleted) atmosphere. If there is evidence that damage has occurred and such a condition exists, expert advice must be sought before commencing to unpack the container.

- 5.1 Any container which carries dangerous cargo, particularly toxic products, should be ventilated before unpacking commences, that is, the door should be left open for a short period.
- 5.2 After a container containing dangerous goods has been unpacked particular care must be taken to ensure that no hazard remains. This may entail special cleaning, particularly if toxic spillage has occurred or is suspected. When satisfied that a container offers no hazard, the dangerous goods labels should be removed.
- 5.3 If any container shows signs of heat it should be removed to a safe place and fire services immediately notified. Care should be taken to see that any fire fighting methods to be used are suitable for the cargo in question.
- 5.4 Attention is drawn to the fact that the consignee is normally obliged to return the container, after discharging, clean and suitable for the transport of every kind of cargo. This applies especially when poisonous, dangerous or obnoxious cargo has been transported.

---

#### (Turned back from page 13)

##### (ii) inland waterways:

- a proposal for the setting-up at Community level of a European Laying-up Fund for Inland Waterway Vessels.

It will transmit the following proposals during the second half of the year:

##### (i) operation of the surface transport market:

- a proposal on the monitoring of road haulage capacity,
- a proposal on serious disturbances of the market,
- proposals to promote combined transport (for example, road and rail) at Community level;

##### (ii) shipping:

- a proposal concerning competition from State-trading countries.

# Transport Policy of the European Communities

Hereunder are extractions in part of the Transport Policy of the European Communities relevant to the inland waterway and sea transport matters from "Eleventh General Report on the Activities of the European Communities in 1977" and "Programme of the Commission for 1978". These publication will be obtained on application, with the relevant amount of costs, at Office for Official Publications of the European Communities, Boile postale 1003-Luxembourg.

1. *Eleventh General Report on the Activities of the European Communities in 1977. (English (336 pages), Danish, German, French, Italian, Dutch)*

Catalogue number: CB-22-77-734-EN-C

Price: US \$ 5.60

2. *Programme of the Commission for 1978. (English (56 pages), Danish, German, French, Italian, Dutch)*

Catalogue number: CB-24-77-253-EN-C

Price: US \$ 1.80

(D.S.G.)

## I. Activities in 1977

### 1. Main development

In 1977 the Commission continued to draft and present proposals on the main areas covered by the common transport policy. The Council adopted a number of measures representing real progress in transport policy, and saw its way to taking many more decisions in transport matters, both on Community legislation and on external relations.

In June the Ministers of Transport discussed the Community's transport objectives and priorities, and the Commission followed this up on 28 November with a communication to the Council on a programme of priority actions for the period 1978-80. The programme includes measures for the gradual introduction, during the second phase, of a Community infrastructure network, and for ensuring that services in the Community's transport markets are flexibly adjusted to meet users' requirements, at the least cost to the taxpayer. One of the main objectives of the programme is to improve the economic situation of the Community's railways. It follows that the role of transport of every kind—land, sea and air—in relations between the Community and its neighbours and at the level of international organizations will become an increasingly important and demanding feature of Community action.

In 1977 there was an increase in transport policy measures in respect of relations with non-member countries. There are regular exchanges of information with non-Community government shipping experts and shipping industries including those of Norway and Sweden. The Commission is negotiating an international agreement on the laying-up of inland waterway vessels with Switzerland.

Parliament, exercising its right to initiate action, adopted inter alia an Opinion on a survey of shipping problems in the Community.

### 2. Achievements (Organization of the surface transport market)

In line with its communication of 1973 on the develop-

ment of the common transport policy and following its first proposals on the operation of the surface goods transport market within the Community, the Commission has drawn up a second set of measures covering in particular the freedom to provide transport services and the control of capacity. The Commission intends to send the Council various proposals on these matters in the course of 1978.

On April the Commission sent the Council a document amending its three proposals on reference tariffs (road, rail and inland waterway) to take into consideration the observations made by Parliament and the Economic and Social Committee.

Access to the inland waterway transport market: on December the Council stated that it agreed in principle to the decision amending the directives authorizing negotiation with Switzerland of an Agreement establishing a European Lying-up Fund for Inland Waterway Vessels. The amendment is required to meet the points made in the Opinion delivered by the Court of Justice in July as regards compatibility between the original draft Agreement and the rules laid down in the Treaty.

### 3. Sea transport: ports

On September the Council adopted a Decision setting up a consultation procedure on relations between Member States and third countries in shipping matters and on action relating to such matters in international organizations. The first consultations have taken place.

In December the Commission sent the Council a proposal for a Regulation in respect of accession to the United Nations Convention on a Code of Conduct for Liner Conferences. The aim of the proposal is to avoid discrimination for reasons of nationality between the shipping lines of the Member States and, within the OECD, to maintain the principle of sharing cargoes among members of the liner conferences.

Shipping matters were discussed for the first time in December in the regular high-level talks between the Commission and the American and Japanese Governments.

In June the representatives of the major ports approved the report on the current situation of the major ports of the Community. They also examined a Commission staff paper on the current situation as regards traffic links between the ports and their hinterlands. The working group was instructed to produce a further study dealing inter alia with possible measures to be taken in the ports sector.

## II. Activity Programme for 1978 Transport Policy

Under the priority action programme for 1978-80, the Commission will press for the adoption of the proposals pending on infrastructures, the operation of the transport market and relations with non-member countries.

The Commission will present the following proposals during the first half of the year:

(i) harmonization of conditions of competition:

- an amended proposal on the weights and dimensions of commercial vehicles,
- a proposal for methods of compensating for tariff obligations not yet covered by existing legislation;

(Turn back to page 12)

# Industrial Ports and Economic Transformations

## Series No.4

By Paul Hanappe and  
Michel Savy

### CHAPTER III

#### RECENT TRENDS IN PORT ECONOMICS

#### 3.1. MODIFICATIONS IN INDUSTRIAL LOCATION

- 3.1.1. Methodological note
- 3.1.2. The main axes of redeployment and their consequences on the port industrial zones
- 3.1.3. The industrial branches of the main port industrial zones –
  - Petroleum products
  - Non-petroleum energy
  - Chemicals
  - Aluminium
  - Automobiles
  - Converting industries
- 3.1.4. Factors in the balance sheet

Having seen in this way the decline in the forces which resulted in the development of the port industrial zones in the form they took after the Second World War we should now look at the trends which are emerging this new phase of economic history which has now started.

This task will deal firstly with what is the central preoccupation of this work: industrial location. The first section is devoted to this; it attempts to demonstrate, in a concrete manner, the incidence of what is now termed the "new industrial division of labour" on the ports.

Recent economic transformations have, however, many other effects on port life. For this reason there is a trend towards specialisation of international transport equipment, as shown in maritime transport, in the ports and in land transport terminals; this will be examined in the second section.

The third section will be devoted to the principal changes in the organisation of transport and the transport industry; in this section it will be seen how the transport auxiliary industries, and in particular the transit agents, are changing; an attempt will also be made to demonstrate some characteristics of containerisation which are important for our problem. The increasing role of telecommunications and data processing in the transport industry will also be dealt with.

The fourth section will show how the spatial aspects of international transport have also been affected by this change: this relates to reduced modal captivity and the dilution of the concept of the hinterland.

All these modifications and new trends are less disparate than may appear at a first glance. It will, however, be in the concluding chapter that we will see how they may be linked to the underlying economic processes and what part they play in the fundamental explanation.

#### 3.1. MODIFICATIONS IN INDUSTRIAL LOCATION

##### 3.1.1. Methodological note

What will happen to the port industrial zones of the European countries? Are they destined to immobilism, even to disappearance, or can they on the contrary continue their development, but undoubtedly in new forms?

This is a question to which parts of an answer may be given by reviewing recent facts observed in certain European and Japanese port industrial zones. "Parts of an answer" only, for fundamental reasons, since we have analysed the period of the descendant Kondratieff phase (or, according to a similar approach, the period of crisis) as a period of difficult reorientation, marked with attempts, successes and checks of which the principal directions of evolution are still not clearly seen; for practical reasons also, since the most recent facts are still not available in publications; for reasons of the date of the work, finally, since unlike previous analyses which are based on an evolution spread over some twenty-five years the characterisation of the present long phase can only be based on its first manifestations, still few in number and less suited to reasoned classification.

Whatever the position it is even more necessary to construct a framework for examining the observable facts, even if the latter are still few in number: their structuring cannot proceed from the evidence, nor from simple good sense. The drawing up of a classification and explanatory grid makes it possible to locate the isolated facts more effectively in relation to each other, and to appreciate the pertinence of the hypotheses of the observer on those points which are sensitive to evolution and in relation to the problem of this research: this framework is also a tool for seeking out the information which it then processes.

##### 3.1.2. The main axes of redeployment and their consequences on the port industrial zones

By its generality the term redeployment can evoke at the same time sectorial restructuring and spatial (and international) relocation which define the industrial situation in its adaptation to new economic conditions.

The difficulties encountered in the valorisation of capital in the developed countries, the aspirations of many under-developed countries for industrialisation, the transfers of resources linked to changes in the prices of certain raw materials (oil) all work together to orientate, in the case of certain countries on the "periphery", the location of certain industries or certain elements of industrial activity which up to now were mainly concentrated in the developed countries: not only the labour industries but also heavy industries, consumers of space and energy, of fixed capital and raw materials. To the Hong Kong model is now added the Teheran model<sup>1</sup> and undoubtedly also that of Algiers, based on different social structures and development choices.

A large part of the heavy industries will in this way be progressively transferred towards countries which are becoming industrialised, whilst the older developed countries will accentuate their specialisation in more complex pro-



ductions, increasingly downstream and requiring more skilled labour, and characterised by the high level of added value which they apply to the imported semi-products.

Now iron and steel and heavy metallurgy, refining and basic petrochemicals, the production of alumina and of aluminium, of paper-making pulp, fertilisers, sugar and starch, flour milling and various agro-food activities (oils and soaps), which are the industrial branches most likely to have been formerly located in the Third World countries, are also those branches which form the basic core of the existing port industrial zones. It is likely therefore that in a few years most of these activities will desert the coastal sites where they have been concentrated during previous decades.

On the one hand the transformation which is taking place accompanies a lower overall rate of growth: the need for new production capacities is seen to be very significantly reduced, in conformity with the mechanism of the investment accelerator<sup>2</sup>. The modification of the relative weight of the industries in the developed countries and the under-developed countries will not take place so much on the occasion of growth, which will selectively allocate the new establishments to one or the other, but rather by gradual restructuring with an overall volume of growth at a slowed down rate of increase.

<sup>1</sup> According to the terminology of Baboulene, Destaudau, Gaudin and Portefait in *Organisation of the main industrial groups and the choice of location—BERU—Concerted action in Urban Research*, Paris, 1975, 91 p. (in French).

<sup>2</sup> In addition the crisis will accelerate the devalorisation of functioning capital, the operations of disengagement and re-engagement of capital, and delocalisation by the creation of new establishments and the premature closure of older establishments.

Secondly it is necessary to pay attention to the operating times necessary to carry out the qualitative transformations involving all the social structures of the countries concerned. Beyond any considerations of immediate economic import all major investment programmes have an inertia which is such that they can scarcely be modified once their launching has taken place, so it is clear that the industrialisation of the Third World countries takes place not only by the creation of the necessary body of technical and executive personnel but also by the proletarianisation of labour of rural or urban origin, whose cultural, family and industrial structures, whose material habits and whose ideological background arise from pre-capitalistic production patterns. It is known that a similar transformation took place in Europe over the period from the XVIIIth to the beginning of the XXth centuries, often in very brutal forms (the British enclosures) and even going as far as a breakdown of the social order (the Paris revolutions).

Under these conditions several evolutionary axes of the port industrial zones in the countries developed under the influence of the new international division of labour can be identified:

— certain activities will continue to be carried out on existing sites, if not at the destination of exporting at least at the destination of the nearby consumer markets which are, in general, the most important.

— other activities, by contrast, will be transferred to the countries which are becoming industrialised, this transfer being more or less rapid according to the growth of the volume of production or as modifications in the production techniques take place more rapidly.

— the transfer may, however, affect only certain segments of the industries concerned: this is the scheme of dispersed production, where the basic activities on the one hand and certain assembly activities on the other may be established in the Third World countries, the most sophisticated segments of the production process (requiring skilled labour or a complex industrial environment), the management, research and development activities remaining in the developed countries.

— Finally the port industrial zones can orientate their activities towards those sectors in which they have only been involved to a limited extent up to recent times. Inasfar as the basic industries seem to be the most likely to be affected in the coming years the evolution of the zones in the developed countries could move downstream of their existing production lines to establish more detailed production relying on those inter-company and inter-industrial links which can only be established in a highly developed economy.

### 3.1.3. The industrial branches of the main port industrial zones

We will look here at the main industrial branches mainly present in the port zones, without claiming to give an exhaustive description of their evolution<sup>1</sup>, but to discern the evolutions of the content of these zones. We will look successively at iron and steel, the handling, storage and refining of petroleum products, non-petroleum energy, chemicals, aluminium, automobile construction and the light converting industries.

<sup>1</sup> the information here has generally been collected by interviews during visits to ports and industrialists, rather than from reading published documents.

### Iron and Steel

The internationalisation of the iron and steel industry, the place and the role which transport has in it and the importance of the phenomenon in the port industrial zones, have already been studied in the first phase of the present research work. Without returning to these analyses and their conclusions we will now describe the evolution which is visible today in respect of the location of steel production units.

The construction of new heavy iron and steel units seems, in the present state of the crisis in the branch, rather improbable: is the second tranche forecast for Fos opportune when the production capacities of the first are so under-employed?

The question of the creation of mini-iron and steel plants, supplied for example by spongy iron produced in the countries producing the ore, has often been raised, and cannot be rejected. One may however envisage that, supplied with a raw material of a higher specific value than ore, they could in certain cases be established inland, nearer the converting and steel user markets, rather than as large coastal plants<sup>1</sup>. The techniques of pusher barges on waterways, or even of transport by pipeline, could facilitate such locations, which would therefore leave to the maritime port only those activities linked to the handling of goods, and so to the detriment of the industrial added values. The smaller size of the vessels supplying a mini-iron and steel works, compared with that of the giant ore carriers, the need for special handling installations which would, however, be assured of regular use, could encourage the location of this traffic in medium-size ports, under conditions of

assured profitability: if for example the lower costs of the sites could counterbalance the scale economies linked with the large ports. In the port of Bremen, where it is true that industrialisation has never been of the same size as that of Rotterdam or Antwerp, the Klöckner company, whose iron and steel plant is supplied by sea with imported ore, but through rail transport between the terminal and the plant, is proposing to increase its metallurgical activity by using imported ingots in the coming years: the development of the international division of labour also invites moving downstream that segment of the production chain which seems to be most opportune.

<sup>1</sup> For example in the valley of the Seine a site near Rouen could be preferred to one at Le Havre.

However, and in addition to the losses linked with an unfavourable heat balance sheet, the division of steelmaking and rolling has, as its major disadvantage, the necessity for the latter industry to hold large buffer stocks. For this reason this international segmentation still remains, at the present time, in the region of projects.

The Japanese iron and steel industry, apart from an international commercial offensive which is disturbing the European iron and steel industry, is actively developing the establishment of production units overseas, in association with local capital.

For example a project in Brazil forecasts the investment of Japanese capital on a technological basis and the supply of Japanese plant, but the production is mainly intended for the Brazilian domestic market. The installations should be built by 1982.

Supplies of raw materials to the Japanese iron and steel industry could also develop with the industrial introduction of new techniques for treating iron ore: agglomeration, pelletisation, spongy iron (pre-reduction). Enrichment of the ore would make it possible to increase the productivity of a blast furnace (which could, at equal size, produce a greater quantity of steel), and so contribute to restraining the extension of existing installations in the developed countries or the creation of new installations (improbable in the short term at the present time, and under the present economic conditions). The modifications induced by pre-reduction are more important since these processes can only be profitable in countries with a very low energy cost, such as oil countries having capital which would allow them to build an iron and steel industry. Under these conditions the Japanese iron and steel industry envisages specialising their production even more in products at the top of the range: stainless steels, painted sheet products, high pressure tubing, (for oil pipelines, etc.), involving technology in which, at least initially, the new producer countries could not share.

Taken overall, then, the coming years should be shown by a maintenance, at a more or less static production level, of the coastal iron and steel units operating today in the developed countries. Sustained growth on the pattern of preceding years in Europe, and massive investments in the Third World, both seem to be highly improbable.

### **The handling, storage, refining and distribution of petroleum products**

Petroleum traffic represents, in many European and Japanese ports, the largest tonnage and sometimes the most remunerative of the port activities. Evaluation of its evolution possibilities is therefore essential for those organ-

isation responsible for managing the installations and for organising the adaptation of port activities. Questions must therefore be asked as to the evolution of the volume of the petroleum traffic, and of the refining activities which the latter would supply.

As far as petroleum traffic is concerned, in the reception of which the nautical characteristics of the port, its special installations for handling and storage of petroleum, for the degassing of bunkers, etc., play a decisive role, the economic crisis marked by a slowing down of industrial growth, and the rising cost of petroleum which encourages research into energy and utilisation economies and a more intense examination of alternative sources of energy, leads one to assume a very low, nil or even negative rate of growth<sup>1</sup>. The allocation of traffic between the ports could nevertheless undergo considerable change, encouraged by the lively competition towards which, confronted by financial difficulties, the port authorities could move. Even if it proceeds from activities prior to the "petroleum crisis" the new Antifer oil terminal could, without doubt, contribute towards modifying the allocation of petroleum traffic of effectively static overall volume. In the same way the over-capacity of maritime oil transport (which is shown by the laying-up of a large number of tankers, sometimes immediately after they have left the shipyards), reinforces competition between ship-owners and may contribute towards increasing the average size of the vessels used on the long hauls: concentration of traffic in the ports with better nautical characteristics could be reinforced<sup>2</sup>.

<sup>1</sup> It is known for example that the French Government proposes to reduce the absolute value (in quantity) of the national consumption of oil.

<sup>2</sup> In the case of ports on the north coast of Europe however the exploitation of North Sea oil will call for oil tankers of medium-size (cf. para 3.2.1. below). This will result in the preferential use of very large tankers over the longer distances. The use of the Suez Canal could also result in specialisation in the use of fleets of different size.

Refining activity should, like petroleum traffic, remain stagnant overall. It is already characterised by excess production capacity. Furthermore the location of new units has, over the last ten years, been mainly near the principal consumer markets rather than at the point of trans-shipping from vessel to land transport (as has already been noted in chapter II). Even if this movement seems to have stopped, and at least since they will not themselves become major consumer zones (both industrial and private; large industry and a large concentration of population), the port industrial zones are not likely to see any creation of new refining units in the coming years. The only exceptions to this trend arise from special political wishes, not very probable in the existing climate, or the extension of existing units.

All the same, the projects for the industrialisation of the oil countries include, as priorities, refining and petrochemicals: it is therefore possible that a not unimportant proportion of the petroleum products will, in the future, be imported into the developed countries in the form of already refined products: the scheme of the international division of labour by segmentation of the production chain between the upstream and downstream industries is clearly illustrated here. The development effort in the zones in the developed countries will not then depend on the refining capacities but on the downstream activities: petrochemicals (for example the installation of a steam-cracker at Dunkirk, with financial collaboration with Qatar), chemicals (which

will be considered later), and more probably activities downstream of the petrochemicals.

From this point of view we can see the development of the storage and handling activities for petroleum products in the port zones, which also concerns those activities linked to petroleum itself as well as the chemical activities.

There are scarcely any difficult technical problems to be resolved here by the port organisations: handling of the products is often carried out by the pumps of the vessel itself, whilst the safety standards to be complied with are now well established.

In addition to this simplification of handling the port sites are also particularly suitable for the storage of petroleum products for safety reasons: safety, in the case of an accident, by the space which is available in most of the ports, their distance from habitation zones, and the availability of powerful and specialised safety services; safety in regard to supplies since, unlike a depot which is supplied by pipeline, a depot in a maritime zone can easily substitute one source of supplies for another.

There is therefore likely to be either the establishment of, or establishment projects for, various depots for liquid products, petroleum or chemical, in the port zones, corresponding to the intensification of trading in semi-products at a European scale and, in the near future, at an intercontinental scale. This is not a matter of projects for isolated establishments but of the simultaneous construction, in two or more different sites and in different countries, of similar installations, controlled by the same investor (oil company, chemical company, or trader and stock-holder of chemical products).

