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Port Lyttelton New Zealand

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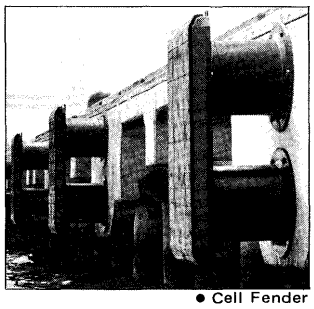

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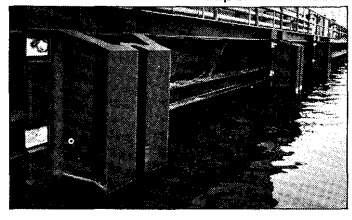

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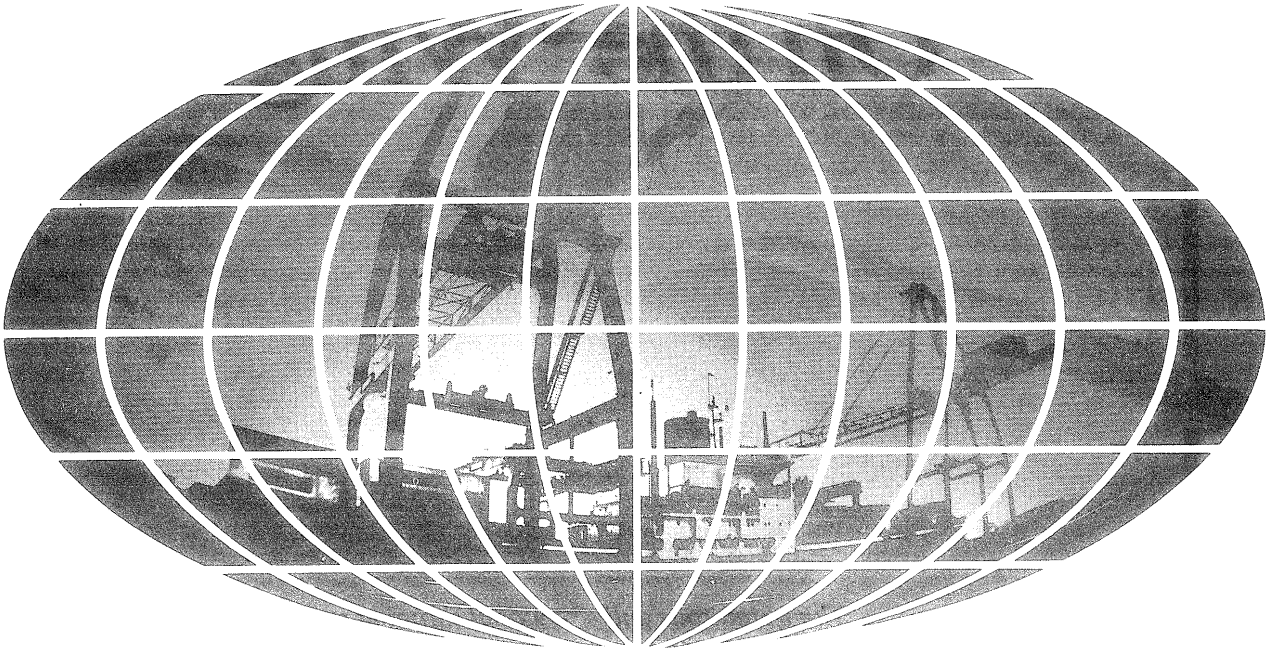

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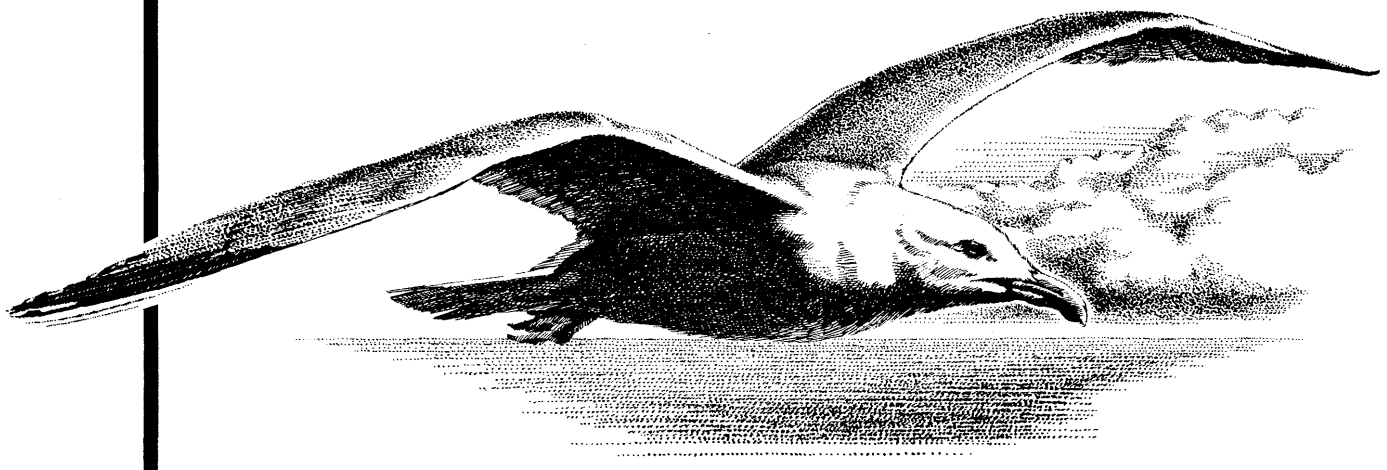

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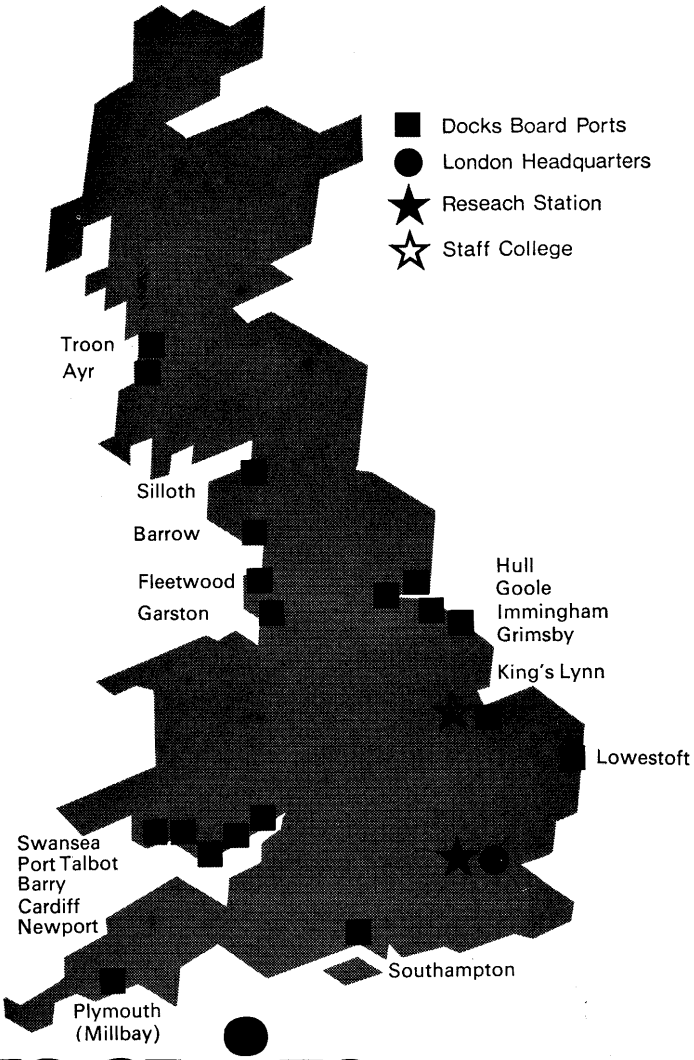

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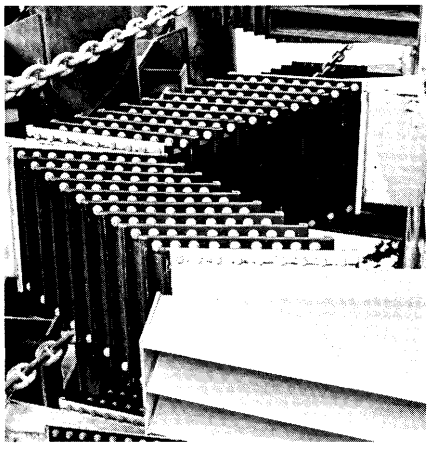