It should be noted that in 1975, although there was an acute crisis in the construction of large oil tankers, there was a very considerable demand for small tankers, suitable for the chemical "bucket-chain" between the ports of north-western Europe, the repercussions of which on the industrial geography of Great Britain have already been seen.

### Non-petroleum energy

The development of forms of energy other than petroleum energy may find their conditions for optimum location in the port industrial zones.

Apart from a possible recovery in coal imports there is likely to be an intensification of gas imports (by pipelines on the European continent from Holland and the North Sea, but also by vessel from Algeria, in particular). Certain port sites may find here an occasion for establishing a regular traffic, retained by very specialised handling, storage and treatment equipment (projects for the Loire estuary).

In the same way the port industrial zones often combine together those characteristics which are favourable for the installation of nuclear power stations: available space, proximity to industrial users and, sometimes to lesser extent, domestic users, and the availability of cooling water (projects at Fos and Dunkirk).

### Chemicals

Even less than in the case of the other industrial branches this brief review of some recent events cannot claim to give an account of the evolutions of the branch; it is a question solely of identifying the development axes of the port industrial zones<sup>1</sup>.

Petrochemicals is, at the same time, the chemical activity most widely represented in the port zones (since one finds

there, in the countries which are not producers of oil, the various reception resources; storage, and often oil refining) and also one of the industrial branches which is most directly affected by changes in the international division of labour: the oil countries have been, since 1973, the principal candidates for industrialisation amongst the Third World countries. Their efforts are obviously directed, beyond refining, to the first stage of petrochemicals.

<sup>1</sup> At the same time the place and role of transport in the internationalisation of the chemical industry will be the object of the next phase of the present research work.

Various technico-economic considerations (directed towards higher efficiency in the production lines) and financial considerations (tending to the control of certain markets by certain sources of capital) makes it possible to understand the nature of the modifications to which petrochemicals could give rise, the new division of tasks, which could be established in the developed countries and the oil countries. The scheme for a gradual reorganisation and progressive integration, step by step, of the upstream segments of the petrochemicals chain into the economy of the oil countries seems rather unlikely.

In fact a steam-cracker of optimum size has, under European conditions, a capacity of 450,000 tonnes, this size appearing to have become stabilised over some years (modular construction causes the scale economies to flatten out). When the annual market in France, a populous country with 50 million inhabitants and with a high level of industrialisation and consumption, is 1,500,000 tonnes it can be seen that a 450,000 t unit cannot easily be inserted into the economy—or into a group of economies—which are under-industrialised (the polymers obtained from steam-cracking represent 80% by weight of the heavy chemicals in France). Furthermore a ten million tonne refinery supplies about a million and a half tonnes of the required petroleum cuts to a steam-cracker, and about a million tonnes are recycled in the refineries. Since the transport of several of the products exchanged in this way is costly, if not dangerous, it is probable that refineries and steam-crackers will for many years be located immediately next to each other, as today. Furthermore it is the whole of the downstream industries from the steam-cracker which are located near it. Displacement of the units downstream will not take with it those units which are situated immediately downstream of the refinery, but sufficiently far in the converting line so that the products to be transported, carrying an adequate added value, have a specific value which justifies costly transport in comparison with the transport of crude oil.

If they are not to be lost, the ethylene, propylene and butadiene leaving the steam-cracker must, at least up to the present time, be used within a restricted radius of their production: transport by pipeline is excluded beyond a distance of some tens of kilometres, except when the high tonnage justifies this<sup>1</sup>; transport by specialised small vessels is too difficult. At the present time there are scarcely any massive intercontinental trade flows in basic chemical products: intra-European trading represents 80% of the world international trading. By contrast the more sophisticated products such as aromatics, which are easy to transport, are the subject of intercontinental trade flows (in particular from the United States to Europe).

To these technico-economic aspects must be added the

<sup>1</sup> See below, para. 3.2.3.3.

commercial obstacles liable to oppose themselves to the sale of chemical products on international markets from new producer countries. The control of distribution networks by the largest firms (and this does not exclude confrontations and market sharing between them), the almost infinite number of existing components amongst which it is necessary to orientate production so as to meet the precise demands of each industrial client, oblige Third World producers to become associated with companies or States in the developed world according to reciprocal agreements in order to move their products: for example the MITSUI and MITSUBISHI projects in the Middle East, the SUMITOMO project at Singapore, which is to manufacture intermediate products for local markets and, as exports, for the Japanese market. These agreements, tolerated today within the framework of the EEC, could be questioned if they became of larger size.

The location of petrochemical activities in the producer countries would therefore occur in a random manner, each time involving a whole interdependent assembly of industrial installations. The size of the projects then poses more acutely those questions of the industrial training of labour and of technological transfer (understood in the broadest sense, that is to say touching the whole of the social environment of the industrial projects). It is in this spirit that an agreement has been reached between CdF Chimie and Qatar. Equally opposed to a rapid transfer are the costs of establishing factories in the developing countries which, taking into account the longer construction times and the distance from the suppliers, is currently two to three times greater than the cost of installation in a developed country: the operation of the unit which is built no longer benefits from the agglomeration economies normal in industrial concentrations: lower priced water and electricity (high scale economies) and other services external to the company.

However these increased costs will be (and already are) acceptable for certain States when the development objectives are of greater importance than strictly financial considerations. As a consequence, and if the new international division of activities needs, for its establishment, longer deliveries than those which, in the effervescence of the oil crisis of 1973, were announced by certain observers, and if this establishment takes place by means of a complex redefining of international economico-political force relationships, the division of the petrochemicals production line between an upstream segment which is largely integrated into the economy of the producer countries and a downstream segment which is diversified and located in the developed countries, seems likely to be the medium-term trend. A similar distribution is also likely for other chemical activities than those restricted to petroleum.

In this way, and to consider only the port and industrial activities in Antwerp linked with phosphates, up to the present time these were imported in crude form from Tampa (Florida) or from Morocco to Antwerp (and Ludwigshafen) by vessels of 50,000 tonnes, and then converted in Antwerp to phosphoric acid. This organisation will continue in the present volume of activity. However any increases in production will be carried out according to a different division. The phosphoric acid will be produced in the country of origin and exported to Antwerp by a specialised and therefore more expensive vessel where it will undergo its subsequent conversion. This new international division of activities will involve the installation of a specialised port

terminal at Antwerp, capable of subsequently attracting other users than those at the origin of the present project (cf. para 3.2.2. on specialisation in port installations).

The specialisation of coastal chemical platforms in the developed countries in downstream productions could result, in various cases, in concentration or, on the contrary, the spatial dispersion of production units.

Certainly diversification downstream and concentration are linked: both of them assume the multiplication of trading between production units and between companies. The example of Antwerp is amongst the most spectacular where, whilst the establishment of base activities is now discouraged, there is a waiting list of those wanting to occupy the new industrial sites on the left bank of the Escaut, and production is extending downstream to include insecticides, cosmetics and additives for the rubber industry.

The production of products downstream multiplies interdependencies in order to balance not only the raw materials balance sheets, but also the energy balance sheets which condition profitability. The presence, if not the cohabitation, of organic and inorganic chemistry is also necessary<sup>1</sup>. In order to produce vinyl chloride at Antwerp, BASF needs hydrogen and chlorine. Bayer, which produces 625,000 t of sulphuric acid supplies all the factories in the Antwerp region. In the same way, and although it is near the platforms of the Escaut and the Rhine, a chlorine industry is lacking at the Basse-Seine platform in order to allow certain diversifications and to join this "Verbund wirtschaft" which is operated by the German chemical companies in West Germany and the Benelux countries.

<sup>1</sup> The simultaneous recovery of coal chemistry, based on the new price of oil, must not be excluded.

The consequences of such a development for the port zones would be principally the reinforcement of the methods of specialised handling and storage for an increasing number of chemical products and the establishment or extension of the means of transport within or without the zone to ensure the interconnection of the specialised units (networks of pipelines). These aspects will be developed in para. 3.2.2. below.

Does there therefore follow an irresistible trend towards spatial concentration? Some breakdown of activities at a European scale could compensate for these effects. Certain negative economies are in effect appearing, above certain concentration thresholds, at Rotterdam. It is true that few European ports are in a similar position of having to face the concentration problems of Rotterdam! Without going up to a point of physical and ecological congestion the major zones present specific problems of safety and of external and internal dependence on supplies (raw materials and utilities): the complexity of production also increases its vulnerability. To these technical reasons are added the care for social policy intended to fragment, if possible, the concentration of labour, using establishments of smaller size than in past periods. The reduction in the cost of transport (networks of chemical pipelines, in particular for ethylene, on a regional or even international scale, specialised terminals and vessels) can facilitate this trend which would break the quasi-monopoly of the major existing chemical platforms.

#### Aluminium

The aluminium industry, if it is not yet established in a



large number of port industrial zones, nevertheless presents those characteristics which one could judge to be susceptible of justifying such a location: substitution of the importation of bauxite for local production has been envisaged in France, whilst electricity of nuclear origin could be competitive with the formerly traditional source, in this industry, of hydroelectric power<sup>1</sup>. In this way projects for an alumina or aluminium plant were at one time announced for the Dunkirk and Fos zones.

<sup>1</sup> These factors have been developed in the study on the development prospects of the industrial zones of Fos and Dunkirk (op. cit.).

However the desire of the aluminium companies to diversify their establishments on a world scale, the less rapid realisation than was forecast of the programmes of nuclear energy, and in particular the rise in the cost of energy, direct the creation of new production units towards those countries which simultaneously have deposits of the mineral and hydroelectric power, generally situated in the Third World. Japanese companies feel today that the cost of energy is too high in Japan to allow the creation of new plants and, that as a consequence, production of the metal will be carried out in Venezuela, Indonesia, Brazil or New Zealand. It should be noted that, except in the case of New Zealand, the Japanese investors are also paying for the construction of the hydroelectric dams associated with their plants.

#### Automobile construction

Once envisaged (cf. for example the first descriptions by the port authorities themselves of the future industrial zone of Fos), the development of major automobile factories, near the European ports and directed to the exporting of a very large part of their production, is no longer on the agenda: the internationalisation of this branch most frequently takes place, at least in the European companies, through internationalisation of their capital and the creation of overseas production subsidiaries<sup>1</sup>, whilst the Japanese companies have developed both a very high productivity national production and a policy of exporting goods. The future industrial zone of TOMAKOMAI in Japan should therefore comprise: a refinery of 300,000 barrels per day, a petrochemicals plant producing 400,000 tonnes of ethylene, electrical installations and an automobile factory with 600 employees producing 180,000 vehicles per year. One should note however that the internationalisation of the production process, which is developing particularly on the European scale, could favour coastal locations. Bordeaux can no doubt be used to support this thesis, since the gearboxes which are exported by sea from there are in fact sent from Le Havre because of the better containership services from the latter port. However trading in parts between the Ford factories in the United States, Great Britain (Basildon), Germany and various countries in the Third World and at Antwerp, make this latter location a centrepoint and a major user of the port (Ford having itself chartered a containership for trading between Belgium and Great Britain).

In the same way the geographical axis of development of the Renault company, with Le Havre as its natural outlet for maritime exports, has been confirmed by the recent establishment near Rouen of an establishment specialising in the manufacture of "small collections", assemblies of parts which are exported to overseas assembly factories to

supplement parts of local production. However the characteristics of the jobs created (high proportion of unskilled jobs for men) do not appear to correspond with the needs of the labour market in a number of the large existing port zones.

<sup>1</sup> The internationalisation of automobile manufacture has, with that of iron and steel and the industries linked with transport and data processing, formed the subject of the first phase of the present research work.

#### Converting industries

The light industries do not seem, a priori, to be those which use, most efficiently, the facilities offered by port industrial zones: nautical qualities allowing the acceptance of giant vessels, cheap energy, the presence of heavy industries, etc. In a scheme of sustained development they could, by contrast, constitute the "second wave" of port industrialisation, induced by the heavy industries which were the first to be installed.

In the present circumstances of crisis the converting industries show certain new interests and aspects. Certainly they offer, to the labour pool in the zone, employment possibilities different from those offered by heavy industry (employment of women, tertiary employment, stimulation of local sub-contracting, etc.). However the trend towards specialisation in the developed countries of more complex productions, using material or even elements which have been imported, is shown by the new accent placed by port organisations on this type of activity. The example of the port of Le Havre is particularly clear since it has, temporarily at least, renounced the establishment of an iron and steel plant, but is now making new efforts to attract light industries. A system of a duty-free zone is even envisaged for certain workshops where mechanical and electrical components from the Third World (in particular the project with Brazil) would be assembled, according to the individual needs of the European market.

The Japanese development illustrates clearly that jobs in various industries have their place in the international distribution of activities. For example in the Japanese photographic industry the basic operations are carried out in Asiatic companies with a low wage level (Canon in Taiwan, for example) whereas the more complex finishing and adjustment operations are carried out in Japan.

In the same way the textile industry is shifting its general production (with consequences on employment in the countries which have been developed for many years, like France, which are already known) and retaining certain productions requiring more complex plant or skilled labour. However the difficulties (already indicated in the case of the heavy branches such as petrochemicals) in constituting the industrial environment of the project and in recruiting and training the labour<sup>1</sup> make it more often preferable to establish in a peripheral zone of Japan (Kyushu and Hokkaido) rather than in an under-developed country in South-East Asia, despite the lower wage levels. The political uncertainties of investors are undoubtedly not strangers to this new trend.

<sup>1</sup> In addition to the difficulties linked to political instability, to certain anti-Japanese nationalistic reactions, etc.

The movement of industry towards a diversification of activities is particularly noticeable in the Tokyo region: here one has seen, in recent years, that the number of workers is decreasing whilst the number of companies is

increasing. This involves mainly the small and medium-sized companies with fairly high productivity which, unlike the large companies, are not constrained to leave the highly urbanised zone of Tokyo to find sites necessary for the extension of their installations. Symmetrically to this the island of Hokkaido, until now under-industrialised and being depopulated, now appears as a very valuable reserve of space, linked by a rail tunnel to the other islands of the archipelago and likely to play an important role not only in the "redeployment" of the Japanese coastal industry in the new distribution of its activities between Japan and the overseas countries, but also in the inland part of Japan itself.

Space, labour, qualification and employment are not, however, the only aspects which are of importance to the port organisations in the establishment of light industries. Certainly the diversification of employment contributes towards the equilibrium of the zone, and may therefore be sufficient to justify the active intervention of the port. However the port traffic induced is also essential. It has been calculated that, for equal tonnages, traffic in general goods is about seven times more remunerative for the port than bulk traffic. As a creator of port employment and transport intermediaries it contributes to maintaining an increase in the number of regular shipping lines, ensures a minimum regular level of activity in those commercial and transit functions which characterise at the present time the privileged axis of development in port activities (cf. para. 3.3).

#### 3.1.4. Factors in the balance sheet

The rapid examination of some industrial branches has, in this way, made it possible to "fill in" the proposed hypotheses grid. Comparing the analysis of the development factors for the zones on the one hand and the process linked with the crisis and to industrial redeployment on the other, it confirms that the European industrial zones are orientating their development towards diversification downstream of the existing industries, able to use the skilled labour and to benefit from the agglomeration economies which only the older developed regions can offer. One finds here the synergistic relationships between the port and the town<sup>1</sup> or, according to the terminology of the German economists, the succession through the different stages of: *kaiegebundene*, *hafengebundene*, *hafenstadtgebundene* and *stadtgebundene industrien*<sup>2</sup>.

<sup>1</sup> cf. the article by P. HANAPPE in "La Vie Urbaine" in 1971 (op. cit.)

<sup>2</sup> Industries linked with the quay, with the port, with the port town and with the town.

Before dealing in the following chapters with the numerous consequences which these tendencies will have on port activities, the manner in which they will influence the organisation of maritime and terrestrial transport and the related industries (and in return will be influenced), it should be noted that the more complex and numerous links between the industry and the town, in the same way as the intensification of inter-industrial trading, which assumes the development tendencies which are emphasised above, can arouse inter-port competition which could affect in a highly selective manner the development of the various European sites. If Rotterdam, Antwerp and, to a lesser extent, Le Havre have already reached a high level of diversification and inter-company and inter-branch interlocking of their activities (with the adequate diversification of the corre-

sponding transport activities), the more recent industrialisation zones, or those which are near a labour pool or a major market, appear to be somewhat penalised.

However the improvement of certain transport services and the desire to divide up certain concentrations of employment can, on the contrary, facilitate the deconcentration of activities linked to the port and to the profit of the surrounding regions (Antwerp and Belgian Flanders), or even a more homogeneous distribution between the larger and medium-sized ports<sup>1</sup>. The same applies to the problems of environment which, apart from the case of Rotterdam, have not yet become acute in Europe but which, in Japan, figure amongst the principal reasons for the spatial reorganisation of activities.

<sup>1</sup> even more as the development of containerisation favours, in its turn, port concentration and therefore acts in the opposite manner to that desired by land developers.

In all these aspects the port industrial zones appear rather as sensitive points (revealers and stakes) in the new international division of labour which has now been established for some years.

---



---

# Orbiter Probe

---



---

## ICHCA Provides a New Service

London, April, 1978 (ICHCA=International Cargo Handling Co-ordination Association):—At the General Assembly of the International Cargo Handling Co-ordination Association (ICHCA) in Melbourne in 1977, the need for making the unique store of cargo handling information accessible to the members on a world-wide basis was recognised. Accordingly this month has seen the publication of **Cargo Handling Abstracts\***. There will be three issues in 1978 and the Abstracts will then be published quarterly. Both the content and the format of the publication will be improved with each edition. Between 30 and 40 abstracts relating directly to cargo handling will be included in each issue. There are six subject categories: Equipment, Labour (including safety and health), Developments, Handling methods, Terminals and General.

The purpose of the Abstracts is firstly to give busy executives the opportunity of examining what technical literature is available world-wide on the subject of cargo handling and to obtain the abstracted document in full for study and information; secondly it provides an information retrieval key for researchers, libraries and students.

\* Cargo Handling Abstracts No. 1-78 available from ICHCA, Abford House, 15 Wilton Road, London SW1V 1LX.  
Price £2 for a sample copy to non-members.

## EUROPORT Press Release

### WORLD DREDGING CONFERENCE AND DELTA TUNNELLING SYMPOSIUM AT EUROPORT 1978

The Central Dredging Association and the Tunnelling Section of the Royal Institution of Engineers in the Netherlands, in cooperation with the Europort Organisation, will organise:

- a) The 8th World Dredging Conference, where the principals of dredging projects, scientific advisers to the dredging industry, designers and builders of dredging equipment and dredging contractors can meet and discuss their problems.
- b) The Delta Tunnelling Symposium covering the financial, planning and economic implications of shore to shore connections, as well as the design and construction of immersed tube tunnels.

The conference and symposium will be held concurrently with the exhibition, Europort 1978. These events will take place at the RAI Congress Centre in Amsterdam.

Already many applications for exhibition space have been received from interested parties in the dredging and

tunnelling business through out the world. On present indications, Europort '78 will include the largest presentation of dredging equipment ever presented, whilst never before so much attention has been paid to immersed tunnel techniques.

The Central Dredging Association, responsible for the 8th World Dredging Conference, is one of the three geographic sections resulting from the recently restructured World Dredging Association.

The restructuring involved the formation of three sections: The Central Dredging Association, covering Europe, the Western Dredging Association, covering the Americas, and provision in the future for the Eastern Dredging Association, covering the Far East. All these associations will be represented in the restructured World Dredging Association.

The Tunnelling Section of the Royal Institution of Engineers in the Netherlands is a member of the International Tunnelling Association (I.T.A.).

Europort '78 will be held from 14th to 18th November, 1978, at the RAI Complex in Amsterdam. It is the 17th presentation of the giant annual maritime exhibition. Details of the World Dredging Conference the Delta Tunnelling Symposium and information on the exhibition are available from:

Europort Tentoonstellingen B.V.  
Waalhaven Z.Z. 44  
3088HJ Rotterdam  
The Netherlands  
Tel.: 010-299655  
Telex: 28484 eurex nl.

## “Portos e Navios” Nov. '77

Rio de Janeiro, Brazil:—

### Ports & Waterways

- Petrobrás has recently signed a 1,8 million Cruzeiros contract with Andrade Gutierrez/Christiani Nielsen for the construction of a soya beam and wheat marine terminal in the port of Rio Grande.
- The cargo handling in the port of Salvador and Malhado in Sept. 1977 has reached 110,7 thousand tons.
- The Port of Rio de Janeiro Authority has incorporated the ports of Niterói and Angra dos Reis.