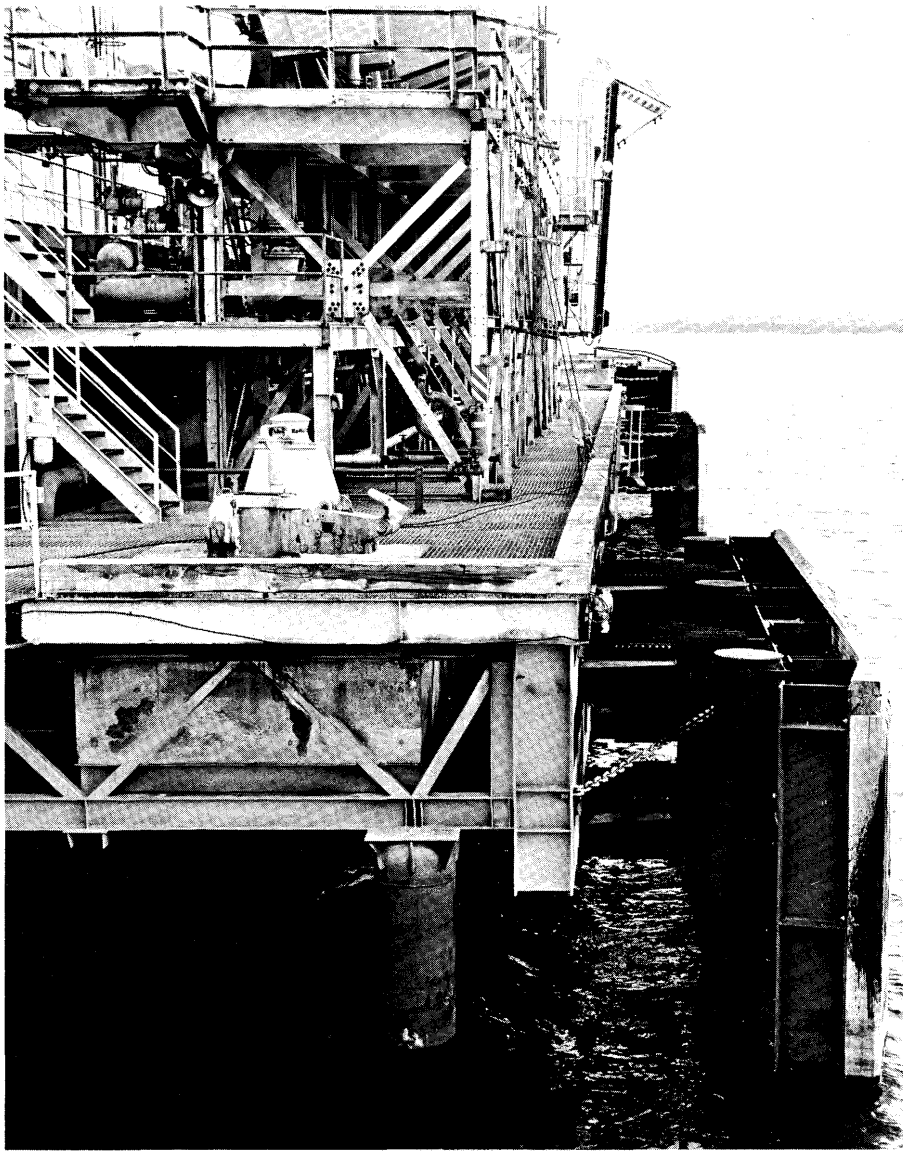

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PORTS and HARBORS

Editor: Yoshio Hayashi

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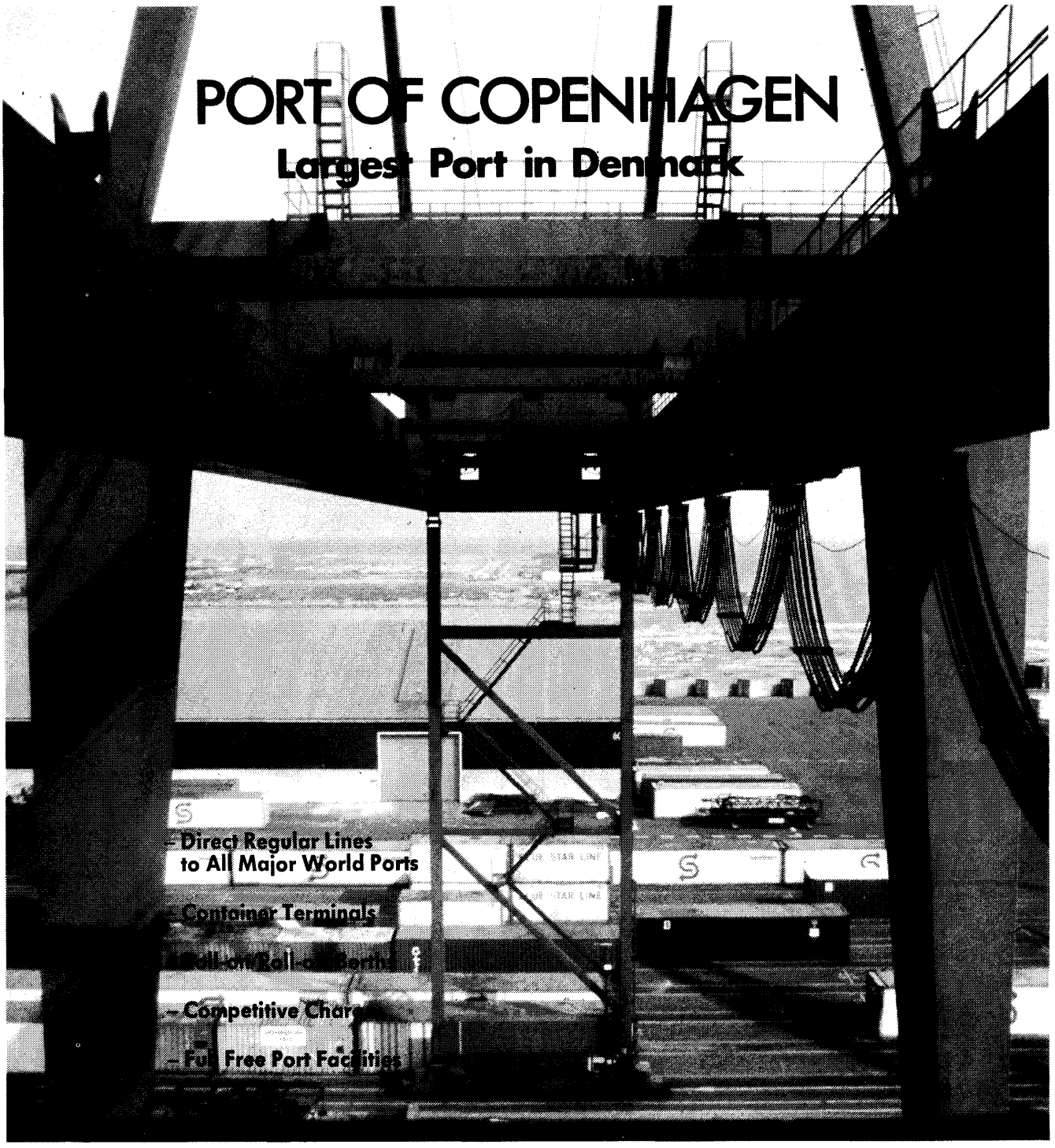

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PORTS and HARBORS

IAPH Head Office Announcements: Pages 7~15

A. Mohammed Mzee, the first recipient of IAPH Bursary, reports on port training course in London

As reported in the December 1976 issue of Ports and Harbors Magazine Mr. Abdulla Mohammed Mzee from the East African Harbours Corporation was the first recipient of the IAPH Bursary for Port Training. After completion of a course in "Port Security" which was runned by the Port of London Authority Police Force, Mr. Mzee has made the following very interesting report.

I am glad to realize that Mr. Mzee actually has got so good learning and experiences of the course. The report also gives us a clear idea of the importance of giving the port security matters their right attention. Thus as you have concluded from the above the publication of the Bursary reports also can let the members of IAPH have interesting views in urgent and actual matters.

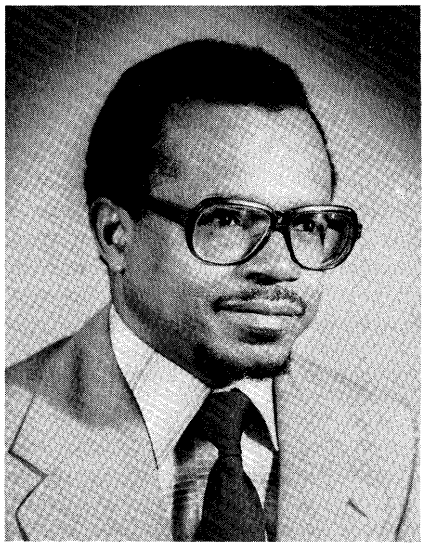
However, because of the extremely low interest shown by the ports concerned in those countries selected to nominate applicants for a Bursary it was decided at the Houston Conference to transform the Bursary Scheme. This work is now going on and I hope that it will be a greater interest for the new Bursaries when invitation to apply for such Bursaries will in the near future appear in this magazine.

Here follows the report from Mr. Mzee. (July 25, 1977 at Gothenburg by Sven Ullman, Chairman of Committee on International Port Development)

REPORT ON PORT TRAINING : IAPH BURSARY PLACON, PORT POLICING AND SECURITY COURSE "D" 4TH OCTOBER, 1976 TO 16TH DECEMBER, 1976

1. INTRODUCTION

The International Association of Ports and Harbours awarded me a bursary from the Technical Assistance Fund for training on Port Policing and Security in the United Kingdom. The participants of this course who totalled 24, were Port Security Officers drawn from countries in Africa, Asia and the Middle East, namely Singapore, Malaysia, Ghana, Nigeria, Liberia, Saudi Arabia, Oman, Bahrain and Kenya. The course was conducted by the Port of London Authority Police at the National Dock Labour Board Training Centre, London, under the auspice of the Port of London Authority Consultancy Ltd. The object of the course has been to make available to the participants the experience and expertise of the Port of London Authority in fighting criminal activities in Maritime Ports. The first part of the course concentrated on Port Policing and Security (Unit Loads) whilst the second part was on Port Policing and Security (Intermediate). The Syllabus also included practical instruction in the latest techniques of first aid, life saving, fire fighting and fire prevention. Lectures were supported by the showing of suitable films. There were also periods of attachment to Port of London Police sub-divisions to provide opportunities to gain practical experience under supervision.



Mr. Abdalla M. Mzee

2. Lecturers

Lectures were conducted by the following personalities.

Mr. I. Carnochan: Mr. Carnochan is a custom's officer at the Barking Container base which is an Inland Clearance Depot. He is also a training officer for HM. Customs and Excise.

Chief Insp. Crafter: Mr. Crafter is the training officer for the Port of London Police.

Mr. A. Flatt: Mr. Flatt is responsible for operations of container berth at Tilbury Dock. He is also a member of Consultative Panel

of Placon.

Mr. I.M. Fletchn: Once a Port of London Police Officer, he is at present engaged in the field of cargo insurance.

Det. Con. Gotsell: Mr. Gotsell is a lecturer on "Scenes of Crime" and "Forensic Science".

Det. Insp. Graves: Is a lecturer on crime investigations and he is reported to have the most comprehensive knowledge of the various types of container crimes in the United Kingdom.

Supt. Luck: Mr. Luck is the operations superintendent of the Port of London Police. He has made container crime, cause, effect and cure a personal study.

3. Visits & Visiting Lecturers

There has also been a number of visiting lecturers including police officers on regular police duties from the Port of London Police. The class also visited a number of security organizations in U.K. and coach tours were also conducted to places such as Basingstoke where security seals are manufactured, the West African Terminal in London Port to study the functions of private security guards, Olsen Terminal, the Orsett Container Depot, Felixstowe Container Port in Ipswitch and the Old Bailey and Magistrate courts in London.

4. Port Policing & Security (Unit Loads)

The object of this course was to identify and illustrate the range of security problems specifically associated with goods carried or stored in ISO containers or other forms of sealed unified loads and to describe methods and procedures available to the modern port security force to combat criminal activities in this area. Lectures were delivered on examples of Unit Loads and container thefts, causes of container crimes, container documentation and container berth operations, container security, Insurances and Customs, Security at Inland Clearance Depots, container seals and methods, container inspections and checking against creation of false bottoms for drug smuggling, cures for container crimes, practical police operations at container berths, Container Intelligence Unit and International Co-operation in fighting container crime.

5. Port Policing and Security (Intermediate)

The object of this course was meant to provide comprehensive training on the problems and techniques of port police work and security. The course covered all main aspects of regular security procedures, crime prevention and criminal investigations, pass system, control of dangerous drugs and smuggling. The subjects were covered in dails and a considerable practical work was involved. The major topics are given hereunder:–

(I) Crime Prevention

This subject included lectures on the need of preventing crimes and the causes of crimes, Intruder alarm system both audible and silent, types of Security Fences, Security aids such as magnetic contacts and mechanical switches in sheds and Warehouses, space protection by ultrasonic Detectors, microwave Detectors, Infra Red Beams and other devises, Regular police beat within the Port supported by plain clothes policemen, gate checks, effective search of cars, lorries and persons, effective use of private guards and watchmen, general security of building and cash on transit, Security risks involved in uncontrolled parkings in the port area, security of high value goods in the port, security of Dangerous Cargo, Oil installations and explosives with particular emphasis on international or local terrorism.

(II) Pass System

Pass System for both cargo and persons in the port is considered to be the basic foundation for Overall Security within the docks. Lectures on this subject included the need for pass system and its general rules and Legal Enforcement, Validity of passes, their class and persons authorized to sign passes, passes for mates and passenger effects, passes for port contractors, rules for acceptance of passes, disposal of passes, discrepancies in passes and lost passes, passes for Port Users and general public, control on issue of passes, Safe Custody of passes and prevention against forgery.

(III) General

Lectures were also conducted on recruitment and training of Port Security Officers, Special Branch work in the port, Intelligence, Statements and Statement taking, the Port of London Dock Bye-Laws, Oil pollution and control, fingure printing and photographs. There were also lectures on scenes of crime and application of science in detecting crimes, Merchant Shipping Act and Laws of Evidence.

6. Fire Fighting, Life Saving, Self Defence and First Aid

The Firefighting course was run in conjunction with the Essex Fire Brigade and had a large practical content. The lectures included theory and causes of fire, types of fire, Fire Extinguishers and their operations, practical demonstration of firefighting using extinguishers and re-filling of extinguishers after use, fire prevention, fighting fires aboard craft. Fire hoses–use and maintenance, practical fire fighting, use of breathing apparatus (smoke helmet), practical use of breathing apparatus in smoke room and fixed system of fighting fires aboard ships. Lectures were also conducted to National Certificate Standard on Self Defence, Life Saving and First Aid followed by detailed practical demonstrations and exercise. At the end of the course participants had to sit for a written examination.

7. Observations

In view of the economic development of many countries throughout the world, the ports have played an increasingly important role. With developments inevitably comes a higher standard of living and all the social problems that go with such growth. One of these problems is the growth in criminal activities. As the methods of committing crime become more sophisticated so should be the methods in combating such activities. Training in port security is therefore necessarily a continuous process.

Within a port situation the ideal security coverage should be unified security system with all those who operate the port being jointly responsible or at least actively interested in the Security System. The ideal police force in the port would be the one completely divorced from the National

(Continued on next page bottom)

Large Ships Committee Meets in New York in September

The first of the planned trio meetings of Special Committee on Large Ships (COLS) will be called in New York on September 13, 14 and 15 according to a letter reached the Head Office recently from Mr. F.L. Dixon, Jr., Chairman of the Committee.

Mr. Dixon says, his Committee plans to hold three meetings in each of the IAPH regions prior to the forthcoming 11th Conference in Le Havre.

Two other meetings after New York, he further says, are tentatively scheduled in European region in May, 1978 and in Asian region in December, 1978.

Mr. Dixon, following his election as Chairman at Houston, sent a letter to Vice-Chairman and all his Committee members encouraging them to participate actively in the Committee programs.

Part of his letter is quoted hereunder together with the agenda of the first meeting, which IAPH members might find interesting to look into. (TKD)

AGENDA

INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS COMMITTEE ON LARGE SHIPS

–Meeting in Exxon Building–RM 5005–
Sept. 13–15th 1977

September 13th

0900–1215 – Introduction
– Review of terms of reference and their implementation
– "Guideline for Port Safety and Environmental Protection" book
– Determine location of next general meeting of the Committee

1400–1700 – Definitively review activities–"Working Group #1–Vessel*

September 14th

0900–1215 – Working Group #2–Vessels at berth or anchorage*

1400–1700 – Working Group #3–Environmental protection and crisis management*

September 15th

0900–1130 – Old business
– Crude oil wash study
– Failure mode analysis
– Port technical audit program
– Other matters arising

12 Noon – By courtesy of Mr. Anthony J. Tozzoli, Director Marine Terminals for the Port Authority of New York and New Jersey (and 3rd Vice President of IAPH), a bus will pick us up at noon for transport to the World Trade Center for lunch. We will then view New York Harbor from the South Tower then take the bus to Port Newark to see the container facilities.

* In the review of Work Group activities we will:
- Determine resources available–publications, organizations and personal contacts
- Catalogue items to be included
- Define what is and is not to be covered
- Apportion sections to be developed to members (by Chairman of Work Group)

Mr. Dixon's letter follows:

Dear Mr. Wallace:

You have been appointed Vice Chairman of COLS. I am sure that we will have a good working association over the next few years even though half a world separates us.

As you know the building of ever larger ships has reached a plateau, at least for a few years therefore COLS can shift some of its emphasis from analyzing the next generation of ships to a more introspective look at handling

(Continued on next page bottom)

Police Force but with the same training and the same standard of personal integrity and overall efficiency.

An effective port Security System should include police with all the ancillary specialist branches, private security arrangements and special branch work. There would also be the additional responsibility for those parties using the port to develop their own security arrangements. Many security functions do not call for the expertise of professional body such as cargo watching and ship's gangway patrol. The inner wheels must be developed to standard norms. The ideal situation would be a port police force as the hub.

The port itself and the ships that use the port must be seen as separate security problems and coverage must be allocated according to changing needs. It is necessary to be aware of "high risk" security areas at all times. The international situation must play an important role in determining security risks where vessels are concerned. The value and attractiveness of incoming or outgoing cargo, will also alter the security coverage required. There must always be good and visible security on the land side of a port situation, and this of course can be accomplished in no better way than by frequent uniform patrols which act as a great deterrent.

There are many factors that will help facilitate crime in a given port and among them are (a) Regularity of pattern i.e. same cargo into same warehouses, same ship at same berth etc. (b) Fragmental Security, (c) Ineffective gate control, (d) Uncontrolled parking (e) Ineffective Pass System (f) Temptation due to broken, damaged or high value packages. The best method of applying the training I have had on Port Policing and Security would be through the already existing Port Security Committee in terms of contribution of ideas and suggestions on problems under discussions.

Office of the
Deputy Director General,
E.A. Harbours Corporation,
MOMBASA

22nd February, 1977.

Guidelines on the Provision of Adequate Reception Facilities in Ports

IMCO (Intergovernmental Maritime Consultative Organization) has recently published the Part I (Oily waste) of the guidelines on the provision of adequate reception facilities in ports, being prepared by the Marine Environment Protection Committee with the main objectives of assisting governments, particularly those of developing countries, in implementing appropriate requirements of the International Convention for the Prevention of Pollution from Ships, 1973.

The guidelines provide developing ports concerned with the guidelines for determining the volume of oily wastes generated on different types of vessels and capacity of reception facilities required to handle these volumes, and also help the ports already provided with moderate reception facilities to study their adequate facilities for the future port development.

It is reported that this guidelines will be followed by several separate parts covering noxious substances, sewage and garbage.

In the light of the requirement expressed in the IMCO circular, this office reproduces the full text of the guidelines. (DSG)

1. INTRODUCTION

1.1 These guidelines have been developed taking into account a step-by-step analysis of Regulation 12 of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973. On the basis of this analysis, a set of general parameters of the study was established for the purpose of producing a rational methodology in developing guidelines for evaluating the adequacy of reception facilities to meet the needs of the ships, in accordance with Annex I, using them without causing undue delay to these ships. The recommendations in these guidelines are based on the quantities of oily wastes from ships which could not be discharged to the sea in accordance with the provisions of Regulation 9 and Regulation 10 of Annex I (Oil).

1.2 Quantities of oily wastes are estimated on a per ship basis which would be required to be retained on board and discharged to reception facilities within the constraints of the following parameters:

1.2.1 origin of oily waste or residue;
1.2.2 ship type and design;

---

large ships safely and efficiently in ports. Further, as we discussed in Houston, any guideline developed for safe, efficient and environmentally acceptable handling should be equally applicable to ships regardless of size or cargo carried. In another words you cannot make a port safe for large ships unless it is basically safe for smaller vessels.

Our work effort over the next two years is to be aimed at producing a report that will aid the membership of IAPH in handling the challenges posed by large ships (and other traffic) without incident. We have an impressive array of talent on the committee both in the individuals and the organizations they represent therefore I would suggest that the major part of our activity be reflected in a permanent (and renewable) reference work–

"Guidelines for Port Safety and Environmental Protection."

This could be set up as a loose leaf book with about 15 sections. It would be updated and improved by the COLS as techniques and technology advance.

For your review and comment I have prepared four attachments to outline the proposed work of COLS:

- Exhibit I outlines briefly the overall activity through May, 1979.
- Exhibit II outlines the division of responsibility amongst three work groups.
- Exhibit III shows the proposed make-up of the three work groups. It is to be stressed that all members are expected to comment and participate in the overall Committee effort but hopefully can participate more intensively on the creative side of their specific work group.
- Exhibit IV is an outline for the reference book– "Guidelines for Port Safety and Environmental Protection." This is intended to be a working and constantly improving reference for ports. The work would include cross reference to other pertinent studies and guides produced by the organizations such as PIANC IALA, OCIMF, IMPA etc. so that more intense review by the user will be possible as he focuses on specific problems.

A number of interim reports are underway, these include:

- Crude oil wash study–G. Thebaud
- Failure mode analysis–F.L. Dixon
- Port Technical Audit Program–G. Beaudet
  F.L. Dixon

It is proposed that upon completion of these reports and agreement within COLS, perhaps in September, that they be forwarded to the head office for inclusion in the Ports and Harbors Magazine.

Looking forward to Deauville in 1979, our final report for the conference should include:

- Resume of Committee activity–Our studies, surveys and proposals
- Distribution of "Guidelines for Port Safety and Environmental Protection."
- A review of interim reports given to membership during the previous two years.
- Proposed future action.

It would have been better for us to sit down and outline the work together, however, time and travel precluded that option. As a poor substitute for our meeting I would deeply appreciate any comment or further suggestions on how we can progress the activities of our Committee. It is realized that the program outlined is ambitious, however the needs are compelling and we have the talent.

Upon receipt of your comments and those of other members, I will prepare an agenda for a meeting in New York, September 13th-15th.

Very truly yours,
F.L. Dixon, Jr.

1.2.3 ship operating route; and

1.2.4 the various types of ports and terminals referred to in Regulation 12.

1.3 The following types of oily mixtures to be discharged as wastes are considered in these guidelines:

1.3.1 dirty ballast water;

1.3.2 tank washings;

1.3.3 oily bilge wastes; and

1.3.4 oily residues and liquid and solid sludges.

1.4 These guidelines provide estimates of the average quantities of oily wastes generated on crude oil tankers, product tankers (black and white oil), dry cargo ships and combination carriers. The guidelines take account of these types of vessels operating on long voyages, short voyages (less than 72 hours and 1,200 miles), wholly within special areas, short voyages terminating in special areas, long voyages terminating in special areas and ships preparing to enter ship repair yards or tank cleaning facilities.

1.5 The methodology for determining the adequacy of reception facilities in a particular port should be based on the quantity of oily wastes and residues which each type of ship must retain on board to meet the provisions of the Convention, and the mix and volume or traffic density of ship types anticipated by that port. The total quantity of oily wastes requiring reception facilities at a particular port may be arrived at by applying this per ship estimate of oily wastes to the total ship mix in order to estimate the total throughput capacity and adequacy of the reception facility, but due regard must be paid to the local characteristics of the port.

1.6 In evaluating the adequacy of reception facilities to be provided under the provisions of the Convention without causing undue delay to ships using them, it may be assumed that ships requiring those facilities are operated in a responsible manner having regard to the minimization of oily wastes by various measures as indicated in paragraph 3.2, and in accordance with the provisions of Annex I of the Convention. At the same time, the term "adequacy" can generally be defined as follows:

1.6.1 the required tankage or storage capacity;

1.6.2 the treatment process technology and time required to produce a satisfactory effluent and residue disposal.

1.6.3 pipeline interface between the ship and the terminal to permit a timely discharge of oily wastes to the storage tanks; and

1.6.4 both the ship's line and the facility pipeline to be fitted with the standard connexion specified in Regulation 19 of Annex I of the Convention order to enable pipes for reception facilities to be connected with the ship's discharge pipeline for residues from machinery space bilges.

2. ESTIMATES OF QUANTITIES OF RESIDUES AND OILY MIXTURES REQUIRED TO BE RECEIVED

2.1 Introduction

In estimating the quantities required to be handled by reception facilities in this section, the following basic assumptions are made:

2.1.1 The ship will take such steps as can be reasonably expected of it to ensure that residues on arrival are reduced as far as possible, consistent with compliance with the relevant provisions of the Convention.