## Port of Halifax News Releases

Halifax, Nova Scotia, Canada, March 30, 1978:

### • Reefer Containers

Dart Containerline recently began to introduce a hundred temperature-controlled containers on their transatlantic service through the Port of Halifax. Prior to this, a technical seminar was held to familiarise all Dart personnel with the operation and capabilities of the equipment which can be used for temperature-sensitive cargo in the range of  $-30^{\circ}\text{C}$  to  $+30^{\circ}\text{C}$ .

This type of container is always in demand and a spokesman for Dart said that the units are being brought on stream to "cater to the needs of our customers who are already shipping dry cargo."

This first container is being lifted aboard the 'Dart Atlantic' for shipment to France. It was loaded with frozen codfish blocks from National Sea Products.

### • Full Scale Container Repair Plant

Container resources in the Port of Halifax have recently been augmented by the opening of a full scale container repair plant.

This is operated by Purdy Brothers Limited and is staffed with people trained to repair or even rebuild containers of steel, aluminium, or fiberglass, and including refinishing of interiors.

They are fully equipped with all varieties of modern welding techniques and machinery, suitable also for the repair of Mafi trailers and are preparing to undertake the repair and rebuilding of refrigerated containers.

Purdy Brothers has already begun to enjoy the business generated by this foresight and looks forward to serving all lines calling at or intending to call at Halifax, for the repair of their containers, thereby avoiding the necessity of shipping them elsewhere in a damaged and nonrevenue condition.

## World Trade Centre Toronto

Toronto, Ontario, Canada, February 21, 1978:—World Trade Centre Toronto is now in business. It opened its doors last December in the newly renovated offices of the Toronto Harbour Commission Building.

"We are operational to the extent that our staff is processing trade inquiries," said Ernest Griffith, general manager of the Toronto Harbour Commission (THC) which operates the centre. "We feel it will take us a few months yet to complete our library, computer centre, club facilities and to provide the services required by the world trader."

Mr. Griffith explained that World Trade Centre Toronto is moving cautiously in setting up its services so that everything works smoothly when it becomes fully operational later this spring.

"We want to make sure we are doing the right thing," he said.

A low-key promotional effort is bearing expected results. Mr. Griffith stressed that the trade centre's objective is to bring the buyers and sellers of the world together.

## 'Queen' Breaks Her Own Records on Third Transit of Panama Canal

Balboa Heights, C.Z., Panama, February 3, 1978 (The Panama Canal Spillway):—Record crowds on both sides of the Isthmus watched as the Queen Elizabeth 2, the largest passenger ship to pass through the Panama Canal, made her third transit of the waterway on Tuesday, January 24, arriving from New York on a 90-day voyage that will take her to 28 ports in the Pacific.

At least 4,000 spectators gathered along the route of the Canal. Another 1,935 visitors passed through the gates at Miraflores Locks, filling every possible space in the area, and hundreds watched from Miraflores Bridge, Contractor's Hill and other vantage points on the banks of the Canal. It was the Queen's first southbound transit of the waterway.

Making a smooth transit in 7 hours 18 minutes, the QE2 broke her own transit time record as she was locked through the west side of Miraflores Locks and docked at Balboa for the first time. The liner, which is 963 feet long and has a beam of 105 feet, squeezed through in 8 hours 4 minutes on her first historic transit in 1975. Last year's transit took 8 hours 30 minutes.

The 66,851 ton QE2 once again broke the Canal's toll record when she paid \$69,660, surpassing her own record of last year when she paid \$68,465.46.

Assigned to guide her safely through the Canal were control pilots Capt. Roger Swain, who was "at the helm" for the first half of the transit and Capt. Albert Wilder, who took over at Gamboa and brought her through to Balboa. So that he could give his complete and undivided attention to the handling of the vessel, Captain Wilder did without lunch. "I couldn't eat anyway," he said, adding that he was too busy to even think about eating. Two assisting pilots and eight towing locomotives were used to put the QE2 through the Canal.

## Container Tonnage Records Set

Baltimore, Md., April 20, 1978 (News From Maryland Port Administration):—During the first three months of 1978 the port of Baltimore attained two new container tonnage records, and Maryland Port Administration statistics point to the conclusion that 1978 probably will be a record-breaking year for container cargo at Dundalk Marine Terminal.

The records already established this year include:

\*\* Largest volume of container cargo during any first-quarter (January, February, March) at Dundalk Marine Terminal.

\*\* March 1978 container tonnage was the largest for any single month in the history of the port.

In statistics released today, the Maryland Port Administration said during the first quarter, 302 vessels discharged 615,153 tons of container cargo. Add to that a projected 60,000 tons for 30 more vessels which arrived at the port during the quarter, but whose agents have not yet reported their totals and the three-month figure comes to over 675,000 tons. (Average cargo load is 2,000 to 3,000 tons per ship.) Looking back to the first quarter of 1977, total container tonnage reached 633,115 on 292 vessels.

Additionally, the month of March is virtually certain to become the largest single month in the history of container



## O.T.C. Houston



Fitting a 1,000-watt tungsten lamp into the top deck of a new, more powerful light for marking oil rigs, which is to be shown by AGA Navigation Aids Ltd. at O.T.C., Houston, 8-11 May, 1978.

These double-decker lanterns are part of a standardised set of light and sound equipment certified for use in hazardous areas. This consists of a control and alarm panel, two 15-mile white lights, two or more 3-mile red lights and a 2-mile fog signal with ½-mile standby.

The top lantern in this light alloy and glass unit is a 15-mile light rated at 14,000 candelas and the bottom lantern a 10-mile 'standby' light. These units are easily re-lamped, operate without the need of fan cooling and are supplied for mounting directly on the deck, without need for a support structure. (AGA Navigation Aids Ltd., Sweden, April 3, 1978)

cargo in the port. The cargo level for 99 vessels is 214,342 tons. Add to that approximately 46,000 tons projected for 23 vessels whose tonnage has not yet been reported the total will reach to about 260,000 tons. This exceeds the largest month to date, which was June 1977 at 248,000 tons.

The highest quarter for container tonnage in the port of Baltimore to date was the second quarter of 1977 with 709,284 tons. September 1977 recorded the highest number of container vessels served with 116.

W. Gregory Halpin, Acting Maryland Port Administrator, said "the statistics clearly demonstrate that the port is

gaining in cargo volume despite increasing competitive pressures. Baltimore continues to show growth as a leading U.S. port, especially in its ability to successfully attract new container business."

The continued growth in port container traffic, he said, "supports the Maryland Department of Transportation program for continued development of urgently needed new facilities."

## International Trade Conference

Charleston, S.C. (From South Carolina State Ports Authority):—The live wire Port of Charleston will present shippers with the transportation industry's top thinking on key issues at the 1978 South Carolina International Trade Conference.

To be held at downtown Charleston's Hibernian Hall, adjacent the conference headquarters Mills Hyatt House Hotel, the fifth annual event will present "Transportation Debate of '78". A group of government and industry leaders in transportation from throughout the United States will debate five of the hottest topics of the year.

Between 700 and 800 persons are expected to be in Charleston May 17-19 at what has become one of the best-attended trade meetings in the nation.

General Chairman for the 1978 conference is J. Lee Waller, Charleston district sales manager for Southern Railway System. This year's honorary chairman is W. Don Welch, executive director of the South Carolina State Ports Authority. Charles A. Marsh, the Ports Authority's trade development director, is program chairman.

The five debate topics and speakers will be:

"Using South Atlantic vs. North Atlantic Ports"—Russell H. Waechter, manager of overseas transportation, Deere & Company, Inc., Moline, Ill., vs. Max M. Hyder, transportation manager of international operations, Brunswick Corporation, Skokie, Ill.;

"ICC vs. FMC Intermodal and Through Bill Jurisdiction"—Martin E. Foley, director, bureau of traffic, Interstate Commerce Commission, Washington, D.C., vs. Arthur Pankopf, managing director, Federal Maritime Commission, Washington, D.C.;

"Conference vs. Non-Conference Shipping"—Louis P. Kopley, administrator, Trans-Atlantic Associated Freight Conference, New York, N.Y., vs. O.G. Christophides, director, Constellation, Inc., New York, N.Y.;

"Free Trade vs. Protectionism"—Thomas G. Travis, customs legal specialist, Sadler & Travis, Miami, Fla., vs. Dr. R. Buford Brandis, international trade director, American Textile Manufacturers Institute, Inc., Washington, D.C.; and

"American Flag vs. Soviet Flag Shipping"—Peter J. Finnerty, vice president, public affairs, Sea-Land Service, Inc., Menlo Park, N.J., vs. Arthur C. Novacek, president, MORAM Agencies (Morflot America Shipping, Inc.), Clark, N.J.

## All-time high trade volume

Houston, Texas (Port of Houston News Release):—Foreign trade tonnage and dollar value at the Port of Houston reached an all-time high in 1977 when more than 51 million tons of cargo valued at \$10.9 billion moved over the wharves.

The statistics, just released by the Port of Houston

# Does Shipping Give You A Headache?



This fast-acting remedy will clear up your shipping headaches as quickly as you can say "Ship Via Port of Houston." Relief is only minutes away because you know that your cargo will move quickly and efficiently. Our prescription is compounded of good service, people who want to be helpful and superior facilities. Still we are not satisfied because we are building more facilities, getting more frequent sailings to ports around the world and improving our shore service. Next time, ship via the Port of Houston for the surest headache relief.

## PORT OF HOUSTON

Where You Ship With Confidence

P.O. Box 2562, Houston, Texas 77001 • Telephone: (713) 225-0671 • TWX 910-881-5787

Authority, show that foreign trade tonnage increased by 22 per cent and dollar value by 14 per cent over the 1976 record of 41.9 million tons valued at \$9.6 billion.

Exports from Houston to foreign countries equaled 15,506,536 tons valued at \$5.6 billion, while 35,513,711 tons with a value of \$5.3 billion were imported at the Port of Houston.

Total tonnage for the year, including domestic trade, amounted to 102,410,601 tons, 13.8 per cent higher than the 1976 high of 90 million tons.

Japan remained the leader in the Port's list of top ten trading partners for 1977 with \$1.150 billion worth of trade moving through the Port of Houston to and from that country. Saudi Arabia was a close second with \$1.121 billion.

Others in descending order were West Germany, \$708 million; Iran, \$580 million; Nigeria \$558 million; Mexico, \$530 million; Algeria, \$434 million; Brazil, \$403 million; USSR, \$399 million; and Great Britain, \$395 million.

Top export commodities in terms of tonnage were wheat, 4,700,219 tons; cereals, 1,931,891 tons; corn, 1,577,122 tons; organic chemicals, 1,176,220 tons; and fertilizers, 1,058,747 tons.

In dollar value, the largest exports were oil field and construction machinery, \$650 million; wheat, \$528 million; organic chemicals, \$431 million; pumps and machinery parts, \$189 million; and chemical products, \$176 million.

Leading import commodities in terms of tonnage were

crude petroleum, 27,938,363 tons; iron and steel goods, 2,219,956 tons; iron ore, 940,877 tons; crude minerals, 881,727 tons; and natural and manufactured gas, 805,532 tons.

Top dollar value imports were crude petroleum, \$2.4 billion; iron and steel goods, \$643 million; automobiles, \$585 million; coffee, \$199 million; and organic chemicals, \$150 million.

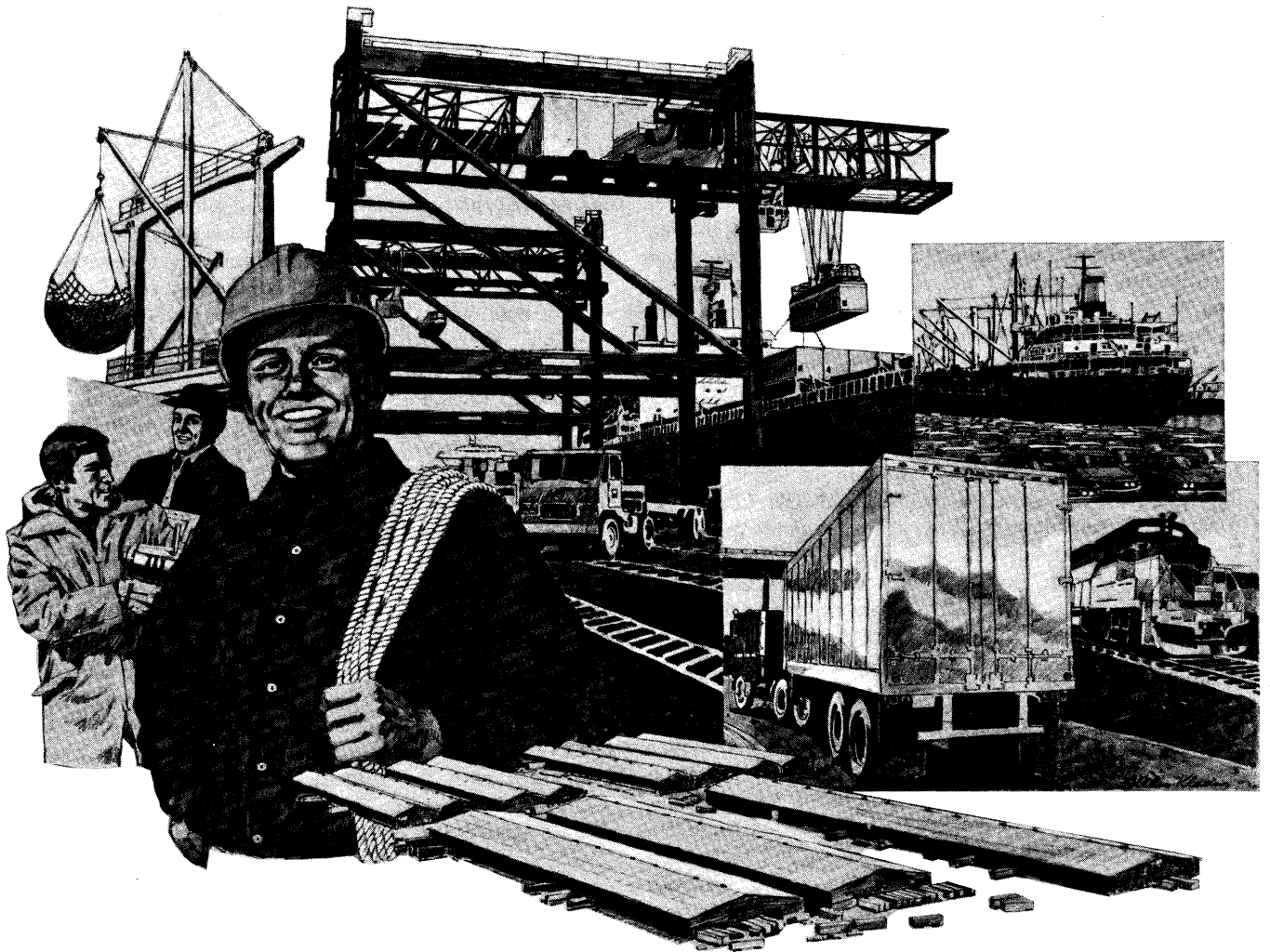
## Port of Los Angeles News

### • Gorman appointed chief harbor engineer

February 27, 1978 Edward L. Gorman was appointed Chief Harbor Engineer for the Port of Los Angeles, Fred B. Crawford, General Manager of the Los Angeles Harbor Department, announced today (2/27). He fills the vacancy created by the retirement of Lawrence L. Whitneck on July 1, 1977. His annual salary will commence at \$41,718 and increase to \$51,824 in five years.

Gorman, 55, held various positions with the Los Angeles Public Works Department, Bureau of Engineering, from 1948-1963. Transferring to the Harbor Department in 1963, he worked as a civil engineer in charge of survey, inspection and construction until 1968 when he was promoted to the position of chief of design, which he has held for the past nine years.

(Continued on page 28)



# Marine Terminals with Facilities second to none!

**Ready to accommodate your assembly/distribution plant now!**

A Marine Terminal is a complex, a system, a place to house a multitude of related industries engaged in international trade.

Our terminals have steamship berths backed up by assembly/distribution operations. Warehouses. Specialized cargo facilities and handling devices. Acre upon acre of upland. New land to build on. Ample and highly productive labor eager to assist in your assembly/distribution/transportation activity. Unequaled air, rail and highway connections.

Your business can be a part of this picture. Consider the Port Authority Marine Terminals in Elizabeth, Port Newark, Hoboken and Brooklyn — where more than 12,000,000 tons of cargo were handled last year. These Marine Terminals, with their diverse facilities to conduct the business of the world, are second to none! Call or write:

## **THE PORT AUTHORITY OF NEW YORK & NEW JERSEY**

Marine Terminals Department  
One World Trade Center, 71E, New York, N.Y. 10048  
(212) 466-7985 • (201) 622-6600 Ex. 7985

# Com/Nav Equipment, Policy and Rules Subjects of 2nd Annual Event in N.Y.

## The Maritime Association of the Port of New York

New York, April 4, 1978:—Vessel safety at sea, international agreements on tanker construction standards and certification and present and very-near-future implementation by the USA of rules and regulations governing marine navigational and communications systems and procedures and hardware, with a strong emphasis on satellite programs, were the issues stressed by congressional leaders, federal government agencies and industry spokesmen at the second annual Navigational Aids and Communications Conference and Exhibit, co-sponsored by the Maritime Association of the Port of New York (MAPONY) and The Council of American Master Mariners, Inc., at the Downtown Athletic Club in New York City during sessions held March 21-23.

N. Nick Cretan, executive director of MAPONY, welcomed the more than 250 conferees and exhibitor's representatives from around the world who attended the event, during which demonstrator exhibits of the latest Navigational and Communications equipment were on display by internationally-known manufacturers.

Keynote luncheon speaker during the annual conference was Admiral Sidney Wallace, USCG, marine transportation advisor to Secretary of Transportation Brock Adams. Other principal addresses were delivered by Representative Mario Biaggi, chairman of the House Coast Guard and Navigation Sub-committee for the Merchant Marine and Fisheries Committee, who cut the ribbon to launch the annual Conference and Exhibit, and by Senator Ernest F. Hollings, chairman of the Sub-committee on Communications for the Senate Commerce Committee.

Panel sessions on the first day, chiefly concerning Navigation procedures and equipment, was chaired by Capt. K.C. Torrens, Port Captain, Farrell Lines Incorporated, and president of The Council of American Master Mariners, Inc. The second day's sessions, on Communications, was chaired by Roy Andres, vice president, Planning, Western Union International, Inc. On the third day a panel session on governmental legislation was conducted by Brian Moir, legal counsel to the Committee on Interstate and Foreign Commerce, and Peter Gatty and Mark Thiessen, counsels to the Merchant Marine Subcommittee.

In his keynote speech Admiral Wallace, who leads a DOT task force to recommend laws and regulations on navigational safety and vessel inspection, which ultimately pass to President Carter for congressional action, reported that agreements reached between the USA and other nations in Geneva last month at the meeting of the Inter-governmental Maritime Consultive Organization (IMCO) were important in two areas: (1) tanker construction specifics and (2) vessel inspection and certification. The other governments, without a dissenting vote, adopted USA proposals on tanker construction and operational safety standards. The strong USA delegation to Geneva was headed by Brock Adams, who was assisted by Alan Butchman, assistant secretary of transportation, and Admiral Wallace.

The two principal addresses by Congressman Biaggi and

Senator Hollings preceded all-day technical panel sessions on each of the first two days of the conference.

Congressman Biaggi said he envisions a government and industry partnership in the promotion of marine safety and efficient maritime commerce. "This necessitates a balancing of interests, with government benefitting industry wherever possible. We are not in government to put any private commercial enterprise out of business, especially in New York City, the communications capital of the world."

He recommended: (1) administration formulation of a long-range management plan for all radio navigation systems, civil and military (2) the Secretary of transportation should become an active participant in the Department of Defense NAVSTAR program to ensure civil needs and to develop a low-cost receiver for that system's signal and (3) that the FAA and the Coast Guard give priority to the national plan for navigation which governs satellite radio-navigation research and development.