2.1.2 The estimates are world averages, and different circumstances at individual ports (e.g. the normal pattern of the preceding ballast voyages) may cause some variation in the average quantities that can be expected.

2.1.3 A co-ordinated operation involving the exclusive use of segregated ballast, or any other method which reduces the quantity of ballast water taken into cargo tanks, will have a significant effect on these estimates.

2.2 Crude oil loading terminals

2.2.1 *Terminals outside a special area*

Terminals outside a special area and receiving tankers of which some will have completed a ballast voyage of not more than 72 hours or not more than 1,200 nautical miles.

2.2.1.1 For those tankers completing a ballast voyage of not more than 72 hours and not more than 1,200 nautical miles: 30 per cent of vessel dwt as dirty ballast.

2.2.1.2 For those tankers completing a ballast voyage of more than 72 hours or 1,200 nautical miles: no facilities for cargo residues or oily mixtures required.[1] [2]

2.2.2 *Terminals within a special area*

2.2.2.1 For those tankers completing a ballast voyage from the last discharge port and totally within the special area: 30 per cent of ship dwt as dirty ballast.

2.2.2.2 For those tankers completing a ballast voyage from a last discharge port outside the special area and where the voyage is of more than 72 hours or more than 1,200 miles outside the special area: no reception facilities required. [1] [2]

2.2.2.3 For those tankers completing a ballast voyage from a last discharge port outside the special area and where the voyage is not more than 72 hours or not more than 1,200 miles outside the special area: 30 per cent of ship dwt as dirty ballast.

[1] In ports where the discharge of clean ballast (as defined in Annex I of the Convention) is prohibited by local regulations, facilities for the reception of ballast equivalent to 30 per cent of the vessel's deadweight may be required.

[2] In those ports of the world where arriving tankers may be expected to have encountered adverse weather conditions such as to prevent the carrying out of oily-water separation during the preceding voyage, it may be necessary for facilities to be provided for the reception of substantial quantities of dirty ballast water.

2.2.3 *General observations*

2.2.3.1 Terminals receiving a mix of above tanker categories will require to examine the likely mix of categories in the assessment of the size and design of the facilities.

2.2.3.2 The amount of dirty ballast aboard a tanker on arrival in the appropriate categories will vary from ship to ship and with weather conditions. Generally, the total ballast weight on average will exceed 30 per cent of deadweight. However, in recommending a basic

figure of 30 per cent of dwt for the average quantity required to be put ashore, allowance has been made for the large number of crude oil carriers which are presently provided with permanent segregated ballast tankage ranging from 10 per cent to 18 per cent of dwt. The amount of dirty ballast may be further reduced in the future by the increased use of segregated ballast and the application of improved operating techniques as indicated in paragraph 3.2.

2.2.3.3 Some tankers arriving with dirty ballast may also occasionally have on board oily wash water from any tank cleaning performed en route. This wash water will also require to be received ashore. The wash water quantity, however, will be small in comparison with the quantity of dirty ballast (probably less than 5 per cent). However, having regard to the broad generalization of these guidelines, 30 per cent of dwt for the average quantities to be received may be considered as an adequate overall recommendation.

2.2.3.4 Reception facilities at crude oil loading terminals do not need to accept any consolidated slop tank residues arising from tank cleaning which may have been carried out en route. Such residues will remain on board and be admixed with the loaded cargo as in retention on-board operation. Only receipt of dirty ballast and wash water need be considered. The bulk of the dirty ballast and wash water, if any, will have an oil content which can be as low as 50 ppm. Floating on the dirty ballast in the ship will be a layer of cargo residue and this will be entrained with the ballast towards the end of the discharge from each ballast tank. The amount of oil so entrained may be between 0.4 per cent and 1 per cent of the volume of the dirty ballast in any tank.

2.3 Product tanker terminals loading an average quantity of more than 1,000 metric tons per day

2.3.1 *Product tankers (black and white)*

2.3.1.1 Because of the nature of the product tanker trade, it is not generally possible to load a cargo of products on top of residues from the previous cargo or wash water and all product loading terminals will need a degree of ballast and residue shore reception.

2.3.1.2 In general, product tankers will arrive at a loading terminal after a ballast voyage from a previous discharge port in one or two conditions. It may have carried out not tank cleaning and in this case it will have on average some 30 per cent of its dwt as dirty ballast. In addition, it may have accumulated in one tank a collection of water-free product draining from the tanker cargo system. Alternatively, if the product tanker has had sufficient voyage time to carry out tank washing, she may arrive with clean ballast which need not be received ashore but will have a slop tank containing some water (the majority of the wash water may have been decanted) with a mixture of the previous cargo products floating on top. The amount of cargo residues so floating in the slop tank may be of the order of 0.2 per cent of the total cargo capacity of the ship.

2.3.1.3 All dirty ballast water, wash water and cargo residues will be required to be discharged to the reception facility if no other means are provided for their disposal or treatment.

2.3.1.4 A product tanker may discharge a cargo at a terminal and be required to load a cargo of different product parcels at the same terminal. In such a case, it may be necessary to clean some or all of its cargo tanks either alongside or outside the terminal area before loading the new cargo. Reception facilities will then be required to accept the tank washings pumped directly from the tanker as it cleans.

2.3.2 *General observations*

The recommended basic figure of 20 per cent of deadweight for the amount of dirty ballast from product tankers, to be put ashore where appropriate, must again be a broad generalization. The weight of the ballast carried by a product tanker will vary from ship to ship and be dependent upon length of voyage and geographic and climatic considerations. Product carriers generally are not provided with permanent ballast tankage to the same extent as are the larger crude carriers. However, bearing in mind that it is on the longer, more exposed voyage demanding generally more ballast weight than there will be adequate time to wash tanks and prepare clean ballast, it is considered that a guideline figure of 30 per cent of deadweight is an adequate overall first assumption for the type of ballast voyage on which a product tanker will retain its dirty ballast. In geographical areas of generally good and predictable weather conditions, an appropriate figure could well be less than 30 per cent of deadweight. Product loading terminals, con-

Survey report on Braking tugboat for VLCC by the Japan Workvessel Association

Mr. Yoshitaro Sugimoto, Chief of Secretariat of the Japan Workvessel Association, recently informed that a 130 page report entitled "Research and Survey on the Braking Tugboat for Very Large Vessel" was completed by his Association and the English version of the report would be available on sale.

The report summarizes the studies and surveyes made by the working committee, which was headed by Dr. Shizuo Kuroda, President of the Japan Port and Harbour Association, and carries items of;

a. Researches on usual maneuver of entry port
b. Experiments with models and ships
c. Synthetic consideration

Trial design of braking tugboat for VLCs

The report is priced at US$75.00 per copy and is available by writing to:

The Japan Workvessel Association
Ishiko Bldg., No. 2-9, Yaesu, Chuo-ku,
Tokyo, Japan

templating new or extended facilities, should investigate the ballast quantity pattern of arriving ships.

2.4 All ports having ship repair yards or tank cleaning facilities

The following are estimated quantities of oily mixtures and residues which such ports may be required to handle. In this regard, the port or tank cleaning facility itself is in a better position to make a more detailed investigation based upon its existing and expected pattern of ships involved.

2.4.1 *Crude oil tankers*

2.4.1.1 Up to 30 per cent of deadweight as dirty ballast.

2.4.1.2 A variable amount of wash water from in-port tank washing, possibly in the range of 4 to 8 per cent of deadweight.

2.4.1.3 Up to, and possibly exceeding, 1 per cent of deadweight as liquid oil residues.

2.4.1.4 An amount of oily solids which may have to be lifted from the cargo tanks. These amounts vary considerably depending upon tank cleaning procedures and can range from 0.01 per cent to approximately 0.10 per cent of the deadweight of the vessel.

2.4.1.5 A tanker which has been able to carry out its own tank cleaning en route to the port should arrive with clean ballast and with its residues wholly accumulated in its slop tank(s). These accumulated residues would require to be discharged to the reception facility with due provision being made for the residues' likely waxy, viscous and emulsified nature. The slop tank would require to be cleaned and the washings passed to the reception facility.

2.4.2 *Black product tankers*

Same as for crude carriers, except that the total black product liquid residues are not likely to exceed 0.5 per cent of deadweight.

2.4.3 *White product tankers*

2.4.3.1 Same as for crude carriers, except that the total white product liquid residues are unlikely to exceed 0.2 per cent of deadweight and that there will usually be substantially smaller quantities of wash water.

2.4.3.2 Whereas crude oil and black product liquid residues, once de-watered, may be disposed of as fuel or for re-refining as may be found locally appropriate, disposal avenues for white oil residues may be more restricted because of their widely varying components and volatility.

2.4.4 *All ships*

Means should be provided for the acceptance of oily ballast water from bunker tanks and the wash water and residues which result from the cleaning of bunker tanks and sludge tanks. The quantities involved will be greatly dependent upon the size and type of ships catered for and can only be investigated and assessed locally.

2.5 All ports and terminals which handle ships with tanks for sludge from the on-board processing of fuel oil and luboil, etc.

2.5.1 A diesel propelled ship using residual fuel oil may accumulate sludge from the on-board fuel oil processing at a rate normally not exceeding 1 per cent of the fuel consumption. In broad terms, a 10,000 SHP ship at sea under power may accumulate such sludges at the rate of about 0.25 metric tons per day. The accumulation rate would be roughly *pro rata* to the ship's horsepower.

2.5.2 Ships are required to be provided with sludge holding tanks of sufficient capacity in conformance with Regulation 17 of Annex I. Oceangoing diesel propelled ship with sludge holding tanks of between 5 and 10 metric tons should provide for 15 to 25 days of steaming without having to empty the sludge tanks. All ports and terminals receiving these ships should provide means of relieving any such ships promptly of at least 10 metric tons of such sludge.

2.5.3 Ports and terminals should estimate the proportion of ships arriving with diesel propulsion and using residual fuel. It should be noted that such ships on a worldwide basis represent a very high proportion of total oceangoing shipping.

2.6 All ports in respect of oily bilge and other residues

2.6.1 Bilge water accumulation at sea varies widely and depends upon the type of machinery, age of ship, and the standard of housekeeping aboard. Figures ranging from 1 to 15 metric tons per day for ocean tonnage and from 0.1 to 3 metric tons per day for coastal tonnage have been quoted as typical for well-run vessels. The rate of bilge water accumulation in port is likely to be substantially less than when the machinery is under power at sea.

2.6.2 Ports will need some degree of such facilities if the discharge of any bilge water is prohibited whilst the ship is in the harbour or territorial waters. All ports will therefore need some degree of facilities for the discharge of oily bilge water. Ports handling ocean tonnage should be able to accept up to 100 metric tons of bilge water at any one time. Proportionately smaller facilities will be needed at ports serving coastal vessels.

2.6.3 Subject to the provisions of Regulation 9(4) of Annex I, ships equipped with oily-water separating equipment in accordance with Regulation 16(7) of Annex I are not expected to require substantial reception facilities if such effluents are allowed to be discharged in port areas.

2.6.4 There is also a need for facilities to receive dirty ballast water from bunker fuel tanks. Although the Convention will prohibit "new" ships over certain tonnages from ballasting bunker fuel tanks, except under abnormal conditions, many existing ships have to ballast their bunker tanks to maintain stability. Some 50 to 60 per cent of ships may sometimes be faced with this requirement and facilities for these residues will be needed at the great majority of ports. The required capacity will have to be assessed by individual ports, but at those which receive oceangoing ships, facilities for a minimum of 500 metric tons of dirty ballast water in bunker tanks be necessary. At deep sea container ports, much larger facilities may be required.

2.7 Combination carriers (i.e. oil-bulk-ore (OBO) and oil-ore (O/O) carriers)

2.7.1 The Convention specifies that reception facilities must be provided in loading ports for bulk cargoes in respect of oil residues remaining in combination carriers.

2.7.2 Some Administrations may require oil cargo tanks in combination carriers to be cleaned and gas-freed before ore or dry bulk cargoes can be loaded. Where such tank cleaning operations take place at the bulk loading port, reception facilities may be required for residues and tank washings from this operation, which may be in the range of 4 per cent to 10 per cent of the deadweight.

2.7.3 The quantity of liquid oil residues on combination carriers can be expected to be similar to that on crude oil tankers (i.e. up to, and possibly exceeding, 1 per cent of dwt). However, the smooth and flush internal design of cargo tanks on combination carriers can result in a reduction of residues as compared with crude carriers, and an average of 0.5 per cent of dwt of oil residues can be anticipated on combination carriers after tank washing.

2.7.4 Combination carriers required to load dry bulk cargo after a short ballast voyage from an oil discharge port will need reception facilities at the bulk loading port adequate to accept some 30 per cent of ship dwt as dirty ballast.

2.7.5 Modern combination carrier designs incorporate slop tanks, fitted with inert gas equipment, to receive tank washings and oily residues. This may minimize the need for reception facilities at bulk loading terminals.

3. MEASURES FOR MINIMIZING THE NEED FOR AND CAPACITY OF RECEPTION FACILITIES

3.1 Various measures, which are currently available or which could become available in the future, may have the effect of minimizing the need and/or capacity of reception facilities. While it is essential for governments to ensure that "adequate" reception facilities be provided to meet the needs of the ships using them without undue delay, it is prudent that such facilities should not be overbuilt. Estimates for determining the adequacy of reception facilities should generally be based on reasonably balanced requirements to avoid incurring excessive initial capital costs.

3.2 Measures for minimizing the need for reception facilities include the following:

3.2.1 *Segregated ballast tankers*

The need for reception facilities for tankers at oil loading ports could decline after 1 January 1980, since the introduction of segregated ballast in new tankers over 70,000 dwt as required by the Convention will progressively reduce the quantities of oily ballast resulting from the mixture of sea-water and the oily residue after cargo discharge. It should be noted that the most recently constructed tankers in operation have at least some segregated ballast capacity, generally in the range of 10 to 18 per cent of deadweight.

3.2.2 *Retention-on-board (load-on-top)*

Where tankers can effectively employ retention-on-board procedures for handling the dirty ballast water, there will be no significant amount of dirty ballast water accumulated on board to be discharged to a reception facility. Refinements in the retention-on-board procedures by improved slop-tank designs, cascade systems, chemicals to accelerate oily-water separation can possibly reduce the minimum time required to operate retention-on-board effectively, thereby making it more universally applicable to tanker operation. The need for reception facilities could be minimized as the use of retention-on-board procedures and their design features are incorporated on an increasing number of operating tankers.

3.2.3 *Cargo tank cleaning*

Crude oil washing under controlled conditions such as an inert gas system or other suitable systems, can effectively reduce the oil residues in cargo tanks, thereby reducing the throughput waste load in repair port reception facilities. It is estimated that crude oil washing can reduce the oily residues from 1 per cent to 0.1 per cent. Improved cargo tank stripping systems (such as location of limber holes and tank suctions) can also effectively reduce oil residues in cargo tanks.

3.2.4 *Oily-water separating and oil filtering equipment*

Effective oil-water separating and oil filtering equipment used in conjunction with the effluent discharge from the slop tanks and bilges can provide means for reducing the oily waste loads to reception facilities.

3.2.5 *Incineration of oily wastes*

Vessel operators might consider the installation of packaged incinerator plants on board to burn oily wastes, residues, as well as solid wastes, such as garbage, dunnage, etc.

3.2.6 *Operating alternatives*

Certain other operating alternatives might be considered to minimize the neeed for reception facilities. In each case, the economic viability of the operating alternative should be studied to determine its cost effectiveness in comparison with the cost of providing reception facilities. In any case, there should be the fullest consultation and co-operation between Administrations and the industry. Practicable alternatives are:

3.2.6.1 increasing the segregated ballast capacity of existing tankers (with the possible reduction of cargo carrying capacity);

3.2.6.2 reducing speed or lengthening steaming time to complete retention-on-board operations;

3.2.6.3 transferring ballast at cargo transhipment terminals to other tankers, if this does not compromise the pollution avoidance procedure or cargo quality status of these vessels;

3.2.6.4 washing tanks at discharge terminals, if tank cleaning and discharge of tank washings are possible at those terminals; and

3.2.6.5 avoiding, as far as practicable, the use of bunker tanks for the carriage of ballast water.

4. TECHNOLOGY OF THE SEPARATION PROCESS

4.1 Governments, in assessing the adequacy of reception facilities, should also consider the technological problems associated with the treatment of the oily water mixtures received from ships and the ultimate disposal of the residue and effluent from the reception facility. Although the

establishment of effluent standards is not within the scope of the Convention, nevertheless Administrations should take responsible action within their national programmes to consider such effluent standards along with other shore-generated residues.

4.2 The technology of the treatment and separation process is a significant factor in determining the adequacy of a reception facility. It not only provides a measure of the time required to complete the process cycle, thereby indicating the degree of delay in the handling of the oily wastes, but also is the primary means of producing an effluent of required purity.

5. CONCLUSIONS

5.1 These guidelines provide a reasonable basis for the determination of the adequacy of facilities required by individual ports for the reception of oily wastes from ships. However, such calculations and the business of ensuring their adequacy must be the responsibility of the Governments of the States wherein the ports lie.

5.2 As the ratification and implementation of the Convention cannot be accomplished without the provision of adequate reception facilities, Governments are urged to initiate at the earliest opportunity studies into the provision of facilities at ports in their respective countries.

5.3 The increasing use of offshore loading terminals and deepwater ports could create additional problems in the design and operation of adequate reception facilities for these installations.

5.4 In the selection of the most appropriate type of reception facility for a particular port, consideration should be given to several alternative methods available. In this regard, floating plants, such as barges or self-propelled ships, might be considered more effective in a particular location than land-based facilities.

5.5 The initial goal of these guidelines will be attained if they can provide the necessary stimulus to Governments to continue these studies on their own behalf. When making such further studies, Governments are urged to solicit and consider the views of shippers, receivers and carriers of oil cargoes and to explore with them the operational alternatives before reaching any final conclusions concerning the size and type of reception facilities required at any specific location.

Visitor

On August 1, 1977, Capt. Prapa Buranadilok, Director-General, Harbour Department of Thailand, visited the Head Office and was received by Dr. Sato, Secretary-General, and his staff during his recent one week trip to Japan.

During his stay in Tokyo, he visited the Bureau of Ports and Harbours of Ministry of Transport to meet Mr. Kiichi Okubo, Director-General, and Tokyo Bay Port Development Authority to meet Mr. Kidokoro, Director of Planning Division to discuss the present situation of containerization in this country. He also visited Bureau of Port and Harbour of Tokyo Metropolitan Government and met Mr. Koichi Yada, Director-General.

In a speech at a luncheon reception, Capt. Buranadilok introduced that the Harbour Department, being a division of the Ministry of Communication and Transport, was responsible for development of ports and harbours of Thailand, except the Port of Bangkok which was being administered by Port Authority of Thailand. Since the Port of Bangkok is only port which presently serves the ocean traffic of Thailand, the provision of deep water seaports has become vitally important requirement to cope with the increase of the traffic, and presently three port development projects are carried out by the Harbour Department, namely, Sriracha, Songkhla and Puket.

He also disclosed that the Harbour Department has been paying attention to the activity of IAPH during past eight years by despatching delegate to each of past IAPH conferences since 1971 in Montreal to absorb new concept and technics. (rin)

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The "Frigorifique" began refrigerated shipping 100 years ago, from Rouen, of course !

"Rouen Port" International Issue January 25th, 1977, Information bulletin of the port authority of Rouen

The Port of Rouen is never missing from honours lists. Her fame in the past, and her present activities (fourth in the French Ports classification, and first for certain trade activities) bring her commendations she is proud to refer to. Investigating more closely, the discovery is soon made that, at one period or another, the Port of Rouen gained her laurels in fields that we'd never dream of today. In the annals of the Port are to be found several «firsts» that are unrepeatable, some operations carried out promptly which could well have been «firsts», but have not been rated so because, at the time, they were not targets, and the renowned Rouen people's matter-of-fact outlook has followed up. And this is the case with the FRIGORIFIQUE.

Looking at our Port in this winter would anyone suspect that it was once the cradle of the world's refrigerated transport? It was 100 years ago. On the 20th September, 1876, the FRIGORIFIQUE set out from Rouen to undertake the first maritime refrigerated transport. It was only 105 days later that Charles Tellier's ship reached her destination. She gave perfect satisfaction . . . but after the excitement of the banquets had died down, her fate was to be laid up on returning to the Seine.

DISCOVERER OF COLD

Charles Tellier was born in Amiens in 1828. The failure of his father's textile mill at Condé-sur-Noireau, following the economic crisis in the wake of the 1848 revolution forced him into other spheres, and he turned his attention, after some years had elapsed, towards producing artificial cold. He succeeded in becoming, in the words typical of the «Third Republic», the «Father of Cold.» In 1868 he invented the first refrigerating plant for industrial use, the first to use it being the Menier chocolate producers. But his great life's work was to bring about, on a large scale and in a rational way, the preserving of foodstuffs on the dry-ice principle (+2° to 0°C). Tellier wanted, most of all, to demonstrate the possibility of not only preserving, but also of transporting refrigerated products over long distances, even in the warmest of climates. A first trial, on a very limited scale, had been tried in 1868, on board the cargo vessel CITY OF RIO DE JANEIRO: but this failed owing to a mechanical fault. Tellier, to be doubly sure, decided to get hold of a ship. He raised 1,200,000 Francs, with which he set up a research company which bought the little English steamer EBOE, belonging to the Elder Dempster Lines (an iron- ship built in 1868, 62 metres long, with a draught of 4 metres, with a 200 H.P. steam engine capable of 6 knots; it had a crew of 50.)

A FINE START

Re-named FRIGORIFIQUE, she was refitted at Le Havre in the summer of 1876; a large hold was installed, together with two Tellier refrigerating plants, each of 40,000 fg. units. Thus modified, the FRIGORIFIQUE sailed up the Seine to moor round about the present Palais des Consuls. On the 24th August 1876, the official inauguration of the ship took place amid great pomp and splendour, according to the «Nouvelliste de Rouen»; there was a great crowd, and plenty leading lights in science. It was an occasion when a number of speeches were made, very much in the style of that era.

M. Goussard de Mayolle, President of the company for the FRIGORIFIQUE delivered an address to the Cardinal who had come to bless the ship: «Guided by the great lights of science, it is my privilege to come to tell you we are helped from head to heart. We are in line with the old proverb; God helps those who help themselves. We have helped ourselves within the limits of the possible and the impossible. It now is for Heaven to promise to crown the good work.»