Senator Hollings, who spoke on the second day of the Conference, said "Now, I come as the new chairman of the communications sub-committee and wherever I turn I see a need for overall policy guidance." But he said he was not displeased with the outcome of the IMCO conference in Geneva. "As you are aware" he told the audience, "the Senate passed the Tanker and Vessel and Safety Act of 1977, last summer. We have been awaiting the outcome of the IMCO conference before pursuing legislation further. We are scheduled to hold hearings on the result of that effort on April 5th. The House hearing will follow the next day, April 6th. We will be looking at ways to implement the results of the IMCO conference as quickly as possible."

The Senator's other concern was principally with the upcoming 1979 World Administrative Radio Conference (WARC), which will convene in Geneva in September. At that time world-wide transmission bands will be reallocated among nations of the world. "As the greatest spectrum user," he said, "the United States has high stakes in this process. We know that underdeveloped countries have been organizing to get a much larger share of the spectrum—whether or not they can use it now or in the future."

The decisions made at the WARC meeting, he said, where it will be one country, one vote, can have a tremendous impact upon the United States.

At the panel session on legislative matters held the third day it was affirmed that a crucial government step must be taken to delineate the scope and future of U.S. participation in worldwide maritime satellite systems. And, if and when that is done, who will represent the U.S. if the decision is made to join. Should the Communication Satellite Corporation (COMSAT) be named, or a consortium of members of MARSAT, a group of private communications companies authorized by the FCC?

It is planned to hold a third Communications and Navigational Aids Conference and Exhibit again next year. For information write to the MARITIME ASSOCIATION OF THE PORT OF NEW YORK at 80 Broad Street, New York, N.Y. 10004 or call (212) 425-5704.

# Congress Urged to Appropriate A Sum for 3 Channel Improvements

## News from The Port Authority of NY & NJ

New York, N.Y., April 3, 1978:—The Port Authority of New York and New Jersey and the City of New York today urged Congress to appropriate \$6,389,000 for three Federal channel improvement projects in the New York-New Jersey Harbor in Fiscal Year 1979. All work would be performed by the United States Army Corps of Engineers.

The joint presentation also represented the interests of 28 port, maritime and civic organizations in the bi-state Port.

Planning and Development Director Edward S. Olcott, speaking for the Port Authority, and New York City Commissioner of Ports and Terminals Louis F. Mastriani testified at hearings in Washington before the Subcommittees on Public Works of the House and Senate Committees on Appropriations.

Specifically, the two New York-New Jersey area officials recommended an appropriation of \$6,000,000 for the New York Harbor Collection and Removal of Drift Project (Waterfront Cleanup), in lieu of the \$4,500,000 contained in the Federal Budget.

They also recommended that \$300,000 be appropriated for the removal of Shooters Island, New York, a construction project for which no funds were authorized in the Federal Budget.

In the study category, they supported the Budget allocation of \$89,000 for the study of the Gowanus Creek Channel, New York.

In all, the sum of \$6,389,000 in appropriations sought by the two Port spokesmen would increase the total funding of \$4,589,000 as contained in the Federal Budget for New York Harbor improvements, by only \$1,800,000—a modest request for the nation's leading seaport and metropolitan region.

### New York Harbor Collection and Removal of Drift Project

Mr. Olcott, the Port Authority's Director of Planning and Development, presented testimony on the Port's needs under the New York Harbor Collection and Removal of Drift Project. The Port Authority conceived this project, also known as Waterfront Cleanup, as early as 1963, and Mr. Olcott has been its spokesman as Chairman of the Port of New York and New Jersey Waterfront Cleanup Project Coordinating Committee. This group represents the interests of the two States, waterfront municipalities, and the Port Authority in coordinating the participation of State and municipal government with the Corps of Engineers.

Work began on the Drift Project at Liberty State Park in Jersey City, New Jersey, in 1976. Since then, Mr. Olcott reported, the cleanup project has transformed much of this rubble-strewn and rundown shoreline into cleared meadowland that is not only ready for further park development, but enhances the visual setting of the Statue of Liberty which lies just offshore of the Park.

The central and southern shorelines of Liberty Park have

been cleaned up. The completion of the north waterfront, scheduled for the Fall of 1979, will require the expenditure of an additional \$3.2 million in Federal funds. Thereafter, the State of New Jersey would like to see the project extended to the remaining Jersey City waterfront and northward along the Hudson River, the first segment of which is estimated to require \$1.0 million in Federal funds. These two State of New Jersey goals require that \$4.2 million in Federal funds be appropriated for waterfront cleanup in Fiscal Year 1979.

Mr. Olcott noted that progress is also in evidence on the New York side of the Harbor, where the City and State of New York are working closely with the Corps of Engineers on the cleanup of two areas. The first is the East River Manhattan shoreline between the Battery and 92nd Street, which could begin in Fiscal 1979, and require a Federal cost of \$700,000. The second is a work plan calling for a start on the Staten Island east shore from St. George to the Verrazano Bridge comprising a Federal cost of \$1.1 million. The combined Federal cost for these two New York undertakings totals \$1.8 million in Fiscal Year 1979.

"In short," Mr. Olcott concluded, "based on New York and New Jersey work plans and local funds, the Corps of Engineers should be in a position to be able to spend \$6.0 million in Federal funds, plus matching local funds, on the Drift Project in Fiscal Year 1979."

"However," he continued, "the Federal Budget contains only \$3.0 million, which, when added to a Fiscal Year 1978 carryover of \$1.5 million, totals only \$4.5 million. This falls \$1.5 million short of local project objectives, and thus it is urged that a total of \$6.0 million, or \$1.5 million more than budgeted, be provided."

The Port Authority official reminded the House and Senate Subcommittees that the Drift Project offers wide ranging benefits for the bi-state Port waterfront community. In ridding Harbor waters of unsightly and dangerous drift, the project can restore valuable waterfront land, now obscured by clutter, rundown piers, sagging bulkheads, and decaying hulks, to a productive and aesthetic status. As a final point, he said: "Few Federal port projects offer so diversified a combination of economic, social, environmental, safety and aesthetic benefits."

New York City Commissioner of Ports and Terminals Louis F. Mastriani also supported the request for Congress to appropriate \$6,000,000 for the waterfront cleanup work during the next Fiscal Year. "The City of New York wholeheartedly endorses the views expressed by Mr. Olcott on the need to increase appropriations for the New York Harbor Collection and Removal of Drift Project," he said. "I cannot overemphasize how much this region, and most certainly the City and State of New York, is counting on the Congress to respond to our request."

### Shooters Island, New York

In his testimony, Commissioner Mastriani asked Congress to appropriate \$300,000 to begin the Shooters Island, New York, project. Removal of Shooters Island, located at



the entrance to the Arthur Kill off Staten Island, would achieve the purpose of widening the Federal channel in the Arthur Kill, and provide a source of landfill.

"The removal of Shooters Island and the resultant widening of the Federal channel in the Arthur Kill will benefit the City of New York's Howland Hook Containership Terminal on Staten Island, as well as privately owned petroleum marine terminals, in New York and New Jersey, located along the Arthur Kill," Mr. Mastriani said. "At the same time, the existing maneuvering area at Bergen Point, off Bayonne, New Jersey will almost double in area."

Noting that the Bergen Point area had more than 100,000 vessel movements in 1977, Commissioner Mastriani said that it was defined by the United States Coast Guard as a Limited Traffic Area. A Limited Traffic Area is a specifically defined area where, due to several factors, such as traffic density, type of traffic and cargo, channel obstructions or restrictions, a high potential for a serious accident exists.

Bergen Point is a convergence point for vessels arriving and departing the heavily trafficked Newark Bay, Arthur Kill and Kill van Kull.

"Removal of Shooters Island would provide a turning basin for deep draft containerships departing the Howland Hook Terminal," Mr. Mastriani said. "It would also provide a vessel holding area for tankers, petroleum barges, and containerships approaching each other so closely that evasive maneuvers are dangerously restricted."

Although the Shooters Island construction project was authorized in the Water Resources Development Act of 1976 no funds were appropriated by Congress last year. The Federal Budget again allots no funds for this project. Therefore, the New York City Port official urged that, to avoid another year of delay, an appropriation of \$300,000 should be made available to the Corps of Engineers for preplanning and advanced engineering.

#### **Gowanus Creek Channel, Brooklyn, New York**

The final channel improvement for which funds were requested for the New York-New Jersey Port was a recommendation for \$89,000 for completion of a Corps of Engineers study for Gowanus Creek Channel in Brooklyn. This Federal waterway functions primarily as an access channel to deepwater oil tanker terminals and major general cargo-container terminals in this marine terminal area of the Brooklyn waterfront.

In presenting testimony on the improvement, Commissioner Mastriani said that the Department of Ports and Terminals have concluded that increasing the present channel depth of 30 feet at mean low water, to 40 feet, would allow for a reduction and possible elimination of tanker lightering activities. This would reduce opportunities for oil spillage, fires and other environmental damage, and help reduce energy costs for the New York City area.

### **SUPPORTING ORGANIZATIONS**

#### **Maritime & Port Organizations**

Board of Commissioners of Pilots of the State of New Jersey

Council of Port Development and Promotion, City of New York

Maritime Association of the Port of New York

New York-New Jersey Port Promotion Association  
New York Towboat and Harbor Carriers Association  
Port of New York and New Jersey Waterfront Cleanup Project Coordinating Committee

United New Jersey Sandy Hook Pilots Benevolent Association

United New York Sandy Hook Pilots Benevolent Association

#### **Civic Organizations**

Brooklyn Chamber of Commerce

Chamber of Commerce and Industry of Northern New Jersey

Chamber of Commerce of the Borough of Queens

Department of Environmental Conservation, State of New York

Department of Environmental Protection, State of New Jersey

Eastern Union County Chamber of Commerce (N.J.)

Greater Newark Chamber of Commerce

Hoboken-North Hudson Area Chamber of Commerce

Jersey City Chamber of Commerce

Jersey City Division of Planning

Metropolitan Regional Council

Newark Transportation Council

New Jersey Citizens Transportation Council

New Jersey Industrial Development Association

New Jersey State Chamber of Commerce

New York Board of Trade

New York Chamber of Commerce and Industry

Staten Island Chamber of Commerce

Union County Planning Department (N.J.)

West Side Association of Commerce in the City of New York

## **Los Angeles News —**

(Continued from page 24)

### **• Developing recreational facilities**

March 24, 1978:—The Los Angeles Board of Harbor Commissioners on March 22 approved General Manager Fred Crawford's proposals for implementation of a previously authorized development plan for the West Channel/Cabrillo Beach area of the Port of Los Angeles.

Crawford pointed out that the plan, which calls for development of a small boat marina and other recreational and youth activity facilities at Cabrillo Beach, would meet several public needs.

It is estimated that the major costs of the total project will be incurred in the construction of the marina. These costs, estimated at approximately \$20,183,200, may be funded by the California State Department of Navigation and Ocean Development, and would include the heavy construction portion of the project and the major surface and subsurface improvements including dredging, landfill, utility track systems and slips.

### **• Sponsors of Boy Scouts of America**

April 19, 1978:—As a result of action by the Los Angeles Board of Harbor Commissioners today (Wednesday, April 19), the Harbor Department will become the

official sponsors of the Boy Scouts of America, Sea Explorers Ship #727.

The Department will provide free dockage for the Scouts' 45-foot cabin cruiser, "Dragnet II," as well as free use of a meeting room in one of the barracks buildings at Lower Fort MacArthur.

Los Angeles Port Warden Captain Edward C. Henry will serve as the Department's representative to the Explorer Scouts and will coordinate all relationship between the Harbor and the scouts. San Pedran Richard Weiss, father of one of the scouts, is the Skipper of the program.

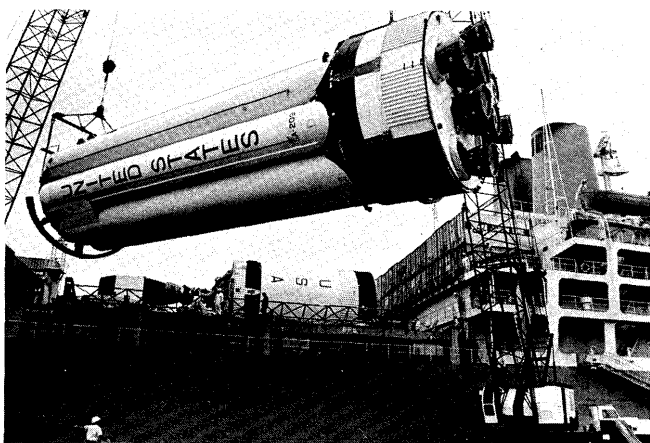
## Director of Maritime Activities

Oakland, Calif., April 18, 1978:—James J. O'Brien, who has more than 15 years experience at the Port Authority of New York and New Jersey in marketing and trade development, has been appointed to the position of Director of Maritime Activities at the Port of Oakland, it was announced today by Walter A. Abernathy, the Port's Executive Director.

In his new position at Oakland, O'Brien will develop and implement marketing and promotional programs to increase ocean commerce at the Port's marine facilities, direct and coordinate the operations at the Port's marine terminals, participate in the plans and negotiations of facilities by current and potential users, and, develop plans and policies to serve economically and efficiently the maritime needs of the Port.

O'Brien will manage and supervise the activities of the Port's Marine Terminals and Traffic Department, and the Marine Marketing Department. He will report directly to Executive Director Abernathy.

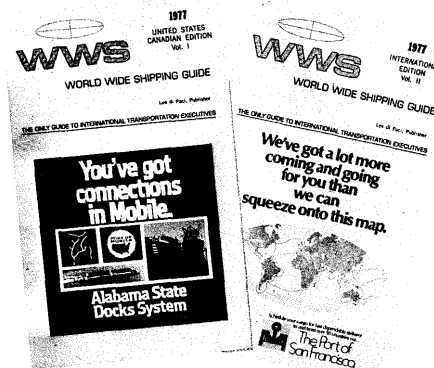
## Saturn Rocket shipped to Japan



SAVANNAH, GA., APRIL 14, 1978—The first Saturn 1B rocket ever to leave the U.S.A., not under its own power, was exported from the Georgia Ports Authority's Container Central aboard the Japanese Container ship, the NEW YORK MARU.

The Saturn rocket arrived in Savannah via a NASA barge from the Kennedy Space Center in Florida and is scheduled to be dockside in Tokyo May 1st.

The Saturn 1B will be the highlight of the seven month Space Expo in Tokyo opening July 16th.



## Looking for a forwarder in Amsterdam?

- A stevedore in Antwerp?
- A service to Damman?
- Information about shipping to the Middle East?

The WORLD WIDE SHIPPING GUIDE will help you! You will save hours of research time with this two-volume book that contains all you need to know about steamship lines and agents, freight forwarders and customs brokers, stevedores, terminal operators, port authorities and government agencies, airlines and railroads, charterers and agents—all transportation categories needed by foreign traders. More than 1,500 world ports are covered. Listings include name, address, telephone number, service, telex, cable and key executive with over 45,000 firms servicing the import, export market. A complete international banking section is also included.

With WORLD WIDE SHIPPING GUIDE at hand you don't have to leave your desk or wait for a search to be completed. It's all there—the world of international trade—at your fingertips!

MAKE SURE you have this essential working tool on your desk. Order additional copies for others in your firm. Use this coupon now (If your check accompanies the order, we'll pay the postage, taxes, and handling charges and you save \$5. off the purchase price. The 2 Volume set will cost you only \$30.00 postpaid.

WRITE TO: Lee di Paci  
WORLD WIDE SHIPPING GUIDE  
77 Moehring Drive  
Blauvelt, NY 10913

Please rush the 2 Volume set—  
WORLD WIDE SHIPPING GUIDE. En-  
closed is my check for U.S. \$30.00.

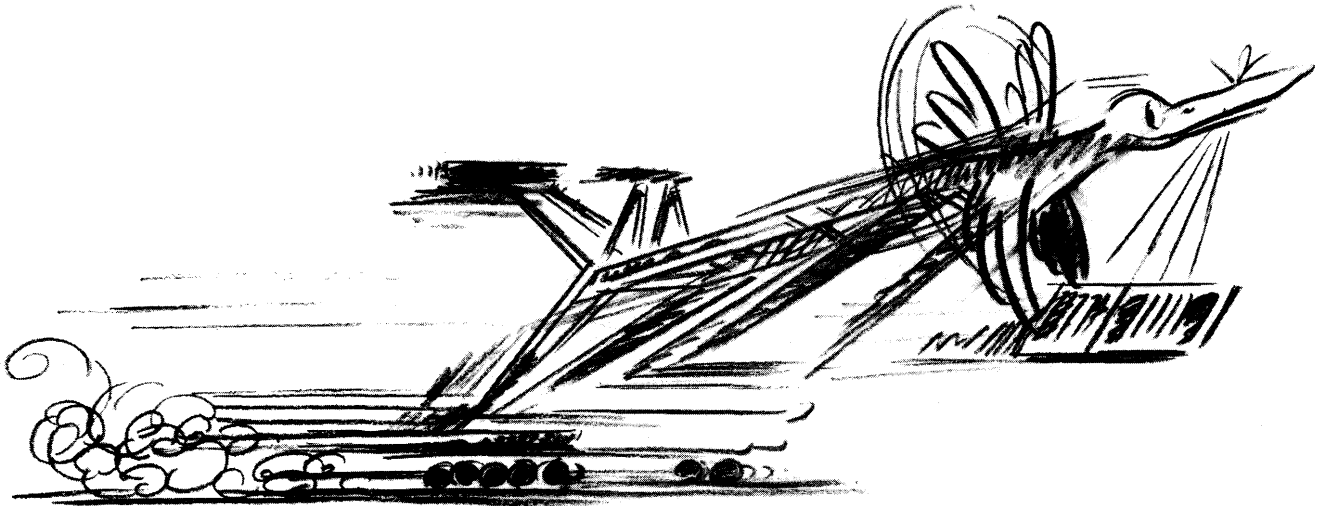
NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_ ZIP \_\_\_\_\_

# Our crane delivers



## in three months.

Sea Containers 'Tango' can be handling 30 containers per hour in any port in the world within three months.

That's not long to wait for a rail-mounted crane that has an 80 to 90 foot outreach, has light wheel loadings, stacks 6 high, handles 20 or 40 footers and lifts up to 30 tons under the spreader.

To find out more get in touch with Fuji Asano Kaiun Co.Ltd., Yabuhara Building, 14-4, 2-chome Hatchobori, Chuo-ku, Tokyo, Japan.

Phone:(81)3 5529211. Telex:22545. Or get in touch with Sea Containers Pacific Ltd., P&O Building, Des Voeux Road, Central, G.P.O.Box 701, Hong Kong.

Phone:(852)5 224191. Telex:HX 74017.

**sea containers**

## Rising containerized cargo

Seattle, Washington, March 1978 (Port of Seattle Trade-lines):—The Port of Seattle's share of containerized cargoes from the transpacific area has grown from 2.5 percent to 10.3 percent in the 10-year period between 1967 and 1976.

During the same period, other West Coast ports reflected a more modest growth from 30.4 percent to 35.5 percent, and the Gulf and Atlantic ports dropped from 67.1 percent to 54.2 percent.

In releasing the figures, Port Commission President Paul S. Friedlander noted that they demonstrate the "double diversion effect" which Seattle has achieved in this trade.

One diversion is that from the Gulf and Atlantic ports to the West Coast. The second diversion is that of Seattle attracting a growing share of West Coast imports.

Complementing the latter diversion is the fact that Seattle had only 7.5 percent of the coastwide transpacific imports in 1967, but tripled that share to 22.5 percent by 1976.

## Port Traffic in 1977

London, 10th April 1978 (National Ports Council News Release):—The latest statistics published by the National Ports Council\* indicate that the total traffic through British ports in 1977 declined slightly—by one per cent—compared with 1976. This was largely due to a further substantial decline in imported oil tonnages, as a result of the development of the North Sea oil fields.

Fuel imports fell by 19 per cent; this fall was partly offset by an increase in exports, but total fuel traffic, in and out, was 2 per cent down on 1976. The year also saw a marked slackening in the growth of fuel exports; in the first quarter these stood 48 per cent higher than a year earlier, whereas in the final three months of the year tonnages were only 6 per cent above the comparable 1976 figure.

There was no change in the non-fuel traffic compared with 1976. The year 1977 as a whole saw a 5 per cent increase in traffic in foodstuffs and manufactured goods, but a decline of 7 per cent in basic materials traffic. The effects of the USA dock strike could be seen in the reduced level of deep-sea unit load traffic in the fourth quarter of the year—11% lower than in the fourth quarter of 1976. This strike also had the effect of reducing the growth in non-fuel exports to deep-sea countries although here the tonnage was still 7 per cent higher than a year earlier.