To which Monseigneur de Bonnechose, Archbishop-Cardinal of Rouen said, during the course of his reply: «If the only concern here today was a merchant venture, we should not be in your midst. We see here a work that is useful to mankind, a work that is destined to satisfy the needs of the poor and to improve the living conditions of our brave soldiers. May Jesus Christ deign to send his guardian angel to lead you through all dangers and to uphold you above all chasms. May you have a happy return to French soil, joyous with success and blessing God for finding your aged parents in full health and strength, likewise your beloved children that you chose to leave in order to accomplish your task . . . » And, of course, he concluded by saying; «There is another navigating to be done, on another sea, to another port. I mean the stormy seas of this world; the great and perilous navigating through human existence. We pray to God that He will help you arrive in the length of your days and hopes to the port of blessed eternity.»

Strengthened by all these blessings, and after being the open house for the Rouen people (charging 1 Franc entrance fee collected by two nuns, who afterwards distributed the money among the needy of the district) the FRIGORIFIQUE set out on the 20th September 1876 at 14.00 h. with a cargo of 10 beef carcases, 12 sheep, two calves, one pig and fifty frozen fowl at a temperature of +2° to –0°C.

A boiler failure held the ship up at Lisbon for 25 days, then the FRIGORIFIQUE made a triumphal entry into Buenos Aires port after 105 days at sea, via Dakar, Rio de Janeiro and Montevideo. Many banquets with meat from aboard on the menus gave proof to the excellence of Charles Tellier's technique. A new era was emerging for cattle rearing in Argentina. A Buenos Aires paper did not hesitate to print «Hurrah! A thousand hurrahs! For revolutions in science and capital. A new day is dawning for La Plata.»

(Continued on next page bottom)

Container cranes at Rouen-Quevilly dock

"Rouen Port" International Issue January 25th, 1977, Information bulletin of the port authority of Rouen

Long before the revolution in container techniques progressed to the proportions we now know well, the port of Rouen was already dealing in fore-runners of the modern containers, mainly on the North African runs. When the container techniques became the standard method in linking industrialised countries, Rouen, by virtue of its inland position (125 km. down the Seine to the open sea) seemed somewhat bye-passed, and some ten years ago noticeably lost her merchant trading with the East Coast of the U.S.A. The great trans-Atlantic container carriers (on the U.S.A., Far East, Australian and South African runs) never call at Rouen, and never will.

Be that as it may, containers have appeared in ever-increasing numbers on the Rouen quaysides. The potential freight trade of the Paris Basin, the pressure shipping agents exerced to get Rouen the benefit of this modern trend in transport, the need to rationalise handling, all these have led to quite a remarkable leap in the number of containers leaving Rouen for destinations regarded as impenetrable only a few years ago, so far as container transport was concerned. Between 1972 (when Rouen really got going with these), and 1975, the number of 20-feet containers has more than quadrupled, rising from 35,171 tons to 150,725 t. The two main directions for this trade are to the West African Coast and to the Indian Ocean, with a supplementary trade with Finland and Morocco.

Rouen's real date of birth in containers can be taken as the 27th January 1972, the date on which the container-ship ANITA inaugurated the first all-container service from Rouen to the West Coast of Africa with her own deck-handling facilities. From then on, and almost immediately, several shipping lines came in with semi-container carriers, and these also contributed to the increase in this trade. Then, later, on the 14th April 1976, a second container line came into service: the GEM Line; and their MARGRET-CATHARINA lays on a fortnightly link between Rouen and Bilbao, Lisbon and Casablanca.

Rouen's equipment for handling containers was well suited to get started. Rouen is in her second stage for developing this specialised trade, fitting out the Rouen-Quevilly terminal.

SIC TRANSIT

The FRIGORIFIQUE returned to France with a cargo of beef and lamb from Argentine and berthed again at Rouen in July 1877 and then became a white elephant until the Worms company acquired her in 1882 with a view to coasting lines.

This cargo vessel, which had so little travelled except for her historic marathon to South America, met with an unusual shipwreck. On the 19th March 1884, while sailing from Pasajes to Rouen she was rammed in the Sein Island roads in thick fog by the English coaler RUMNEY which was on her way from Cardiff to La Rochelle. She listed fast and was abandoned by her crew who were immediately picked up by the RUMNEY. So ended the sturdy FRIGORIFIQUE. Two miles further on, the RUMNEY narrowly missed another ship in thick fog, a ship that strangely resembled the FRIGORIFIQUE. Her sister-ship was perhaps by chance in the offing.

However, soon after, the same ship reappeared, and this time a collision could not be averted. Imagine the fright of the RUMNEY's crew, and of course of the French sailors, when they read the name of the colliding ship: FRIGORIFIQUE! As the fog lifted, the ship-wrecked men could now observe the careering of the phantom ship. They decided to get to the bottom of this. One group managed to catch up with the cargo vessel and to get aboard to discover that the engines were still driving slow ahead, driving the FRIGORIFIQUE at random describing large circles; the steering had remained jammed to the right. However, the ship was not recoverable; the hole sustained in the second collision was deadly, and she sank for good before the eyes of the two crews.

Such was the end of the career of this ship that was unusual even to the last. As for Charles Tellier, he ended his life in poverty, and it was somewhat late when, in February 1913, during the course of a memorable banquet at the «Grand Hotel» in Paris, the result of an international whip-round was handed to him as M. d'Arsonval was making him Chevalier de la Légion d'Honneur. But the old man, «Father of Cold», died a little while after.

THE START: A FLOATING CRANE AND THREE 25-TON CRANES

The first unit at the disposal of port-users at Rouen for handling containers is the pontoon TURNEY, a motorised unit with a 30-ton lift on its deck, and capable of having up to ten 20-feet containers on her. This unit, very flexible in its operations, can be used anywhere in the port, and is specially meant to handle containers small in number aboard traditionally-built ships, or ships for general use that tie up at berths in the port that are not specialised, where traditional loading is mainly carried out. The pontoon can also ship containers from marshalling areas to the ships, and also ship-to-shore. It can equally cope with handling complete cargoes of containers. This was the unit that the Gem Line particularly used at the beginning of its operations in April last. To cope with the growing container trade in 20-feet units, the Port of Rouen Authority then began by ordering two Caillard 25-ton cranes (that came into service in 1973), then a third (in service in 1975). These cranes have a lift of 25 ton and a range of 25 metres, and they can deal with about 15 containers per hour. Two of these cranes are at the Rouen-Quevilly dock. The third is positioned at the Quai d'Afrique.

SECOND STAGE: TWO GANTRIES AT ROUEN-QUEVILLY DOCK

In view of the continuing growth in the number of 20-feet containers dealt with at Rouen and the probable growth of container-ship sizes, the Port of Rouen Authority decided to instal for herself a tailor-made terminal specially equipped, without lessening in any way the flexibility of Rouen's installations. The terminal focussed on the Rouen-

(Continued on next page bottom)

Ports' role in reducing world trade costs insufficiently recognised

Mr. Keith Stuart General Manager, B.T.D.B. at IAPH Conference, Houston

London, 26 April (British Transport Docks Board):—The construction of unit load and bulk handling terminals at ports had been of immense importance in dramatically reducing the real costs of world trade, Mr. Keith Stuart, general manager of the British Transport Docks Baord, said in Houston, Texas, yesterday (27 April).

But Mr. Stuart told delegates to the 1977 Conference of the International Association of Ports and Harbors that the "sheer ingenuity and innovative skills" shown by port management and engineers in providing for new cargo handling methods received lamentably little recognition outside the port industry.

In the UK alone, ports had created facilities with an annual capacity of about 44 million tonnes of container and roll-on/roll-off traffics, and some 30 million tonnes of general cargo were at present passing through them. Equally important were changes in handling bulk traffics, such as at Port Talbot, where a new harbour was now dealing with six million tonnes of iron ore and coal a year for the South Wales steel industry and had rendered earlier dock facilities redundant.

Mr. Stuart said that port authorities had to their credit "a remarkable achievement in meeting demands for quicker turnround, and, as the size, complexity and capital cost of vessels has increased, in reducing manning levels through modern cargo handling facilities".

The number of specialised vessels now trading on particular routes and the larger average size involved, had also faced the industry with premature obsolescence of fixed installations previously used for conventional services, Mr. Stuart said.

"Success of the industry worldwide in meeting this challenge has enabled the transition to take place relatively smoothly, but there has been severe financial and social strain on the ports concerned. Again, the problems, and the way they have been tackled, are not generally recognised outside the industry," he said.

Mr. Stuart cited other examples of how ports had actively contributed to the reduction in the real costs of trade. He described the changeover from conventional liner to bulk shipping of tropical hardwoods from the Far East and the development of joint arrangements with ship-owners, agents, and transport operators, to move cargoes from ship's side to inland destination under integrated control.

"There can be no question that this change in shipping methods has produced real economies—and that port authorities have played a vital role in its achievement," he said. "Whatever the form of unitisation, be it packaging of lumber or containerisation, the real costs to the user of port services have fallen dramatically. The costs per tonne of handling general cargo at ports in, say, 10-tonne container loads are now between one quarter and one third of conventional movement and stowage costs, "Mr. Stuart added.

Direct reductions in real cost terms had been gained in other cases where ports had looked at what could and should be done, and acted as 'honest broker' between the parties. The development of backloads for bulk carriers was an area in which the British Transport Docks Board was actively working, and in another case the Board had made possible savings in inland distribution costs by helping to develop dockside facilities for the long-term warehousing and subsequent direct delivery of fruit.

"Too often," Mr. Stuart said, "ports are seen in a negative light—as costly hurdles which cargo has to surmount. But their role can and should be more positive.

"Obviously port costs can represent a significant proportion of total transport costs—especially where relatively low value primary commodities are concerned.

"This is particularly so in the case of developing countries, and most of all when their exports are sold at given world market prices. The producing country in effect can earn only the known delivered value less the transport cost—of which shipping and port costs can be a significant part.

"If ports can help reduce such costs the return to

(Continued on next page bottom)

(Continued from page 17)

Quevilly dock follows the Rouen policy of non-separation of container and traditional trade; her the containers link with general cargo trade.

The berths that specialise in container trade are situated in the central part of the quay. The free space between the up-stream and down-stream sheds stretches 480 metres; the area for marshalling containers is about 15 acres where 1,500 containers of 20-feet will be able to park as part of the first stage.

The equipment in the container berths consists of two gantries the Port of Rouen Authority ordered from the Irish firm of ⟪Liebherr Container Cranes, Ltd.⟫ in August 1975 and in November 1975. This order embodies technical features perfectly adapted to the needs and aims of Rouen Port; there is a quick delivery date and excellent financial terms (the two gantries with their rolling-tracks make an investment of about 14 million Francs chargeable completely to the Port of Rouen Authority).

The gantries have a lift of 35 tons, with a reach from the quayside of 30 metres (the second gantry will have a reach of 32 metres to deal eventually with bigger ships). The spreader can be one of 20 feet or one of 40 feet, very quickly interchangeable. It will have a range of 22 metres above quay-level and 10 metres below. The container can be manœuvred through 360°, and a longitudinal or transversal angle can be achieved of + or −5° for the container.

The planned rate of containers per hour is 36, but in practice it will be around 25 per hour, in view of various limitations to handling such as the favourable or unfavourable position of such and such a container in the ship's hold.

Oil takes Forth to the top of the Scottish tonnage league

Forth Ports Press Information

Edinburgh:—North Sea oil development was the main factor in increasing the operating profit of the Forth Ports Authority in 1976, resulting in the Forth handling significantly more tonnage than any other port system in Scotland. And in presenting the year's accounts, the Authority's Chairman, Mr. Gerald Elliot, states that the Forth is now becoming the most important centre in the country for the oil industry.

Profits were £1.48 million in 1976, an increase of £909,000 over the previous year. Influences included the renegotiation of the agreement with B.P. for the use of Grangemouth Docks, higher rents, more towage and oil-field construction activity.

Tonnage through the estuary's six ports rose significantly from just under 8.5 million tonnes in 1975, to 13.8 million tonnes last year. Of that total, nearly 11 million tonnes were oil and petroleum products, passing both through the ports and over the Hound Point offshore loading terminal, which handles Forties Field crude.

Dry cargoes showed a decrease of 271,000 tonnes, mainly due to a drop in coal traffic at Grangemouth and Methil. However, it is expected that this trend will be reversed, with the resumption of major pipe-coating activity at Leith, the imminent commissioning there of the coal loading plant for use by the N.C.B. and the start of operations at Grangemouth's new forest products terminal, welcomed by Finnish and Swedish suppliers.

In his statement, Mr. Elliott says that while operating results are very much better than in the previous year and strengthen the Authority's financial position, earnings are still lower than desired, if the Authority is to make provision on a realistic basis for replacing capital equipment and have a good reserve for modernisation and further new developments.

Mr. Elliot stressed that the Authority's policy has been to keep increased in rates to port users below the general advances in prices, the aim being to obtain the necessary improvement in earning by expanded activity. Meantime, a substantial portion of the year's surplus would be required to augment the present depreciation provisions for assets which have to be replaced.

Commenting on the Forth's increasing importance to the oil industry, Mr. Elliot says that progress in this sector had been divided into three phases, exploration, development and production. The Forth had been too far away from the oil exploration areas to gain significantly from the first phase.

But in the second development phase the Forth had obtained a good share, through rig and module building installations on both sides of the Forth, pipe-coating in Leith and the increasing use of the estuary as a base by pipe-laying and construction barges.

The third phase, involving production had barely begun, but it promised to be the most important for the Forth. The handling of oil and gas from the Forties Field at Grangemouth and the export of the surplus through the Hound Point terminal was the first step. Now the Authority hoped that the Shell/Esso plant to process gas from the Brent Field in Fife would be approved by the planning authorities and allow construction to start within the next year. This could result in large tonnages of refrigerated gas being exported from a new terminal at Braefoot. This Shell/Esso project could be a key investment for an expanded petrochemical industry in the East of Scotland.

GRANGEMOUTH again handled the bulk of the Authority's trade and the total of 6.63 million tonnes for the year was 700,000 tonnes up on 1975. An improvement in imports of forest products occurred in anticipation of the new terminal being completed and increases also occurred in exports of steel pipes and plate to various countries.

LEITH handled 1.53 million tonnes, a slight increase on the previous year. The securing by Bredero-Price of a major pipe-coating contract for 210 miles of undersea gasline was too late to have much effect on Leith total tonnage for the year under review but will substantially bolster traffic in 1977.

GRANTON saw a reduction in fish and oil imports, causing the total tonnage of 330,000 tonnes to be 30,000 tonnes less than in the previous year.

METHIL. Imports of grain and raw materials were 20% up on the previous year but a mild winter and hot summer saw shipments of coal to power stations fall by 130,000 tonnes compared to 1975. Thus the total of 296,000 tonnes handled was 122,400 less than in the previous year.

BURNTISLAND had a total traffic of 243,700 tonnes, virtually the same as in 1975. As well as the dominant bauxite cargoes there was considerable activity in the movement of tugs and barges associated with the North Sea oil industry and by the outward shipment of steel modules from the fabrication yard within the docks area.

KIRKCALDY handled 48,600 tonnes during the year, a 4,000 tonne drop, due mainly to reduced exports of scrap metals.

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developing countries from their exports will be improved—to the benefit not only of the producers but to world trade generally. The improved return on exports by developing countries will produce an incentive for new employment possibilities, a general upsurge in economic activity, and a capacity to import more from overseas.

N.P.C. Annual Report for 1976

National Ports Council News Release

London, 14th June, 1977:–More traffic and an improved financial out-turn made 1976 a much better year for British ports than 1975. This partial recovery from the effects of the economic recession at home and abroad is outlined in the annual report of the National Ports Council*.

The total foreign and coastwise tonnage through all ports rose by 7 per cent. If fuels are excluded from the total, the improvement is still better–11 per cent. Confirmed figures will not be available until later in the year, but the Council estimate the total tonnage at 336 million, compared with 316 million in 1975. Before the recession the annual throughput had risen, by 1973, to 377 million tonnes.

Largely as a result of the improved traffic, most port authorities reported significantly improved profitability on the year's operations.

"Given the predicted growth of the national economy there is every reason to hope that the favourable trend towards increased financial strength from 1970 until the end of 1973 has been resumed", says the Report.

When final figures for 1976 are available the Council expect the performance of 24 larger port authorities to have improved to the highest net surplus (before exceptional items) yet achieved, of some £38 million. This represents a return on capital, in money terms, of over 10 per cent, compared with only 5.1 per cent in 1975. (In 1975 the Council recommended a minimum target of 10 per cent for the years 1977/78).

The report says the Council has always taken "a robust view" of port charging, attaching great importance to maintaining the value of revenue in real terms. Particular reference is made to charges at common-user container berths, where publicity in 1976 claimed that undercharging was leading to a loss to the industry of between £5 million and £10 million a year. The Report comments:

"Some financial improvement has since been achieved by increasing charges at the terminals concerned, but the Council are not yet convinced that charges in all cases have reached economical levels".

New Projects

The report lists six development schemes, estimated to cost a total of £19 million, referred to the Council during the year. This is the smallest number of schemes to be submitted in any year since the Council was set up in 1964, and two of the six were variations of earlier schemes.

The report comments that the decline in the level of proposals for new investment is partly due to the extent to which the developments of recent years have successfully met user requirements, and also reflects the economic recession.

"The relatively low level of major new expenditure proposed on facilities for general cargo confirms the Council's view that there is adequate port capacity nationally to meet foreseeable demand for this class of traffic."

It is also pointed out that only major schemes costing upwards of £1 million require authorisation; a useful amount of port investment takes place through smaller schemes. The Council estimate that the total of such 'minor' schemes is now running at an annual level of £12 million for new building and civil engineering works.

Port Labour

Although with the help of severance schemes the registered dock labour force was reduced from 45,542 at the end of 1970 to 30,122 at the end of 1976, some ports are still obliged by the operation of the National Dock Labour Scheme to employ many more men than they need, and the report comments:

"Past experience would indicate that only time will solve the problem of matching the industry's manpower to the changing requirements of the new technology; in the meantime the burden carried by those ports with surplus labour must be recognised".

Technological developments which affect labour requirements emphasise the need for improved manpower forecasting both short and long term. The Council have collaborated with the National Dock Labour Board in forecasting the requirements for registered dockworkers and under the new Dock Work Regulation Act this collaboration will continue.

Research

The amount of money spent on port-related research by the numerous organisations concerned is estimated at between £1¼ and £1½ million (for the year 1977/78). This represents some 0.4 per cent of the total operating revenue of the 24 largest port undertakings in the country, and this puts the ports in the "low" category when compared with other industries.

The Council are involved with £525,000 of the total (port authorities contribute £230,000 of this through the Council levy). The report lists 12 Council-sponsored projects in progress during 1976, ranging from operating systems at container berths to the use and design of tugs, and improvements in the information available to maintenance workers through the manuals supplied by equipment manufacturers.

Port Traffic

Development of the North Sea oilfield is affecting the total traffic throughput at a number of ports. Due to the development of the Tees for the outward shipment of Norwegian oil received by pipeline from the Ekofisk field, on a tonnage basis the Tees and Hartlepool Port Authority is now Britain's third port, after London and Milford Haven. By contrast the Clyde Port Authority has lost traffic because less foreign crude, delivered by overland pipeline from the tanker terminal at Finnart on Loch Long, is being used at the Grangemouth refinery now this is taking North Sea oil from the Forties field.

Outward shipment of Forties oil through the Hound Point terminal has produced a substantial improvement in the traffic figures of the Forth Ports Authority.

Dover is another port which has increased in importance.

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*Annual Report and Accounts for 1976. National Ports Council, Commonwealth House, 1-19, New Oxford Street, London, WC1A 1DZ. Price 75p.

B.T.D.B. Annual Report 1976

British Transport Docks Board

London, 28 April 1977:—The British Transport Docks Board improved its return on capital from 8 per cent to 15.5 per cent in 1976 by achieving a surplus of £25.8 million. Traffic increased by 8 per cent to 83.5 million tonnes.

The Docks Board's annual report for 1976 published today (Thursday, 28 April) states that after deducting interest payments of £6.7 million, and transferring to reserve £6.0 million to cover replacement cost depreciation, a net surplus before tax of £11.6 million remained. (1975—£1.7 million).

Principal increases in traffic were a 20.5 per cent rise in ores to 10.9 million tonnes; and a 13.9 per cent rise in manufactured goods and other commodities to 18.2 million tonnes. Unit load traffic through Docks Board ports rose significantly to a record 683,000 freight units, an increase of 16 per cent. There was a similar growth of shipments of motor vehicles. The total number of passengers using the Board's ports remained the same as in 1975 at just over 3 million.

Commenting on the improved results, the Docks Board's chairman, Sir Humphrey Browne, said "Major factors in improving profitability have been the benefits arising from capital investment at the ports, a continuing tight control of costs, and improved traffics."

Specific activities, such as dredging operations, have been streamlined, and staff numbers, after allowing for the acquisition of a major stevedoring business, were further reduced. However, in spite of these economies, inflation forced the Board to raise port charges early in 1976 and again in January 1977. It is the Board's intention that there should be no further increase in 1977 provided that there is no major change in the rate of inflation and that the Government's current incomes policy continues to be effective.

In his statement Sir Humphrey points out that four interesting new features in the financial history of the Docks Board took place in 1976. For the first time the Board's earnings on its port operations matched the rate obtainable by lending money to Local Authorities; the Board became liable for the payment of Corporation Tax; the amount set aside to cover depreciation of fixed assets based on the original cost to the Board was exceeded by the additional amount set aside to cover inflation; and the Board repaid part of its capital debt a year early and without reborrowing, the first time, it is believed, a state undertaking has done so.

The report states that capital expenditure by the Docks Board in 1976 amounted to £6.9 million before deducting grants received in respect of major fish dock modernisation schemes. The Board has made no external borrowing since 1972.

THE PORTS

The Humber ports increased their profit from £1.3 million to £6.4 million. At Hull, the stevedoring interests of the EWL Group were acquired by the Board from 1 July 1976, and their operations were merged with those of the Hull & Humber Cargo Handling Company Limited, a wholly owned subsidiary of the Board. Work on the modernisation of the fish docks at Grimsby progressed and were almost completed by the end of the year.

At Southampton work progressed on the new container berth (the port's fifth) which is being constructed for the South African container service due to start at the end of 1977. The port's sixth roll-on/roll-off berth was completed.

In South Wales the ports' results improved from a deficit of £0.3 million to a profit of £4.5 million. Major progress was made on the modernisation of the internal road network at Cardiff. Newport benefited from new Malaysian timber traffic, increased tea cargoes, and car exports.