Over 1977 as a whole unit load tonnage was 7 per cent up on 1976. In this regard the continued growth of the port of Dover was particularly noteworthy—unit load traffic through the port rose to 4.5 million tonnes in 1977 compared with 3.6 million tonnes in 1976, making Dover the leading British port for this class of traffic.

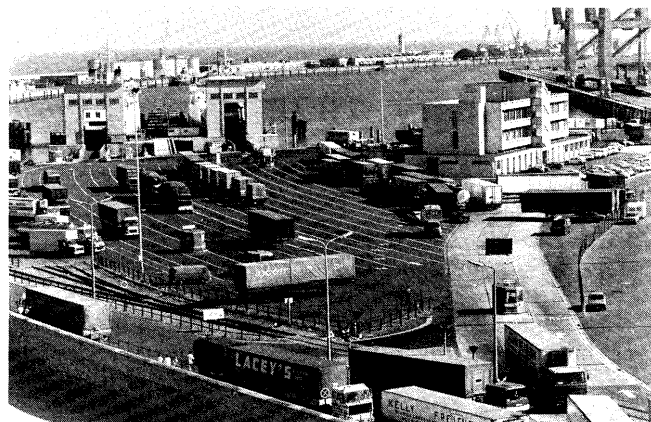
\* Quarterly Bulletin of Port Statistics 1977, Quarter 4. Published by the National Ports Council, Commonwealth House, 1-19 New Oxford Street, London. WC1A 1DZ Price £6.00.

## British Transport Docks Board

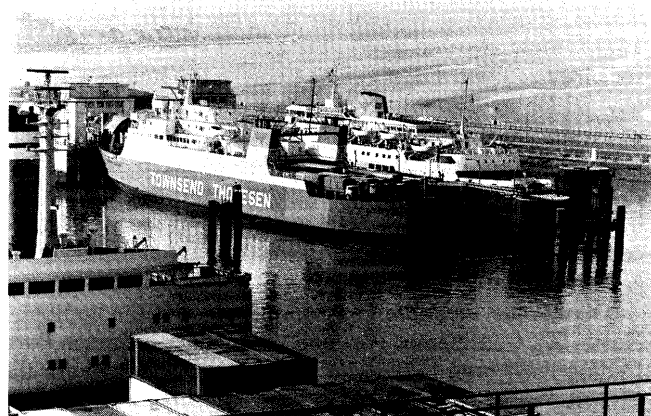
### • Docks Board appoint new estate surveyor

5th April, 1978:—The British Transport Docks Board have appointed Mr. Algernon O. Collins as estate surveyor at their headquarters offices in Marylebone, to succeed Mr. Frederick W. Cartwright, who recently retired.

## Zeebrugge Outerport (See front cover also.)



Carferry (ro/ro) terminal in the outerport: General view



Public ro/ro berths (Outerport)

Mr. Collins has been the assistant estate surveyor for the past twelve years, since he entered the Board's service on 17th January 1966.

Prior to that he spent thirteen years as estate surveyor to the Iron Trades Employers Insurance Association where he was responsible for property managements.

Mr. Collins, who is 59, holds a B.Sc. degree in estate management from London University.

### • Lowestoft wins new service to Malta

11 April 1978:—A new general cargo service to Valletta, Malta has been won by the British Transport Docks Board's port of Lowestoft, and the first sailing is expected to take place on 5 May.

The service, which is being operated by the Deutsche Melita Anglia Line, will run on a three-weekly basis initially, increasing to fortnightly later. Vessels will carry export general cargo which will be partly containerised.

Port agents and stevedores for the service are Small & Co. (Shipping) Ltd., and their director, Mr. Wiltshire, said "Lowestoft was chosen because it provides an efficient service with a good turnaround time for vessels, and because it has a good record in labour relations."

Lowestoft's docks manager, Mr. Robin Nicholls, says "I am delighted to see another regular trade out of Lowestoft. This will add strength to the general cargo services which are fast becoming the backbone of the port's activities."

UK general agents for the service are Seabrook Freight Services Ltd.

# Port of Dunkerque in the limelight

## Paris Press Conference 7th February, 1978

### Extracts from the speech of Mr. Jean Lefol, President The Dunkerque Port Authority Board of Directors

*Since the Dunkerque Port Authority Board of Directors reelected me Chairman last week, I am going to endeavour, together with the Director, to relate the lessons of 1977 and present our objectives for 1978.*

I—a) The total traffic for the year 1977 has remained almost constant compared to the year 1976. As you are aware, these two last years have been marked by important social difficulties. I don't want to make too much of the 52 day strike in the springtime, but, on the other hand, I underline that the total traffic at Dunkerque has been held at 32.8 million tonnes, that is a drop of 2.2%, and this, in the context of National mediocrity on the one hand, marked by the crisis in Steel making, and the world-wide context of maritime transport on the other hand, made equally difficult with the increase of protectionism.

Dunkerque therefore conserves its place as the number 4 North Sea Continental Port and the number 3 French Port, finding itself even better situated above the average for the French Ports, which shows an average decrease of 2.5% to 3%.

b) Dunkerque keeps its place in Western Europe by its dynamic commercial policy, which, without the strike, would have taken the honours for growth among the major French ports. This far reaching commercial policy is founded on practices in line with those of other European ports, on a favourable quality/price ratio, on active inquiries in the Dunkerque hinterland, at Lille and still more recently at Reims, and finally by commercial contacts with New York, Jakarta, and Paris; these commercial efforts have been fruitful in the following fields:

- Cross-Channel traffic increasing in a number of fields.
- The creation of special terminals.
- The opening or reinforcing of regular lines.

On the other hand, the Rapid Transit Container Port is not yet working to its full capacity, due to the lack of any new containerised line, and the containerised line to Harwich having been suspended.

— The traffic due to the importation of iron ore for Saar-land has suffered from competition from the terminal of Maasvlakte at Rotterdam.

— Finally, I.C.I. have not come to Dunkerque, but have gone to Wilhelmshaven, of which Mr. PECHERE will speak to you.

c) 1977 has been a year of constant negotiations in the social field, which has seen the founding of a new organization of labour on the public quays, with the possibility for dockers being semi-permanent for 27 weeks.

Solutions have not been found in all fields, among others, the steel products terminal.

I am now pleased to speak to you of the prospects for

this year, 1978, which unfortunately has again opened in a very uncertain world-wide economic climate.

II—Fundamentally, I can assure you that we remain confident in the future of the port for three reasons:

a) Firstly, if after such a long stoppage of work, Dunkerque has kept its place and its total traffic, it is incontestably the port possessing resources of men, offering price advantages and giving quality work, such that Dunkerque can and must progress even more.

b) Further, the position of Dunkerque in North West Europe, at the crossroads of the world's most dense maritime traffic, is in itself a trump card. You must know that the hinterland of Dunkerque comprises principally the region of the North and Pas-de-Calais. This being the number two French region for foreign trade, as much for imports as well as exports, representing in value, 11% of France's foreign trade. This is to say that our Port, and the region, are complimentary, Dunkerque has a part to play in this region, as elsewhere in France and in Europe, and for that it is extremely well connected with the hinterland.

c) The final reason which allows us to have confidence in the part that Dunkerque can and must play, are its very own qualities which Mr. PECHERE will shortly remind you of. The port installations, the industrial zone, the port organization, none of which ceases to develop and adapt and are far from their full potential.

III—Well then, which policy to adopt in 1978.

— It is very evident that the major objective, without which all the rest will be in vain, is to improve our image. This will be a priority task for some years to come because it is important that a climate of new confidence be restored between Dunkerque and its clientele, whether they be shipowners, shippers, intermediaries or public bodies. This long and exacting labour will be done at Dunkerque with the people of Dunkerque and by the people of Dunkerque.

— A second objective consists of urging the shipping world and the shipping conferences to choose Dunkerque and notably to closely follow the tendencies of French shipowners. This second objective is aimed especially at the shipowners of containerised and conventional lines, trading in general cargo. This is the contribution of Dunkerque to stabilising the balance of payments, for which our government, by the intermediary of Mr. ROSSI, Minister of Foreign Trade, asks of each link in the chain of transport, to make an effort. I believe that Dunkerque is ready to give the best service at the most attractive-cost to Shippers enabling them to sell CIF and to buy FOB, via the French ports of course.

— Last and not least, Dunkerque, the port and industrial axis of Northern France, has a duty vis-a-vis employment, in attracting industries to the Industrial-Port Zone, which is capable of serving the whole of North West Europe.

There we have, briefly, a resume of what are going to be our objectives for this year 1978.

Before going over to the questions and answers debate, I am going to hand you over to Mr. Michel PECHERE, Director of Dunkerque Port Authority, who will explain to you in more detail, last years results and the prospects for the year 1978.



## I—TRADE BALANCE 1977

### LAST YEAR'S TRAFFIC

In 1977 the total traffic of the port reached 32,773,219 tonnes, that is a decrease of 2.2% compared to 1976. An analysis of the various types of traffic, seen in the national context and taking into account the social events of the past year, indicates both successes and failures.

### PETROLEUM

At a time when the French National consumption of petroleum products has again been reduced, hydrocarbons, both imported as well as exported, have made progress at Dunkerque; this has produced a remarkably steadying effect, to the benefit of the northern French port refineries; we have imported more crude oil (especially for the Total Group refinery) and less refined products, at a time when the export of refined products (+33%) has made substantial progress. Dunkerque's refineries (Total & B.P.) are, however, far from their full potential.

### IRON ORE

Half of the traffic of Dunkerque is intrinsically tied to steel making and consequently follows the development of the crisis in that industry. A fall in imports of more than one million tonnes of iron ore (for Saar-land:—700,000 tonnes on 1.7 M.T. in 1976—For the Usinor Group—400,000 tonnes) due to the unfortunate situation and the increased competition from the new terminal of MAASVLAKTE at Rotterdam. Nevertheless the iron ore destined for Lorraine has registered a slight increase. For 1977, the results of production of Usinor-Dunkerque is situated approximately at the same level as in 1976, that is 4.4 M.T. of steel (capacity 8 million tonnes), 5th in the production of steel in France.

### COAL

The maintenance of local production and the reduced national production, have equally exercised their effects on imports of coking coal for steel production, while simultaneously, Government policy has encouraged the E.D.F. to substitute coal for oil in firing the power stations (Commines, Ansereuilles, Pont-sur-Sambre, Bouchain, etc. . . ). This increase in the importation of coal (+800,000 tonnes) by Dunkerque will be continued in 1978, (probably a total of 2.2 M.T. for E.D.F.) and probably increasing again until the French nuclear power stations, now building, are commissioned.

### STEEL PRODUCTS

We can also note that Dunkerque has recorded trading in metal products that has, for the greater part, remained stable both in imports and in exports. With regard to imports, we note a very important development in the copper traffic from Chile, Great Britain, Zambia and Spain. On exports, in spite of the bad situation in the steel-making industry, and in spite of the strike, we can be satisfied to have maintained the level of traffic; the tube traffic has decreased leaving the rolled steel plates traffic in first place. Among destinations, let us quote the U.S.S.R. with a trade of 291,000 tonnes composed of tubes, plates and coils.

### CROSS-CHANNEL TRAFFIC

In 1977, cross-Channel traffic was marked at one and the same time by the loss of the containerised line from Harwich and by the very clear success in the passenger traffic (+44%) (that is a total of a half million passengers) the goods train-ferries from/to Dover (+24%) and the traffic in accompanied vehicles (cars: +100% and road transport: +21%). The containerised ro-ro line between Dunkerque-West and Felixstowe has also known a very clear increase, notably concerning road transport: +120%. The total tonnage transported being 1.3 million tonnes.

### CONTAINERS

The containerised traffic at Dunkerque, which achieved a total of 30,221 containers, is composed of 2 parts: cross-Channel and deep-sea. Containerised cross-Channel traffic totalled a little more than half of the total number of containers transported in 1976, that is 19,528 TEU in 1977. On the other hand, the deep-sea containerised trade increased 25% both in numbers and tonnage, compared to 1976. This positive result, without any contribution from new containerised lines, displays the remarkable extension of containerisation, whether it be in the commissioning of new large capacity full containerships, in the ever increasing numbers of containers shipped, on conventional or on multi-purpose ships, or finally in the much greater variety of goods which are now containerised (eg. steel products on C.G.M.'s Antilles-run) 1977 has seen the shipment of containers, equivalent to 10,400 TEU, amounting to approx. 150,000 tonnes for the deep-sea traffic. In this field, all berths are now in service at the Rapid Transit Container Terminal, equipped with 4 container gantry-cranes and stacking areas.

### GENERAL CARGO

The sugar industries intensive campaign, although late in coming, has provided and increase in traffic to above 1/2 million tonnes. Imports of sand have suffered above all, due to the building industry and public works recession. The traffic in importing wood and textile raw materials has been influenced by the depressed situation. On the other hand we can note with satisfaction the tangible development of the trade in borax and in edible oils, which reached the same level as the very best of years gone by. Cement and fertilizer exports registered the repercussions due to the industrialization of Third World countries; cereals were handicapped by the late price fixing in the Common Market Agricultural system. Finally while imports of general cargo (+1.9%) are holding out well, exports (—12.6%) took a beating from the port stoppage, especially the traffic in regular lines.

All these details correspond with the traffic figures published in the attached information sheet.

## II—FORECASTS FOR 1978

a) Traffic is expected to rise to 34.8 million tonnes, that is a 6% increase in tonnage, and is therefore expected to top the record of 1974 which reached 34.5 million tonnes.

The breakdown of this traffic compared to that of 1974 would appear to be as follows:

	1974	1977	1978
Oil	11,5	11,5	11,2
Iron ore	13,4	10,7	11,2

Coal	3,2	4,1	5,1
Others	6,5	6,5	7,3
	<u>34,6</u>	<u>32,8</u>	<u>34,8</u>

This breakdown indicates that we expect a certain drop in the consumption of oil products in 1978, a slight recovery in European steelmaking and a substantial increase in imported coal at Dunkerque for the E.D.F. power stations. Finally the traffic forecast in other commodities comes from the hope on the one hand that Dunkerque will consolidate its share of the market in the face of European competition, and on the other hand of a moderate recovery from the international sea trade crisis.

Among others traffics which are in a position to increase in 1978, we should probably cite cotton imports, for which Dunkerque is well known with regard to quality of service; sugar, thanks to the commissioning of the new sugar terminal and coke exports to the U.S.A., Portugal and Scandinavia. Elsewhere, the commissioning of the steel quay must allow an improvement in exports of steel products and equally the commissioning of the new chemical products terminal for STOCKNORD would reinforce the port's position in that traffic. The progressive commissioning of the CUAEM works and the steam cracker will generate certain traffics which are at the moment non-existent both in import and export.

As regards Dunkerque-West, with an ever growing tendency towards further containerisation in cross-Channel and deep-sea traffics, a better score ought to be recorded in 1978. The target remains the choosing of Dunkerque-West by more container lines. More cross-Channel train-ferry callings to Dover and Harwich (8 departures a day) ought to produce a higher tonnage of goods transported either by rail cars or by ro-ro freight vehicles and the ro-ro container and freight line to Felixstowe still has scope for further growth. The motorway to Dunkerque should bring more cars and passengers on the Dover-Dunkerque service.

b) To build up a stock of available land in the industrial port zone of Dunkerque-West, the Port Authority goes on buying farmland, especially if this land must be made available for any potential industry to build new facilities.

The western development scheme is geared to potential new industries. It is believed that this further development will take place in the available space between the two ports, sheltered by a new breakwater still to be built. Both ports would then be connected by an average sized lock providing a safe access to Dunkerque-West for river barges and pushed convoys.

No new industrial project has come out yet, but the Port Authority is providing the zone with improved connections by road and rail, especially towards the newly established industries. Farmland not yet required for industry is leased to its previous tenants.

As regards the building of new industries on the zone, CUAEM and COPENOR will be commissioned in autumn. Works are progressing for commissioning the first power group at the nuclear power plant of Gravelines before the end of 1979.

A new air-pollution control network is now almost operational for the first tests on a permanent basis in Dunkerque. This current control is performed in connection with a computer in Douai (Nord) which up-dates all the information every quarter of an hour and in emergency

allows fast reaction.

c) The works program for this year includes the completion of the new n° 6 dry dock for SECOTER around next April and the building of 342 metres of quay to repair ships afloat next to the Southern bank of the dry dock. A sluice will be widened also around April to allow bigger ships into Docks n° 3 and 4.

Further traffic studies are carried out for the new planned solid bulk terminal at Dunkerque-West for ships up to 20 metres draft (65 ft) (175,000 dwt). Their results will bear upon any decision to build it or not. Works could start in 1978.

The Port of Dunkerque Authority also sells its know-how in carrying out building works and equipment engineering. Its civil engineers are involved in building a solid bulk terminal and a general cargo berth in Port Kasim in Pakistan. Other projects are being studied around the world.

### III—THE ASSETS OF THE PORT OF DUNKERQUE

They can be summed up as follows:

- a) The physical possibilities of Dunkerque are not yet reached  
(further scope for huge industrial and traffic development at Dunkerque-West)  
(redevelopping of old docks—new specialized terminals)  
(modern equipment: mobile cranes (36 and 10 tons)  
new container gantry-cranes, ro-ro linkspans)  
(vast back-up areas for storage, ... especially at Dunkerque-West).
- b) Excellent land links within the Common Market and North-Western Europe
  - A 25 no-toll motorway to Belgium, West-Germany and Central Europe
  - electrified railways network for 4,000 ton-trains—several shunting—yards make it the biggest port shunting-yard in France 4,000 trucks/day
  - wide gauge canal (possibility for coasters to go as far inland as Lille and Valenciennes)
  - U.K. 2 hours and a quarter far from Dunkerque
  - Calais-Dunkerque international airport 25 km away; Lille international airport within one hour's drive.
- c) Its quality of service at competitive prices  
Dunkerque is no longer an expensive port. Freight charges are now the same as in other ports on the Bordeaux-Hamburg Range FOB Dunkerque is equal to FOB Antwerp

The regular user contract between the Port user and the Authority involves private professionals in managing their traffic on their reserved part of public quays. New specialized terminals are created.

Labour agreements for the Eastern port in 1973 and the Western port in 1976 and the new April 1977 Labour agreement provide all versatility to dock labour for any kind of traffic.

# Heavy Load Traffic in Le Havre

## Main Asset: A 650 tonnes sheer-legs

(IAPH 11th Conference at Le Havre May 12-18, 1979)

## Port of Le Havre Series No. 3

### Evolution of the Le Havre traffic

A decade ago when we had to describe a big port handling equipment, were mentioned first land quay cranes that up to now have been still conventional handling equipment. Then were mentioned floating equipments of various types, i.e. floating cranes with a lift capacity about the same as that of quay cranes and floating sheer-legs with a lift capacity up to 30 to 300 tonnes.

Then were mentioned stock equipments, especially gantry-cranes for wood handling and various facilities assigned to handle liquid and solid bulks such as hydrocarbons, coal and ore, cereals and chemicals needing gantry-cranes and conveyors of all types.

Indeed as long as ports had only to handle cargo of conventional packaging, none of them marked off from the others by a special handling machine not belonging to conventional equipment here-above mentioned.

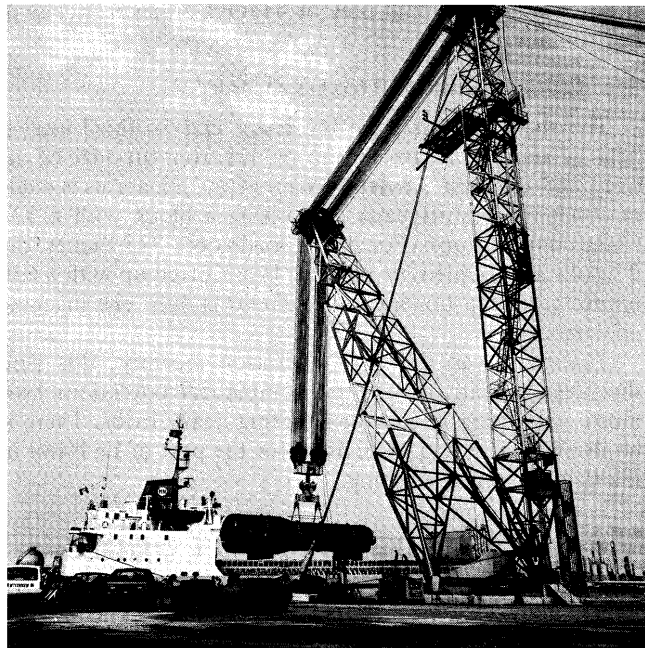
The first major turning point in port handling occurred in France in 1967 when containers appeared in ports for the first time.

Therefore, in order to meet the requirements involved by containerization of a modern and revolutionary handling, the Port of Le Havre marked off by the deliberate boldness in equipping with powerful handling equipment, viz gantry cranes of a 40 tonnes lifting capacity which up to now has constituted the main parts of the 3 Le Havre container terminals. This confidence in containerization enabled the port of Le Havre to rank 1st among French ports in this field.

### A new step

The rapid tempo of industrial world seems however to be opposed to a slowing-down of the evolution of port handling technology. In fact, we are witnessing another evolution: that of a traffic which ports from another point of view are quite familiar with; the traffic of heavy loads made of capital goods that are usually for consignment to developing countries. Over the past few years, the traffic has increased tremendously in Le Havre. For your guidance, the traffic of heavy loads over 15 tonnes has more than doubled between 1974 and 1976.

Being at the moment handled by conventional port equipments, such as twin quay cranes, road cranes and floating sheer-legs, heavy loads which up to now have been of a relatively middle weight are promising to become load units, some of which will be far heavier than those we know. This new situation originates from the evolution of maritime transportation means that enable to convey from one port to another full units. Let us specify that all along its 26 km quays, the Port of Le Havre users are provided with 122 land cranes of 3 to 12 tonnes, one mobile road crane of 25 tonnes, 6 floating cranes of 8 to 200 tonnes and 27 gantry cranes of 4 to 40 tonnes. Fully aware of the important part the port of Le Havre could take in the



Port of Le Havre—A 650 tonnes sheer-legs

traffic of capital goods, the Board of Directors of the Port Authority on their meeting of November 14th, 1975, decided to purchase a land sheer-legs of a 650 tonnes lifting capacity that could handle the heaviest loads expected and that would complete the actual port equipment. This machine was put into operation on August 17th, 1977 at a date when arrived to Le Havre French freighter "Chantenay" having on board a steam boiler of 340 tonnes and a 280 tonnes tank. Those loads were built in the factories of the Creusot and they were for consignment to a nuclear power station being set up at Dampierre.

### Why a 650 tonnes land sheer-legs?

Capital goods are divided into 2 categories: the first one includes machines in boxes, timber bits, engineering materials; loads weighing over 200 tonnes are not numerous. Thus they can be handled by actual port machines, viz floating sheer-legs.

Second category includes assembled units for consignment to nuclear power stations. These loads reach a unitary weight of 280 to 350 tonnes. For the nuclear power stations to be built up, the unitary weight will be close to 500 tonnes. Are also included various loads manufactured in France and assigned to export, i.e. for example: transformers, nuclear turbines, cracking lathes, etc . . .

These loads are distinguished either by their large dimensions that can't be handled by actual port equipment, either by their weight between first 200 and 250 tonnes to reach then 300 to 400 tonnes or even 650 tonnes.

With a view to operating all loads of 2nd category, the port of Le Havre had decided to purchase a sheer-legs with a lifting capacity up to 650 tonnes. A survey proved that we had rather buy a land sheer-legs than a floating one:

working costs of a floating sheer-legs are more than twice those of a fixed one. The site being chosen for the new sheer-legs to be set up is berth 3 of Ro-Ro centre of the Grand Canal du Havre. Indeed it has been proved necessary that all heavy loads be centralized on the same spot, making it possible however that they be handled either vertically or horizontally.

#### Specifications of the 650 tonnes sheer-legs

The sheer-legs has a luffing beam and its fixed mast is held by stays. It is situated 26 meters from the edge of the quay and the mast 30 meters. Main lifting apparatus is made of 2 identical units each comprising a block with a 325 tonnes double hook. For lifting loads over 325 tonnes, the 2 hooks are coupled by a lifting beam fitted up with a 650 tonnes revolving double hook. There is only one machine operator.

Though it was put into operation recently, this land sheer-legs proved on its first commercial operations how much interesting it was for handling heavy loads. There is no doubt that it is a main asset for the port of Le Havre in the field of special handling.

## Marseilles/Fos Europort South

### JANUARY 1978—EDITORIAL

1978 is starting off with the announcement of favourable overall results for last year's port traffic. It was in fact a record year for the transit of general cargo and bulk traffic through the Port of Marseilles Authority. Only oil traffic declined, due to the world economic situation.

These highly satisfactory results are due to three combined factors: Marseilles' favourable geographic position, a dynamic commercial policy, and the industrialization of Fos. Marseilles-Fos is without doubt one of the best placed ports in Europe for traffic to the fast-developing Middle East countries; its inland communication system fans out from Marseilles to link it with virtually all European towns by fast road and rail services; its port complex is capable of absorbing large quantities of modern RO/RO and container traffic; and it is also a great industrial complex, notably for iron and steel and chemical products. During the year, all these numerous possibilities of Marseilles-Fos were also made better known by the frequent meetings organized by the P.M.A. with shippers and forwarders in England, Germany, Switzerland and France.

EUROPORT SOUTH sends its best wishes for the New Year to all those who contributed to this success, and hopes that the prosperity of the port and all who use it will continue throughout 1978.

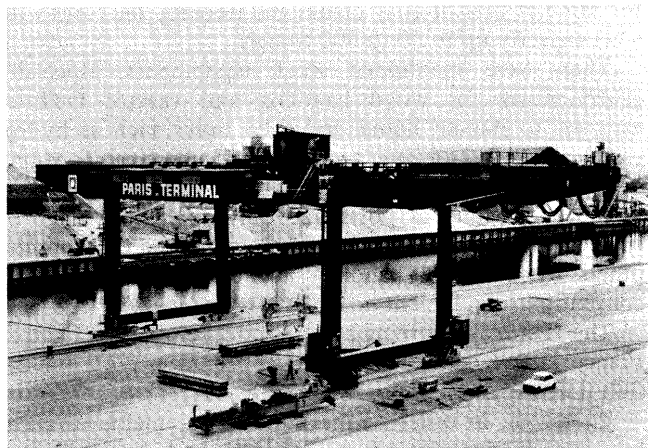
## Container Crane to Fos Sur Mer, France

Alameda, Calif., U.S.A., March 23, 1978:—Paceco, Inc., A Subsidiary of Fruehauf Corporation, Alameda, California recently delivered components for a 40 Long Ton Rubber Tired Transtainer® crane to its licensee, Ateliers et Chantiers de Bretagne (ACB) in Marseille, France. The Transtainer crane, designed and fabricated for GEI Eurofos, was transported to Terminal Contenurs, Fos Sur Mer, France under the direction of ACB, where it was erected on

site.

The Transtainer crane is the second one built by Paceco for GEI Eurofos. The first crane, also 40 Long Tons, was erected at Fos Sur Mer in 1975. With a 74 ft. span, the crane has a four high and six wide container stacking capacity. It utilizes a 20', 35', 40' telescopic spreader supplied by Paceco. Marketing and liaison services were the results of the combined efforts of ACB, (Nantes, France), and Paceco International Limited (London, England). Paceco coordinated design and fabrication of the crane between its Alameda, California and Gulfport, Mississippi facilities.

## New Paris Container Terminal



Alameda, Calif., April 7, 1978 (Paceco News):—During the recent inauguration ceremonies at the new Paris Container Terminal at Gennevilliers, France, a 35 Metric Ton Transtainer® crane was featured as the terminal's most impressive new piece of equipment.

The Paceco/ACB Rail Mounted Transtainer crane is capable of handling rail, road and river barge traffic. With a container stacking capability of four high and five wide, the gantry enables the 20'/30'/35'/40' telescopic spreader (which can revolve 360°) to travel 115 ft. The crane straddles two railway feeder lines and has a floor storage area for 240 TEU. The quayside track is placed close to the quay wall allowing the spreader to extend up to 40 ft. over the water to facilitate barge operations alongside.

## Major contract for CTA

Amsterdam, February 1978 (Amsterdam News Letter):—Early in January, Combined Terminals Amsterdam (CTA) signed a contract with Hoegh Ugland Auto Carriers of Oslo, Norway, and the Nissan Car Carrier Company of Tokyo, to handle some 100,000 autos per year, for a period of from three to six years. After being offloaded in Amsterdam, the cars—primarily Datsuns—are to be distributed throughout Europe.

CTA, a subsidiary of KNSM Royal Netherlands Steamship Company, plans to operate the service under the name Car Terminals Amsterdam.

The company already handles some autos from Japan, but this contract heralds a significant increase. European cars built for export are also shipped through CTA, the

(Continued on next page bottom)

# Bremen News

## Bremen International

### • Bremen Know-How for Bahrain

Bremen, 27.2.78 (BremIn). Multifarious know-how has been assured from a Bremen economics-delegation, led by Burgomaster Dr. Walter Franke, in Bahrain: in extending port-facilities, improving the infra-structure, equipping hospitals with clinical apparatus—and disposing of waste along biological lines. Bahrain is looking to Bremen for training vacancies for doctors, nurses, hospital technicians, banking officials, social workers, sports teachers and construction engineers. Bahrain's Burgomaster-President, Sheik Abdulah ben Mohamed al Khalafi, will already visit Bremen in April for further discussions, as will—in the Autumn of 1978, the Prime Minister of Bahrain, Khalifa ben Sulaman al Khalifa.

### • Import and Export Improvements in 1977: +13.5 Percent

Bremen, 13.3.78 (BremIn). More favourable, in 1977, than the overall external trade of the Federal Republic of Germany was, particularly, the foreign trade through the Bremen ports (Bremen and Bremerhaven). This expanded by 13.5%, to a total value of DM 38 milliards, whereby imports increased 12.1% and exports 14.2%.

Oceancargo handling in the Bremen ports, due particularly to the decline in ore importation, lagged 0.8% behind the previous year's result. The several weeks-long American longshoremens' strike also made itself felt. Nevertheless general-cargo handling, coming with an increase of 7.6% over 1976 to 14.5 million tons, nearly attained the 1974 record. Thus the Bremen ports maintained the dominating role in the container trade which they have held from the outset with 503,000 containers (on the 20'-basis), as the greatest German container port, with a cargo quantity of 4.2 million tons. Hamburg again took second place; according to the West German Federal Ministry of Transport, 471,000 containers, with 4.06 million tons, were handled there in 1977.

The industrial turnover of Bremen and Bremerhaven increased in 1977, over that of 1976, by 13%—to DM 15.3 milliards (previous year: 8%) and thus clearly lay well over the increase for the total Federal region (6%). Thereby the Bremen industry's exports rose by 22 percent.

### • Antarctic Riches grow more Interesting

Bremerhaven, 13.3.78 (BremIn). On April 10th 1978 the two German research vessels "Walther Herwig" and "Julius Fock", with 21 scientists aboard will, in Buenos Aires, be concluding their second Antarctic expedition. On February

only facility of this type in the Port of Amsterdam.

Just recently, in mid-December, at the CTA West Terminal in the Westhaven, the first pile was driven for the extension of the present 760-meter quay by another 150 meters in a northerly direction. This nine million guilder addition provides CTA with almost a kilometer of quay space.

24th they set sail from the Earth's southernmost town, Ushuaia, in Tierra del Fuego, on the third and last section of this undertaking. The object continues to lie in krill, that small crawfish which has developed in enormous swarms since the decimation of the whale in the southern oceans. After over 300 hauls and by applying underwater TV, the two ships have been able to confirm the large-scale accumulation and denseness of the krill swarms—and they also have discovered the, until now seldom detected, krill eggs within shallow waters in stupendous quantities. Considerable progress has been achieved here.

The technical and fish-industry experts have so far not been so successful. Two important problems remain to be solved before the immense profusion of albumen can be utilised:

- 1) the development of a practical krill-trading product by the fish-industry and
- 2) reduction in the still far too high transportation costs in order to become competitive on world fish-markets.

High transport costs also hinder the utilisation of probable, gigantic deposits of ironore, platinum, copper, nickel, chrome and lead at the South-pole—mineral resources which may well have an even disproportionately greater significance than the krill. Added to this is the fact that mining technology to date has developed no process for exploiting these riches from beneath the armour of ice. As, however, the cost of foodstuffs and raw materials rise, the time is already to be visualised when the utilisation of the large 'refrigeration chamber of the Earth' will become economically interesting. Experts estimate: the year 2000—if not earlier . . .

### • Manila-Planning as an Example

Bremen, 28.3.78 (BremIn). The port problem for developing countries depicted in a 20-page brochure just published, entitled 'Port Planning in Development Countries—A Case Description' has met with noteworthy response. The author is a leading expert in this field; Dr. Rolf Stuchtey of the BLG—one of Europe's largest port operating companies. The publisher is the Director of the Institute of Shipping Economics, Dr. Hans Ludwig Beth. Stuchtey takes as a basis his own plans for the Philippine port of Manila. His findings are, in high degree, representative for the ports of all the developing countries. (Institute of Shipping Economics, Werderstr. 73; D-2800 Bremen 1: Tel. 0421/50 02 33).

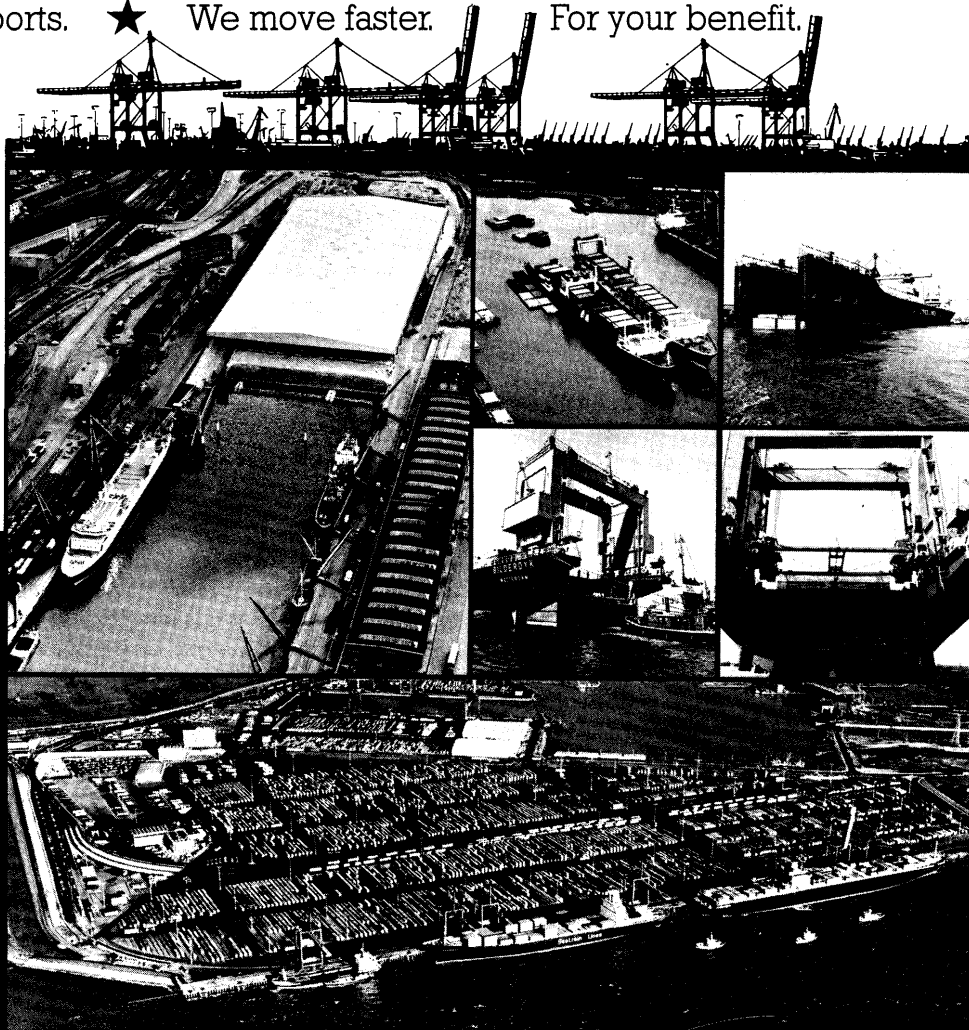
### • Two Ore Unloaders discharged 38 Million Tons

Bremerhaven, 24.4.78 (BremIn). The two ships' unloaders of the Weserport ore-harbour in Bremerhaven, after having discharged 38 million tons from ocean vessels over a 13-year operational period, have now been overhauled and modernised. The mechanics of the traveller-gearing have been converted from the rackwork to the rope-pull system. In overhauling the electrical equipment of the grab-operation, the mercuric steam rectifiers were replaced with thyristors. The effect: considerable easing in the handling of the equipment; greater fluidity in the discharging processes; increased efficiency- (For more info.: Weserport GmbH., Tel.: 0471/49021, or Klöckner Press and Information GmbH, Tel.: 0203/181 and 0203/3961).



# Container Ro/ro-Lash

Intermodal traffic needs speed, efficiency, and flexibility. ★ We've got the facilities and the know-how. ★ That's why more and more lines are calling at our ports. ★ We move faster. For your benefit.



**The Ports of  
Bremen-Bremerhaven**

For details write to: Bremer Lagerhaus-Gesellschaft, 28 Bremen, Überseehafen, Phone 3 89 61, Telex 2 44 840  
Bremer Lagerhaus-Gesellschaft, 285 Bremerhaven, Steubenstr., Phone 48 41, Telex 02-38722

# Port of Gothenburg Topics

## Port of Gothenburg Sweden

### The Nordic Investment Bank lends the Port of Gothenburg 35M. Kronor for new harbour development

The Nordiska Investeringsbanken (the Nordic Investment Bank) has given the Port of Gothenburg a loan of Swedish Kronor 35M. (£4M.) for the projected development of the port's Älvsborg and Skandia harbours.

The bank, which is backed by the governments of the Nordic countries Denmark, Finland, Iceland, Norway and Sweden, has the purpose to support projects of mutual Nordic interest, and as the transshipment port for Nordic export and import the Port of Gothenburg is regarded as such a project. 21% of the port's dry cargo during 1976 was transit goods on its way from or to the other Nordic countries. 57% of this total came on Norway's part, 26% on Finland's and 12% was addressed to or from Denmark. At the Skandia container harbour as much as 30% of the dry cargo flow is transit goods to or from Nordic neighbour countries.

The development of the new Älvsborg harbour and new investments at the Skandia harbour as well as other changes of the port's facilities are estimated to cost around 245M. Kronor (£27M.) in the period 1977-1981. The Nordic Investment Bank may later on cover up to 30% of the total loans needed for the fulfilment of this program.

The further investments after 1981 at the Älvsborg harbour are expected to cost an additional 200M. Kronor. The reason why such large sums are to be invested at the Älvsborg as well as the Skandia harbour is that the port's old inner harbours do not have space nor equipment enough for an effective service of new modern dry cargo vessels, such as those ordered recently by the leading Swedish shipping companies.

### **VOLVO concentrates all its export and import traffic to new terminal at Gothenburg's Älvsborg harbour**

The Port of Gothenburg has made an agreement with the Volvo car company, one of Sweden's largest enterprises with affiliated companies in the tractor and motor industry, that Volvo from the beginning of 1979 will concentrate its export and import shipping transports to a new specially designed Volvo terminal which will be built at the new Älvsborg harbour.

Volvo has earlier had a more diversified system for its shipping transports, the trans-oceanic transports mainly going via Gothenburg, while export and import to and from European countries have been handled by other harbours on Sweden's west coast.

The new Volvo terminal situated at the Älvsborg harbour near the mouth of the Göta River and only 4 km from Volvo's main factories will have an area of some 70,000 m<sup>2</sup> and will have buildings and all the equipment for a car terminal of the most modern type, including a quality control station.

Mr. Rune Svensson, head of Volvo's external transport affairs, says that the concentration of the flow of products to the new terminal will give many advantages. The



The 70 000 m<sup>2</sup> Volvo terminal area in the Älvsborg Harbour will be the focal point of Volvo's Swedish exports and imports when it starts operating in early 1979.

shortening of the time for the transport of the cars as well as car parts means several millions of Kronor. No less than half of Volvo's own capital is involved in the material and the material flow—including the cars ready for delivery—and a speeding up of the transport links thus can give a considerable diminishing of the costs i.a. on the stock side.

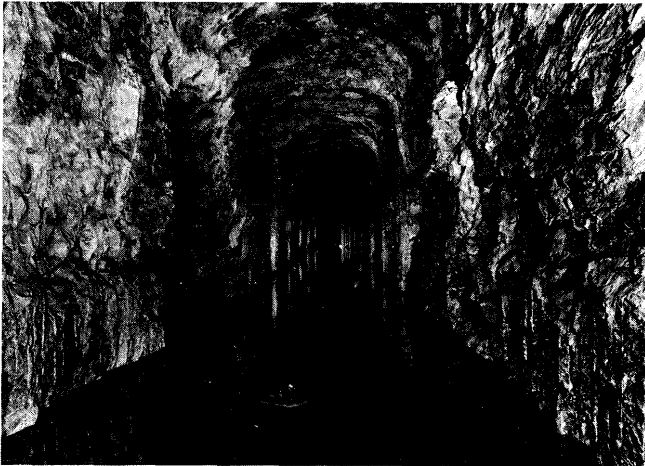
With the concentration of all Volvo's export and import goods to and from Great Britain it may for example be possible to have a ship leaving the terminal once every two days. This will mean that Volvo's buffer stocks in England can be kept within tighter limits which also means savings. Another large export-import link is that between Gothenburg and Ghent in Belgium and the Volvo-owned DAF factories there, and considerable savings are expected to be made possible.

The ship cargo capacity not used by Volvo will be offered to other Swedish and foreign companies for the transport of their products, and it is hoped that the location of the new terminal at Gothenburg's new Älvsborg harbour close to the Skandia container harbour will give good opportunities to build up transport programs to mutual advantage. While the transoceanic transport will go with ships of shipping companies already existing on the routes in question, the European traffic will mainly be served by three new 7,000 tdw ro/ro ships recently ordered by the Nordsjöfrakt company of Skärhamn, Sweden, at the Öresund shipyard of the Svenska Varv AB group of yards for delivery in 1979.

### **World's largest rock cave for oil storing ready for use**

World's so far largest rock cave for oil storing will soon be taken in use at Syrhåla near the Port of Gothenburg's Tor oil harbour.

It has taken three years to blast out the cave's series of four giant rock "halls" each of which having a length of 500 metres, a beam of 20 m. and a height of 30 m. Blasted out of the solid rock with the floor level 50 m. under the



This picture from one of the Syrhäla, Gothenburg rock caves for oil storage was taken when some oil had already been pumped in. Photo flashes were fired from the dinghy in the foreground at a number of locations in the cave. An open camera registered the flashes and made them form a picture.

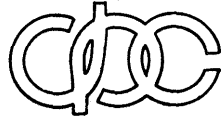
a quantity of oil sufficient for a 70 days break in the ordinary oil flow to the country. The Swedish Supervision for Economic Defence, which is responsible for Sweden's oil store program, will soon have enlarged the country's rock cave stores to a total of some 3.3M. m<sup>2</sup> and in a longer perspective an extension of up to three times this quantity is foreseen.

The cave at Syrhäla is aimed for crude oil and is connected to the Port of Gothenburg's oil harbour as well as to the nearby situated oil refineries. The store cubic available is enough to contain the load from six fully laden 200,000 tons tankers.

The crude oil can be stored for years in the rock cave before being refined. Swedish engineers have a long experience in building rock caves for oil all since the 1930:s, and with the new blasting technique now used it is cheaper to blast out rock caves than to build store cisterns, if the cubic exceeds 50,000 m<sup>2</sup>. In addition, the caves have advantages from an environment point of view—as the caves are hidden under the rocks and consequently do not disturb the landscape scenery.

sea surface and with a top cover of rock which is nowhere thinner than 22 m., the total cubic of the cave is 1.2M. m<sup>2</sup>.

The oil store program which Sweden has taken on as a member of the OECD oil club says that Sweden has to have



## Japan Port Consultants, Ltd.

**Specialist of Harbor Works & Marine Structures**

*Feasibility Study, Investigation, Hydraulic Test, Planning,  
Design, Supervision, Environmental Assessment & Technical  
Consultation*

**Board Chairman:** Dr. SHIGERU SAMESHIMA

**President:** Dr. SHIZUO KURODA

**Vice President:** YUKIO NIIZUMA

**Managing Director:** Dr. RYUICHI YAMAMOTO

**Executive Director:** SHIGEO MORIMOTO

**Head Office:** Daihyaku Seimei Shibuya Bldg.  
1-4, Shibuya 3-chome, Shibuya-ku, Tokyo  
Telex: PORTCON J23536  
Cable: HARBORCON TOKYO  
Tel.: Tokyo (400) 4155

**Branch Offices:** Kobe, Niigata, Kyushu and Nagoya

# Sharjahport, U.A.E.

## Sharjah Port Authority

Sharjah, U.A.E. (=United Arab Emirates):—The Middle East Market is probably the most talked about and least understood of the decade. Everyone has jumped on the bandwagon it seems but not everyone is making a fortune, at least not any more.

As in any boom market, those who were first in did make a killing but now the market is as tough and as competitive as any other. It is still an expanding market, growing at a faster rate than almost anywhere else in the world, but in

### Chart 1

#### Gulf country populations

(To nearest Million)

	Millions		Millions
Iran	36	Qatar	1
Kuwait	1	Bahrain	
Iraq	12	U.A.E.	1
Saudi Arabia	10	Oman	1

### Chart 2

#### Gulf markets we serve

Iran	Qatar
Kuwait	Bahrain

Iraq  
Saudi Arabia

U.A.E.  
Oman

order to take advantage of the situation shippers need to be as competitive as every other company seeking success.

You don't need us to tell you what has happened to freight rates over the past year.

We see your situation as offering two options:

1. Getting out of the Middle East Market.
2. Getting the most out of the Middle East Market.

If you take option 1, and some people are going to have to, nobody questions a businessman for a considered business decision. If you take option 2, then you want the most efficient and effective service you can get with minimum costs and maximum revenue.

That is where we can help. The strategic location of Sharjah's Port Khalid and Port Khor.

Fakkan (opening July 1978) offer you the opportunity to make the land-locked Gulf a one stop market. We know that at present you turn away freight to many Gulf ports. The reasons we understand: insufficient volume, vessel rotation, high operating costs etc.

So try this for an idea.

From Port Khor Fakkan or Port Khalid, the Sharjah Port Authority offers feeder services for:

■ General Cargo ■ Containers ■ Ro-Ro  
to all the Gulf markets shown in Chart 2.

So, cover your principal market with a direct call for the major proportion of your cargo (it may even be here!) and

# A D E N



## OPEN • ATTENTIVE • ROUND THE CLOCK

Bunkering Agents — Ships Agents  
Water Suppliers — Stevedores  
Lighterage and Transhipment Specialists

IATA AND SEA TRAVEL AGENTS

Branch at: Mukalla

### CHAIN SERVICES

For Transhipment (via Aden Free Zone) by Affiliates

### ADEN COASTERS

Classified Coasters FULLY Equipped

Servicing the Red Sea and East African ports

then leave the rest with us.

Let us feed it on to the final port for you.

You could access the whole Gulf on a one stop call.

That way you can take all the freight you can and get (the most) out of the Gulf—fast!

## Anro Asia visits Adelaide

Adelaide, South Australia, April, 1978 ("South Australian Ports & Shipping Journal")—Cargo volumes was the theme taken in the Anro Asia wardroom during a ceremony to welcome the ship on her maiden run to Australia and her first visit to the Port of Adelaide.

Asia and her skipper, Captain F.W. Rockett, played host to a representative group of shipping industry, State and Federal representatives.

The only grumble heard during the ship's short and busy six-hour stay in port was that from Captain Rockett himself. He didn't have time to visit the Barossa Valley, although the shipboard luncheon made some amends—the marketing/commercial manager for the agent company, Elders-ANL, Mr. Dean Buder, made sure there were South Australian reds and whites upon the luncheon board.

Anro Asia, operated by Nedlloyd and the Australia Straits Container Line, shares with her new sisterships a total capacity of 950 containers in her hybrid configuration, including 150 reefer units.

In presenting a Port of Adelaide plaque to Captain Rockett, the Director of Marine and Harbors, Mr. John Griffith, emphasised the research being carried out into cargo volumes originating in, and destined for South Australia. He pointed out that the department's commercial division was actively exploring what volumes were available from the local plant door and overseas exporters and how and why they were distributed by various means.

Mr. Griffith said services such as Anro provided were attracting support, but it was important that they and others attracted the bulk of South Australia's regional imports and exports.

In return for the plaque, the Director accepted an inscribed tray from Captain Rockett as a memento of the visit.

Like her sister-ships Asia will link major Australian ports with Singapore, Port Kelang, Penang and through feeder services with Bangkok and Jakarta as part of a schedule which gives the Port of Adelaide a call every 11 days.

As well as container cells on deck Anro Asia has upper and lower internal vehicle decks for the mechanical handling and stowage of containers and other cargo. She is rated at 18 knots.

Speaking for Elders-ANL, Mr. Buder emphasised the confidence displayed by the ANRO operators in South Australia as a direct shipping point. He predicted increasing activity as a consequence of intensive marketing programs now underway.

## Radioactive Isotopes

Brisbane, Australia (Press Release from Port of Brisbane Authority):—Radioactive isotopes will be used in Moreton Bay this month to trace the movement of silt and dredge spoil.

The project has been arranged by the Port of Brisbane Authority. It will be carried out under the supervision of the State Health Department and executed by the Australian Atomic Energy Commission.

The study, and the methods to be used, are in line with proven and common world techniques and practice. The project will last 10 to 14 days.

The radioactive isotopes will be released in two batches on 26 April and 2 May 1978, about 2 km North-West of Mud Island where the Port Authority has been dumping dredge spoil for many years. The isotopes will be released from the Authority's dredger, "Echeneis", and will be traced by equipment installed in the Authority's work boat, "Wyuna".

It is not expected that the isotopes will travel much beyond the immediate area of the release point.

The Port Authority's General Manager, (Mr. F.M. Wilson), said the study did not constitute any danger to human, marine or bird life.

He said that the isotopes had a very short life, and after 30 days, the radio activity was "dead".

Mr. Wilson said all Federal and State Government Authorities concerned with safety aspects and the environment had been fully consulted and had raised no objections to the study.

During the study, a member of the State Health Department would be present to ensure that the agreed safety standards were maintained and that no residual radio activity remained on the dredge at the conclusion of the project. The Hydraulics Research Station at Wallingford in the United Kingdom is acting as the Port Authority's consultants in the investigation.

He said the Port Authority had also discussed the proposals in full with representatives of all interested unions, and the crew of the "Echeneis" had been fully informed on all aspects.

Mr. Wilson said the Authority over many years had been depositing dredge spoil at specific points in Moreton Bay.

"From the point of view of efficient operation, we need to know if this spoil moves and if it does, where and how" he said.

"The information which we will gather will have an important bearing on the Authority's dredging programmes of the future, and provide information on flood heights in relation to dredged depths to the advantage of the community." (18 April 1978)

# A Fitting Celebration

## Editorial in "Port of Melbourne Quarterly" October-December, 1977

▲ Looking back on what was one hundred years of service, achievement and historical memories was the unwritten theme for the Melbourne Harbor Trust's Centenary Dinner held at the Southern Cross Hotel, Melbourne on the 8th December, 1977.

However, as a progressive, forward planning organisation, the Melbourne Harbor Trust is not content to rest upon past achievements and laurels, hence the opportunity was taken at the Centenary Dinner to highlight some of the future plans for the Port of Melbourne.

Hosted by the Chairman of the Trust, Mr. A.S. Mayne, and his fellow Commissioners, the function had as its major guests, the Governor of Victoria, His Excellency Sir Henry Winneke, K.C.M.G., O.B.E., K.St.J., Q.C. and Lady Winneke; the Premier of Victoria, the Honorable R.J. Hamer, E.D.M.P. and Mrs. Hamer, the Deputy Mayor of the City of Osaka, Mr. K. Kondo; General Manager, Port & Harbor Bureau, City of Osaka, Mr. H. Onishi and Director of Foreign Affairs, City of Osaka, Mr. Y. Iseki.

In proposing the major toast of the evening, Sir Henry Winneke said:

"I am honored, Mr. Chairman, by your kind invitation to take part in proposing the toast to the Port of Melbourne on this occasion which, as we all know, marks the centenary year of the formation of the Melbourne Harbor Trust Commissioners. A centenary such as this is not only an event for great celebration, but also provides a unique opportunity to reflect upon the past.

"This is a place for a village", so said John Batman and his memorable words, which were followed by the first settlement in Melbourne, may well be said to be in part responsible for the establishment of what is now a vital part of Victoria's and Australia's economy and future—the Port of Melbourne.

As we know, Batman's arrival was closely followed by that of John Pascoe Fawkner and collectively their establishment of the new colony, verging on the "good water and very deep" site discovered by Batman, gave birth to a facility which is now vital to the commercial progress of Australia.

However, despite the settlement's geographical advantages, the arrival of 11 ships and the import of 26,500 sheep in less than a year, it took a good deal of time and extensive political lobbying before an administrative body was formed to control, manage and operate the Port.

It was, in fact, the Melbourne Chamber of Commerce which formed a sub-committee to investigate a government report envisaging a marine department, administered by a commission, and it was not until June, 1860 that The Victorian Parliament appointed a Royal Commission to make an exhaustive inquiry into the usage of Hobson's Bay and River Yarra accommodation.

The Royal Commission tabled its report in September, 1860, stressing the need for formation of a

Harbor Trust, but its recommendations naturally took time to bear fruit and many difficulties and obstacles were to be encountered before the Commission's proposals were even partly implemented.

August, 1876, however, saw Premier Sir James McCulloch and his energetic Attorney-General, George Herferd, introduce "The Harbor Trust Bill 1876" to Parliament—and the consequent Act became law on the first day of January, 1877. A century of fine service by the Commissioners and personnel of the Trust has followed and reaped its reward in the dynamic growth of the Port.

Melbourne's first two wharves had been constructed in 1842 (and such is the strange course of history, on the site now occupied by Sir Reginald Ansett's helipad). One of the first decisions, however, made by the Commissioners was to employ the services of eminent English Marine Engineer, Sir John Coode, to report on the best method of developing the Port.

As a result of his report, the Coode Canal opened for shipping in July, 1887; excavations for Victoria Dock were commenced in 1889 and were completed late in 1891. Citizens of the time journeyed from far and wide to see what was then an engineering marvel which created 96 acres of waterway. Victoria Dock was then opened in 1892.

Initial work began on the Appleton Dock area in 1922 but the project experienced many problems and the area did not accommodate its first ship until 1956.

One of the most significant projects undertaken by the Port Authority was the construction of the Tasmanian Ferry Terminal, now known as Webb Dock. This, already, is the busiest roll-on roll-off area in the Port of Melbourne. Its construction was closely followed by that of Swanson Dock, the Port's overseas cellular container complex, which was officially opened by my distinguished predecessor, Sir Rohan Delacombe, in 1969. In these latter few years, the Port of Melbourne has become the largest container handling port in the southern hemisphere and is among the top ten container ports in the world.

1973 saw the commencement of a plan to expand Swanson Dock and this, together with the new Victoria Dock project, will ensure that Melbourne continues to maintain its reputation as a port which is prepared to provide an efficient service to all who use its facilities.

A "world class" port must be progressive.

It must look to the future, it must have the support and respect of the community and have facilities available to handle any new concept of sea borne trade. This has been so through the past one hundred and forty-two years with the Port of Melbourne and I am sure, Mr. Chairman, that you and your colleagues, and those who will follow you in the future, will maintain and continue to expand the vital contribution made by the Melbourne Harbor Trust Commissioners, to the prosperity of the City of Melbourne and its hinterland.

I congratulate you all, Mr. Chairman, upon the great achievements of the past century, and it is with great pleasure that I ask the Honorable Premier if he would be good enough to support the toast."

In supporting the Governor of Victoria, the Premier said: "I am very pleased indeed to support the Governor's



toast and to support also the Chairman in his welcome to the Trust's guests from Osaka. I hope they have a happy and fruitful stay in Victoria and that, in their discussions, real progress is made towards Osaka and Melbourne becoming sister cities.

In this toast we wish success to a port that is, by all standards outstanding. It serves not only Victoria but also part of New South Wales, much of South Australia and Tasmania. Through it passes 25 per cent in dollar terms, of the whole of Australia's trade. It is growing at a rate of at least 3 per cent per annum, and already is one of the ten largest container ports in the world.

Like most of the world's biggest ports it is a gateway to one of the world's biggest cities—in this case, the financial capital of Australia—and the history and development of one is inseparable from the history and development of the other, so the Port is a barometer of the prosperity of the city and state and in this case, the nation it serves.

I say the nation because, in an island continent, so far from overseas markets, Australia, as one of the world's important trading nations, depends more heavily than most countries upon port efficiency. Virtually every industry depends to some degree on shipping to import or export raw or processed goods, and while almost every member of our community is affected by our Ports' activities, at least one in four directly owes his or her economic livelihood to their continuing operation.

It is therefore not quite as curious as it might first appear that, in Australia, one of the younger nations of the world, Melbourne's Port Authority is one of the oldest. Sydney didn't establish theirs until 1901 and Adelaide until 1913. The Port of London didn't have an authority until 1909 and New York's was established only in 1921.

The Melbourne Harbor Trust Commissioners met for the first time in April, 1877, and ever since, State Governments have preserved their freedom in the Port's management. There was early opposition, quite determined in some quarters, and a lack of funds, but the equal determination of the inaugural board and its successors has produced a port recognised by shipping and commerce throughout the world.

In 1963 it became the first port in Australia to be granted a coat of arms, and its motto clarifies the Port's role "Prosperity through service"—service to thousands of ships, millions of passengers and through the millions of tonnes of cargo that have crossed its wharves in 100 years; and prosperity through sound management and foresight which have made Melbourne Australia's major overseas general cargo port and the largest container port in the southern hemisphere.

The credit must go principally to the Commissioners because they have always been an autonomous body. In the past ten years they have expended more than \$100 million to improve the Port's facilities and will spend \$20 million a year on capital works for the next ten years. Already the Port's facilities are conservatively estimated to have a replacement value of \$1 billion.

So much for the past; now for the future. Studies have shown that the proposed World Trade Centre at North Wharf is viable and the Trust intends to begin it



Pictured left to right after opening the ceremonial ball—the Premier of Victoria, the Honorable R.J. Hamer, E.D., M.P., Mr. K. Kondo, Deputy Mayor, City of Osaka, Japan; his Excellency, the Governor of Victoria, Sir Henry Winneke and Chairman of the Melbourne Harbor Trust, Mr. A.S. Mayne.

next year.

The entire project will take something like six years and tenders for the first stage, due for completion late in 1980 or early in 1981, will be called on 1st February, 1978 for a commencement of work in April.

The cost has been estimated at \$61 million, and the State Government will back it to the hilt. Discussions are currently proceeding to decide upon the best method of funding.

The first stage will consist of five buildings: the Harbor Trust building with its adjacent Galleria for trade displays and people-oriented activities; the shipping building, mainly for companies and agents; the World Trade Centre itself, linked to the world's markets and providing information, education and promotion; the traders' building, mainly for importers, exporters and customs agents; and the trade mart and office to accommodate manufacturers' agents and permanent displays of product.

Other stages will follow. Quite simply, the Trade Centre will make Melbourne Australia's focal point for international trade.

So, while the Commissioners can look back on 100 years of history with pride in achievement, the next 100 years, I suggest, offer even greater excitement."

In speaking on behalf of the guests present, the Deputy Mayor of the City of Osaka, Mr. Kondo said:

"Your Excellencies, ladies and gentlemen, it is indeed  
(Continued on next page bottom)

# Tanker Rules in New Zealand Must Be Reviewed, Urges Mr. Lorimer

Auckland, New Zealand, 5 April, 1978 (Auckland Harbour Board):—Review of New Zealand's procedures governing operation of oil carrying ships has been urged by Mr. R.T. Lorimer, General Manager of the Auckland Harbour Board, to minimise the risk of huge tankers being wrecked on the New Zealand coastline.

His advice has been followed by the Board, which is seeking discussions through the Harbours' Association of New Zealand with the Ministry of Transport, the Merchant Service Guild and oil companies.

(Continued from page 44)

a great personal honour for me and for the Port of Osaka, a sister port of the Port of Melbourne, which I represent here this evening, to have this opportunity, to extend, on behalf of overseas and interstate guests, our congratulations upon the centenary of the Melbourne Harbor Trust. I feel that the mother tongue is the best way to express one's feelings on such a memorable occasion and I extend our congratulations in Japanese OMEDETO—GOZAIMASU!!

The world we live in today has reached the stage where we can no longer achieve peace and prosperity without mutual understanding and friendly cooperation, be we located in the East, West, South or North or far apart or not. I wish most sincerely that the Port of Melbourne as a gateway to Australia, will commence its second century of development and contribute greatly to the promotion of international friendship and understanding.

Fortunately, the Port of Melbourne has been developing under the able and energetic leadership of Chairman Mr. A.S. Mayne and together with its most able staff, I am most confident that the Port will meet the expectations of the guests present here this evening.

I wish to close my congratulatory remarks by wishing that our descendants will have a happy reunion one hundred years hence, to celebrate the bicentenary of the Melbourne Harbor Trust at an even more colourful and grand gathering."

It was rather befitting of the occasion that Mr. Kondo joined with the Governor of Victoria, the Premier of Victoria and the Chairman of the Trust in a typical Japanese celebratory ceremony—the opening of a Japanese ceremonial ball.

The ceremonial ball, a gift to the Trust from the City of Osaka opened in a glittering spectacle, highlighted by banners carrying a message of congratulations from the Port of Osaka.

As a finale to the function, the Managing Director of Australian Dredging and General Works Pty. Ltd., Mr. van der Vlies presented to the Trust a hand painted porcelain plate commemorating the Centenary of the Melbourne Harbor Trust. ▲

"The objective should be to minimise the risk of disaster," Mr. Lorimer said.

The recent history of tanker disasters suggested a need for improved regulations and controls over the manner in which large crude oil carriers were navigated in coastal areas and territorial waters, he said.

"While there has been prompt action recently by the New Zealand Government in promoting legislation which will levy ships carrying oil to provide a source of revenue to establish adequate dispersal equipment and to deal with any substantial spills, these could be seen to be defensive measures," Mr. Lorimer continued.

"The circumstances of recent disasters are not dissimilar—the flag of convenience, the coast-wise course, the question mark over local knowledge of those responsible for navigation, the time taken to determine the method of salvage and also weather conditions are some common factors.

"Port authorities and the Government here in New Zealand need to assure ourselves and the public that the control measures adopted, particularly for oil tankers coming within range of our coastline, are adequate and that safeguards exist which would prevent a ship from grounding or coming to grief under a set of circumstances which seem to have occurred in many of the most recent overseas accidents.

"I believe we should look closely at a system which will monitor the courses of all foreign registered crude oil tankers coming within our territorial waters to ensure that the vessels follow a pre-determined course and lane, and if necessary compel them to take on board a New Zealand pilot long before the ship reaches harbour limits.

"Prevention is better than cure and other rules may be necessary," Mr. Lorimer said.

The Auckland Board's Deputy Chairman, Mr. H.L. Julian, said New Zealand's recent experience with ships operating under a flag of convenience included use of forged papers by officers who were not qualified as required.

This suggested a lack of ability and experience in a major ship, which could have grave ramifications for the country and its environment in certain circumstances.

Endorsing the proposed inquiry into adequate controls, Board Member Mr. I.L. Forrest said the ultimate second step should be a complete ban of ships operating under flags of convenience.

He said the best controls and regulations would be of no avail if a ship was in the hands of men without adequate qualifications.

# Ports Authority of Fiji

## Extracted from Annual Report and Accounts-1976

### INTRODUCTION

In 1972 a Commission was appointed to examine all port and wharf facilities in Fiji and to make recommendations for their future administration, co-ordination and development. The Commission's Report was subsequently published and accepted by the Government of Fiji.

One of the major recommendations contained in the Report was the establishment of a Ports Authority to manage, control and operate the ports of Fiji.

The Ports Authority of Fiji Act No 20 of 1975, was passed by Parliament and received the Governor-General's assent on October 2, 1975. This was followed by the inception of the Ports Authority of Fiji on November 1, 1975.

The PAF Act prescribes that the financial year of the Authority shall be from January 1, to December 31. However, as the Authority was constituted on November 1, 1975, this Report includes the two months of operation in 1975 but the accounts for these two months are shown separately from those of the 1976 financial year.

### TRADE AND SHIPPING

As a result of world recession the total cargo handled in the ports of Fiji declined by 7.5 per cent from 1.220 million tonnes in 1973 to 1.135 million tonnes in 1975. Figures from the Bureau of Statistics, however, indicate that the trend was reversed in 1976 and that there was a modest increase over the 1975 total.

Cargo handled in all ports in 1976 was 1.176 million tonnes, out of which general cargo and mineral oil accounted for 0.411 and 0.360 million tonnes respectively. In 1975, 1.135 million tonnes, made up of 0.355 million tonnes of general cargo and 0.381 million tonnes of mineral oil, were handled. Compared with 1975, 1976 therefore registers an increase of 4 per cent for total cargo handled and 16 per cent in respect of general cargo.

A total of 505,390 tonnes of cargo was handled in Suva, which is an increase of 10 per cent above the 460,257 tonnes handled in 1975. Lautoka and Levuka handled 351,178 tonnes and 16,049 tonnes respectively, representing a 2 per cent drop for Lautoka and 32 per cent increase for Levuka over the 1975 figures of 358,188 tonnes and 12,123 tonnes.

Shipping tonnage entering and clearing the ports in Fiji increased from 821 vessels of 4.022 million NRT (GRT not available) in 1975 to 810 vessels of 4.277 million NRT (7.806 million GRT) in 1976. The trend indicates that larger vessels, although fewer in numbers, are using Fiji ports.

### GENERAL OPERATIONS

The Ports Authority of Fiji assumed responsibility for the administration and control of the ports of Suva, Lautoka and Levuka on November 1, 1975. Its immediate task was to solve the serious problems of port congestion, shipping delays and the extensive pilferage and breakage of

cargo which had plagued Fiji ports for many years.

Various schemes, particularly those listed below, were implemented in the course of 1975/76:

(a) Reorganisation of cargo-handling, sorting and delivery methods.

(b) Introduction of a new cargo storage tariff together with a 72-hour Free Storage Scheme.

(c) Establishment of inland freight station facilities for the storage of undelivered cargo.

The easing of cargo congestion in the ports, coupled with improved security arrangements, has brought about a significant reduction in cargo claims. Ships' turnaround time has been speeded up and cargo is available for delivery immediately upon discharge. These improvements have also resulted in an increase of port and storage capacity without any physical addition to wharf and shed space.

### Equipment

In order to streamline the use of cargo-handling equipment in the Port of Suva, the Authority sought and obtained the co-operation of various shipping agents and other owners of equipment who had in the past been the suppliers and operators of forklifts and other machines at the wharves. As a result an Equipment Pool Scheme was introduced on May 1, 1976.

Selected forklifts, cranes and other equipment came under the direct control and operation of the Ports Authority of Fiji on a profit-sharing basis. The EPS Agreement was for a period of 12 months.

On October 1, 1976 the same arrangements were extended to Lautoka and Levuka.

The scheme is operating satisfactorily but it involves much extra accounting work. This is expected to be reduced when PAF acquires its own handling equipment, which will include a 25-ton container forklift now on order.

### Stevedoring

Stevedoring operations in the past were carried out by private firms and shipping agents. They employed their own labour, winchmen, riggers and supervisory personnel to stevedore ships at the wharves and anchorages in the ports of Suva, Lautoka and Levuka.

On July 1, 1976, following an agreement signed with the Fiji Waterside Workers and Seamen's Union, the Ports Authority of Fiji assumed control of stevedoring operations in the ports of Fiji and responsibility for the reorganisation and deployment of port labour and equipment. The permanent dock-workers were granted a wage increase of 15 per cent plus bonus, insurance and other fringe benefits equivalent to 12 per cent of basic wages.

The Authority commenced stevedoring operations in Suva on July 1, 1976 and in Lautoka and Levuka on October 1, 1976. The takeover has resulted in more effective control and utilisation of manpower and equipment.

Stevedoring charges had escalated since 1972. In that year the average cost per tonne of cargo was \$5.00. By early 1976 it had increased to \$10.50. After the takeover of

stevedoring by the Ports Authority stevedoring charges on the average were reduced by about 12 per cent to \$9.50 per tonne.

### **Cargo-Handling**

Because of the advantages of improved turnaround time for shipping and faster cargo deliveries, coupled with more advanced packaging methods and handling techniques, there was a noticeable increase in roll-on roll-off, unitisation and container operation at the wharves in 1976.

The dockworkers' Union had declared its refusal to handle containerised cargo in excess of 10 per cent of the total tonnage for Fiji ports. But with the signing of a new agreement with the Union on July 1, 1976, all bans and restrictions on containers, ro-ro vessels, pallets or any other type of operations or vessels were lifted.

This had an immediate effect on trade and shipping. The tonnage of containerised cargo handled in Suva rose by 40 per cent from 6,293 tonnes in July and August to 8,790 in November and December 1976. It is expected that this trend will continue as more shipping lines increase and modernise their services to Fiji and the South Pacific.

Because of Fiji's geographical location and her increasingly efficient port services and cargo-handling systems, there are indications of growing entrepot activities, particularly in the Port of Suva.

### **INTER-ISLAND AND EXPORT TRADE**

Particularly at Princes Wharf, Suva, where local shipping operates, considerable improvements have been made to ensure that vessels serving the various islands within the Dominion of Fiji are provided with efficient and properly organised ship and shore services.

Princes Wharf Shed No. 5 is now secured for storage of general cargo and copra. Pillage has thus been reduced to a minimum. Introduction of a one-way traffic system reduces congestion and road hazards. Specially constructed covered stalls have been allocated to food vendors within a demarcated area adjacent to Princes Wharf. The vendors operate the stalls by paying a nominal fee to the Ports Authority. This food service has proved to be popular with both dockers and port users.

Stevedoring and wharf labour at Princes Wharf, comprising Registered Relief Workers, came under PAF control on July 1, 1976. Labour is supplied to local vessels at subsidised rates.

Further to encourage and promote local and export trade, wharfage charges on export cargo are levied at half of the import wharfage rate. Improved handling services, good security and better organised storage facilities are available for copra, ginger, and other export commodities.

### **MAINTENANCE AND DEVELOPMENT**

The Ports Authority throughout its period of operation has been conscious of the need for better port facilities geared to efficiency and productivity.

In 1975, during the preparatory stage before the legal establishment of the Authority, considerable changes and improvements were brought about through the cooperation of existing departments such as H.M. Customs and Excise, Marine Department and the Labour Ministry.

Before embarking on any major schemes or capital

projects it is imperative to ensure that existing installations and facilities are fully exploited to meet operational demands and to enhance revenue returns. The ports in Fiji must continue to improve and expand in order to cater for the needs of shipping and trade for the next decade and beyond.

### **Port Beautification**

To improve the appearance of the port and provide a better work environment, a wharf beautification and cleaning programme was systematically carried out during the year.

In specially constructed flower boxes and prepared garden areas within the precincts of the wharves large numbers of plants, shrubs and creepers have been grown. Now in bloom, they offer an atmosphere of beauty and delight to those who visit or work at the wharves.

Large refuse receptacles are located in convenient places. Port users and workers co-operate to ensure that the entire port area is kept in a healthy state of cleanliness at all times.

All the metal railings adjacent to the wharf aprons and transit sheds have been repaired and strengthened. Apart from providing added safeguards for pedestrians and vehicular traffic, the repainted and straightened railings have enhanced the attractive appearance of the wharves.

### **Training**

The Ports Authority of Fiji has placed great emphasis on staff training with a view to maintaining a dynamic and energetic management in Fiji Ports. During 1976 a number of senior staff were sent on study missions to ports in Australia, Singapore, Malaysia, Hong Kong and the Philippines to increase their knowledge of port administration and operation, particularly in connection with new modes of cargo handling and transportation which will affect the ports in Fiji.

In addition to the above a number of officers participated in overseas seminars and conferences organised by international agencies such as UNCTAD and UNDP.

During the coming year more emphasis will be placed on training to prepare officers for their important role in port administration and operation.

### **Port Charges**

Port Dues, Wharfage and other charges which were last amended in 1958 underwent a major and rationalised review during 1975. The Authority, through the medium of the Harbours Regulations introduced new tariff rates in respect of port dues and dockage fees based on the vessels gross registered tonnage, whilst wharfage, storage and handling charges are assessed on the tonnage of the cargo in the metric system.

### **SUVA**

Work on a new security fence at Kings Wharf, began in 1975, was completed in July 1976.

The old Labour Utilisation Board building was demolished to make additional room for the establishment of a Container Yard adjacent to Shed No. 6, which is now operated as a Container Freight Station.

Alterations to a section of the wharf kerbing were effected to facilitate the handling of large ro-ro vessels of

20,000 GRT.

During the latter part of 1975 inland freight station facilities were established at an old seaplane hangar at Laucala Bay. This station has proved extremely useful in easing Kings Wharf of serious cargo congestion. Other Inland Freight Stations, including one at Walu Bay to cater for the storage of pallets and containers, were also set up. This system has enabled the transit sheds at the wharves to be cleared before the arrival of the next discharging vessel. Consequently cargo is not "blocked up," and is readily available for delivery. This has also reduced the temptation or opportunity to pilfer; better operating space has greatly reduced the incidence of breakage and damage to cargo.

To enable merchants and traders to cut transportation and handling costs bonded storage facilities are available within the wharf area where goods can be deposited for long-term storage upon application. Such goods whilst in PAF custody are not subject to payment of Customs duties. In view of the heavy demand for such facilities, a new warehouse complex at Kings Wharf is planned for completion in 1977.

Early in 1976 a small maintenance force was set up to cope with minor repairs and alterations within the wharf area. This unit will be expanded to provide workshop and servicing facilities for the Authority's vehicles and cargo-handling equipment.

The present fendering system along the wharf face requires constant attention. In order to reduce maintenance work other more suitable fendering systems are being studied by PAF.

#### LAUTOKA

Improvements made to the Port of Lautoka have followed more or less the pattern in Suva.

A new security fencing in the storage area of Shed No. 3 together with enlarged open-storage space was completed in December 1975. An Inland Freight Station commenced operation on January 1, 1976.

Construction of new offices for PAF Staff was completed in December 1976.

#### LEVUKA

Minor repairs have been carried out at the wharves to enable cargo-handling operations to continue without interruption. However, in view of the very dilapidated state of the fendering system and the wharf surface and structure, pile testing has to be carried out. A thorough survey will also have to be undertaken prior to the institution of any major repair or construction.

#### ACKNOWLEDGMENTS

The Authority wishes to express its appreciation of the co-operation it received from Government Ministries, departments and agencies, shipping companies, trade unions and other individuals and organisations with which it comes into contact.

The Authority has operated successfully since its inception despite a serious shortage of managerial and operational staff which has resulted in heavy demands being made on its officers. The Authority appreciates the response at all levels and wishes to place on record its sincere appreciation of the dedication and loyalty of its staff.

## Hong Kong concerned over protectionism

Hong Kong, April 8, 1978 (The Week in Hong Kong, Hong Kong Government Information Services, Hong Kong):—Hong Kong must view with anxiety a growing tendency among the more advanced nations, which constitute its principal markets, towards protectionism.

This was stated by Hong Kong's Chief Secretary, Sir Denys Roberts, in his opening address on Monday at the Asian Business Briefing organised by the Financial Times at the Hong Kong Convention Centre.

"Our doors remain open to all who wish to do business with us and we are firm believers in unrestricted multi-lateral trade, upon which our prosperity must depend", he pointed out.

Short term restrictions intended to provide only a breathing space for the read-justment of the economy are perhaps defensible, Sir Denys said.

"But if adopted as a policy of wide application, it can only bring unfortunate consequences, both within the country which adopts protective measures on a large scale and on international trade and stability."

The Chief Secretary said Hong Kong managed to become one of the leading traders in the world despite formidable obstacles. And he cited ten reasons which explain Hong Kong's "remarkable success" in a "competitive and uncertain world".

The reasons are:

- a labour force and management of intelligent, adaptable and hardworking people, bred in a long tradition that life is a struggle that nobody owes you a living and that effort should be rewarded.
- a habit of energy.
- self-reliance. Hong Kong does not belong to any multi-national economic alliances or to any economic community.
- a superb harbour, with first-class port facilities.
- a government which is reliable and predictable because it does not change nor do the main principles on which its policies are based.
- the belief that a government should interfere as little as possible with business and industry.
- a conviction that a government should live within its means.
- a stable society which does not suffer from the strains of internal party political conflicts.
- an ability to attract capital owing to low taxation rate, absence of exchange control and the maintenance of a free port.
- development of a sound infra-structure—air freight services, banking and insurance facilities.

Another speaker, Mr. David Newbigging, Chairman of Jardine Matheson & Co, said China earns an estimated US\$2,000 million to US\$3,000 million a year from Hong Kong through direct exports, family remittances and return on capital investment.

As long as Hong Kong continues to contribute so substantially to the Chinese economy, it is unlikely that China will disturb the present status of Hong Kong, he told the seminar.

The two-day Asian Business Briefing was attended by 135 business executives from several Asian countries.

# Autour du monde.



**Around the world.** The facts which make Air France a worldwide airline are impressive. We serve 150 destinations in 75 countries, spanning over 575,000 kilometers of air routes.

But the spirit which makes us a worldwide airline is unique. It is our internationally-recognized talent for quality, service and excellence in everything we do. No matter where we fly, to Rio or Los Angeles, to Tokyo or Montreal, we send our country's best around the world.

**AIR FRANCE**   
official carrier





# MITSUI Computer Control System for Container Terminals

**Huge piles of data!**  
**How do you process them for efficient handling of containers?**

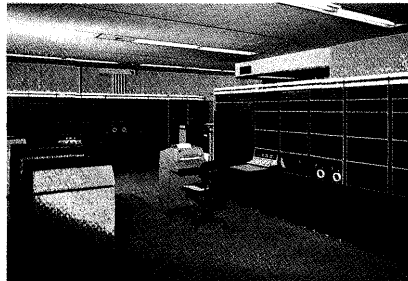
Our System can help solve your problems and enable you to reap the true benefits of container transportation.

Developed in 1972, this System has proved its efficiency at the busy Ohi Pier, Port of Tokyo, and we are now prepared to aid you in solving your terminal problems, particularly those in the fields of cargo information and operations systems.

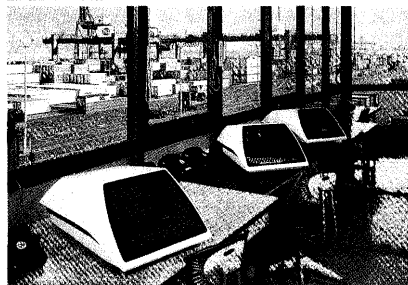
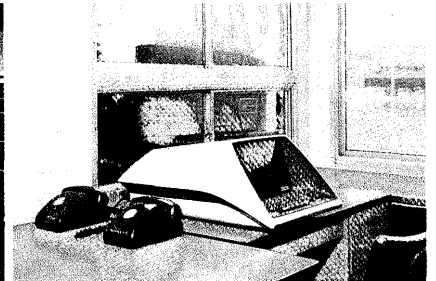
## Major Application Software

1. Planning Support & Management System
2. Receiving/Delivery Operations System
3. Loading/Unloading Operations System
4. Marshalling/Shift Operations System
5. Report Generating System
6. Inquiry System
7. Back up & File Control System

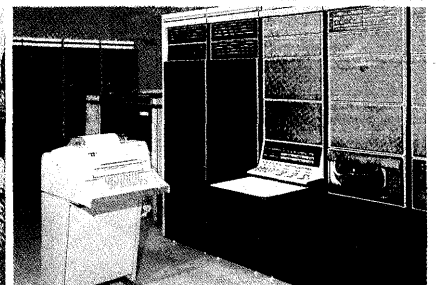
COMPUTER ROOM



GATE OFFICE



OPERATION ROOM



CENTRAL CONTROL UNIT



## MITSUI ENGINEERING & SHIPBUILDING CO., LTD.

Head Office: 6-4, Tsukiji 5-chome, Chuo-ku, Tokyo, 104 Japan  
 Cable: "MITUIZOSEN TOKYO", Telex: J22924, J22821  
 Material Handling Machinery Sales Department Tel. (03) 544-3677  
 Systems Headquarters Marketing Dept. Tel. (03) 544-3272  
 Overseas Offices: New York, Los Angeles, London, Duesseldorf, Vienna,  
 Hong Kong, Singapore, Rio de Janeiro