FUTURE PROSPECTS

Sir Humphrey states that the return on capital of 15.5 per cent achieved during 1976, taking into account the general rate of inflation in the country, cannot be regarded as adequate for the long-term health of the business and further improvement is necessary. He goes on to say, "The prospects in 1977 are uncertain. Much will depend upon the degree of freedom from industrial disputes within and outside the ports industry as well as general economic trends and available traffics; some improvement is, however, hoped for. Over the years the upward trend should certainly continue until an acceptable level of performance has been reached."

In terms of the annual value of exports (excluding fuels) Dover rose from 7th place to 3rd (after London and Liverpool) between 1970 and 1975. Dover is essentially a roll on/roll off port, and its success illustrates the effect upon the ports of the development of this system, which often entails only modest investment in port facilities.

In terms of total tonnage throughput the following were Britain's ten leading ports. Figures are in millions of tonnes.

London	44.16
Milford Haven	43.17
Tees & Hartlepool	31.64
Southampton	26.55
Immingham	22.38
Liverpool	22.23
Medway	20.71
Manchester	14.88
Forth	13.72
Clyde	9.93

If fuel tonnages are excluded, the top ten ports were as follows. Figures are again in millions of tonnes.

London	17.02
Liverpool	10.58
Tees & Hartlepool	9.73
Immingham	9.21
Manchester	5.21
Clyde	4.69
Felixstowe	4.14
Hull	3.84
Dover	3.79
Forth	3.73

Rotterdam Strives for In-depth Expansion

By Jack Bax, Head External Affairs Dept. Rotterdam Municipal Port Management

Rotterdam, The Netherlands, June 6, 1977:—A satisfactory recovery from the recession year 1975 lends an extra dimension to the forecasts and future plans relating to the Port of Rotterdam. A detailed survey has shown that the flow of goods through Rotterdam-Europoort will continue to grow, on the condition, however, that Rotterdam will avail itself of its opportunities and, like in the past, consolidate its competitive position. There are plans that provide for keeping the port updated and increasing the transhipment capacity. It is of interest to note that the ports themselves will hardly be expanded in the coming decades.

But first some figures may illustrate the current position. In 1976 the volume of goods shipped through Rotterdam grew by 5.1 per cent to a total of 283.1 million tons. In the year prior to that Rotterdam had to absorb a 3.7 per cent decrease.

Viewed against the background of the world trade, which is much more susceptible to fluctuations, Rotterdam appears to have a fairly good shock-proof quality.

Crude oil and oil products comprise about two thirds of the total. The boycott by the oil producing countries not only drew the attention to the vulnerability of the port in this respect, but also to the European function of Rotterdam as distribution centre for oil and oil products.

After the boycott Rotterdam managed to recover quickly. The transhipment of crude oil rose by 10.9 per cent in 1976 to reach 148.5 million tons, thus re-establishing the 1972 level.

Liner shipping

But Rotterdam does not depend on oil for its claim as first port of the world. Of particular interest is the very large range of general cargo which is almost entirely carried by liner shipping. Rotterdam is very pleased with the strong recovery of liner trade. It is here that the port registered a 9.9 per cent growth (the total figure was 27.6 million tons).

With about three hundred regular lines (about 13,000 sailings per year), liner shipping offers shippers a fine choice in regular connections to and from all parts of the world.

Container shipping, which together with ro/ro and LASH constitutes half of all liner trade, increased by 15.5 per cent last year to reach 9.5 million tons. The number of containers handled amounted to 816,000.

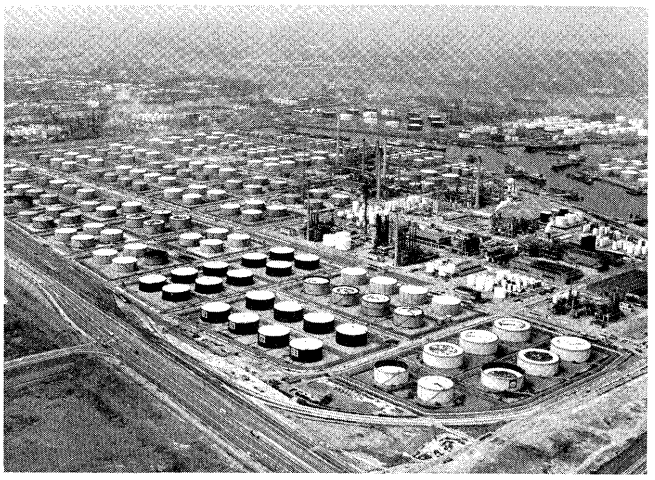
Re-structuring

The volume forecast for 1980 and 1990 were published last year and were found to be of great interest. It is assumed that there will be an annual growth of 5 to 6 per cent, and this rate is considered to be in keeping with the current reflections on environment, expansion and the changed relations in world economy (strongly increased prices of energy and raw materials).

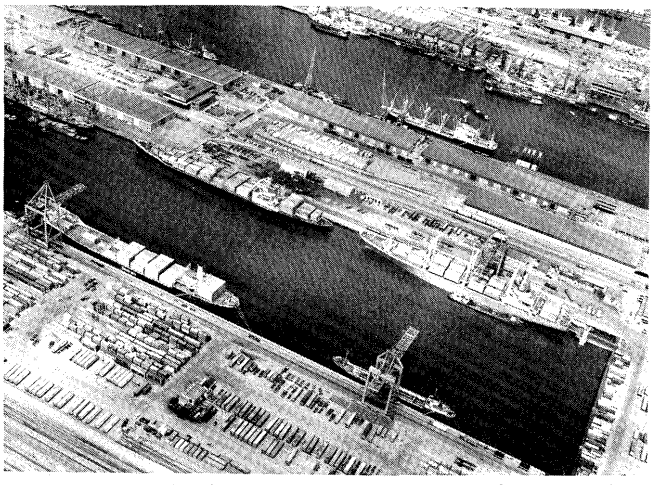
Rotterdam considers that it will be capable of handling about 500 million tons in 1990 without having to expand its port areas. The period of major expansion in terms of space is over. The predicted growth in trade will be absorbed by intensifying the existing facilities.

This, however, will not be possible without proceeding to restructuring the port areas, sometimes in a more or less drastic manner. One step in this direction is the plan for restructuring the older docks. The plans for dock restructuring envisage shifting the activities to the west, same as the port expansion in the post-war years proceeded in a westerly direction.

Obsolete docks in the urban area will be earmarked for new residential building. Firms dealing with general cargo will be moved to, say, Waalhaven and Eemhaven, and may so be able to acquire the necessary additional space. (It appears that there is sufficient quay length in the older docks, but the surface of the quay space it too restricted for modern transport technology and storage facilities).



Port of Rotterdam's post-war port industrialization complex. Rotterdam's total port area stretches over 35 kilometers along the south bank of the river Rhine, occupying an area of 10,000 hectares.



One of Rotterdam's main container terminals. Rotterdam last year handled 816,000 containers carrying 9.5 million tons of cargo.

The container terminals in Waalhaven and Eemhaven might be moved entirely or in parts to a new integrated terminal on the Maasvlakte. The complete operation is likely to last 25 to 30 years.

Nothing new

It is of interest to note that one of the container terminals in Waalhaven, Multi-Terminals/Pier 7 (Unitcentre) is located on a pier which used to handle bulk shipments. In view of the increasing size of the ships, the storage activities (ore, coal) were moved to the new, deeper ports in the west (also the location of new equipment for storage and transhipment of grain and derivates). There is, therefore, nothing new about restructuring the port. It is in fact a vital condition for the capability of a seaport to meet the new developments.

In depth

Recent statistical surveys, published in 'Jane's Freight Containers', illustrated what it means to grow 'in depth'. In a comparison between New York and Rotterdam 'Jane's' found that both ports more or less handled the same volume of containerized cargo in 1974. But Rotterdam achieved its own total with about half the numer of cranes in New York and with only one third of the space surface required in New York.

The figures are all the more remarkable when one remembers how sceptical some people were about the reception of the first containers in Rotterdam from the USA. But despite initial reservations, Rotterdam decided in time to adapt the new Prinses Margriethaven—which was then under construction—for handling containers.

Europe Container Terminus (ECT), which now also occupies part of the adjoining Prins Willem-Alexanderhaven, currently handles more than half a million containers a year.

Still space

Expansion of industrial activities in the port areas will certainly be able to take place, even if the authorities put down stringent conditions. Within the existing areas, about 1000 hectares of adequate sites are available, 700 hectares of which are located on the Maasvlakte.

Meanwhile, it will be necessary for Rotterdam to keep a watchful eye on its connections with the sea and the hinterland. Because of the large share oil has in the total volume of goods handled, the accessibility of the port should keep abreast of the ever increasing size of the crude oil carriers.

The Port Management wishes to increase the depth of the access channel in the North Sea leading to the Europoort facilities, from the present 68 ft to 72 ft.

The good connections with the hinterland via the Rhine have provided Rotterdam with a large share in the ore supplies for the Ruhr steel works. The intensy of the ore transports by push units has become so great now that the Hartel locksystems constitute a bottleneck. Rotterdam is pleading for an open connection.

Further inland, the river Waal must be re-adapted, so that in future six barge-push convoys can be admitted.

Bremen News

Bremen International

- **Aqaba: Bremen Team Proves its Worth**

Bremen, 16.5.77 (BremIn). Where, only a few months ago, 60 ships were waiting for berths in the Jordanian port of Aqaba, the now increased cargo-handling quantities are speedily dealt with, without any waiting time. This is the consequence of the six-month 'management assistance' rendered by a 14-man team of Messrs. Port & Transport Consulting Bremen GmbH (PTC): the Bremen organisation has proved its worth in Aqaba.

- **Handling-Plus Bremen/Bremerhaven 1st Quarter 1977: +15.4 Percent**

Bremen, 16.5.77 (BremIn). The first quarter of 1977 showed a further increase in commodity-handling by the Bremen/Bremerhaven port-group. Handling in the first three months of this year was 5.7 million tons which was an increase of 765,000 tons = 15.4% over the same period of the previous year (4.9 million tons). The particularly high increase-rate for general-cargo handling in Bremerhaven (+53%) is attributable to the further prospering of the container trade.

- **1977 Almanac of Maritime Traffic Economics appears in June**

Bremen, 16.5.77 (BremIn). The 'Jahrbuch 1977', which is a two-yearly publication of the Institute of Maritime Traffic Economics, Bremen, having some 300 pages, containing numerous tables and analyses on the international merchant marine, international ship construction, the handling in the most important ports, inland transport on the major channels etc., will appear in June and will also, for the first time, contain detailed information on the worldwide offshore activities Advance ordering is recommended. Price: approx. DM 60.–

- **In 1976 West-Germany took nearly 100 Million Tons of Crude-Oil**

Bremen, 27.5.77 (BremIn). West-Germany bought nearly 100 million tons of crude oil in 1976, which was 10 percent more than in 1975. It came mostly from Libya (21.3%), Iran (19.2%), Saudi Arabia (19.1%) and Algeria (10.6%).

- **Bremen/Bremerhaven tops General-cargo Proportion for North Europe**

Bremerhaven, 27.5.77 (BremIn). At the '1977 Weser-Day' in Bremerhaven Senator Brinkmann referred to the 'progressive development despite the recession' of the Bremen/Bremerhaven port-group. Bremen's general-cargo share increased in the past ten years from 9.2 million tons in 1966 (the commencement of the 'container era'), to 13.5 millions, i.e. 50%, as compared with 36% for Rotterdam and 22% for Hamburg. The high increase rates of the other ports were based on the bulk-cargo field (crude-oil), in which Bremen neither could nor would participate.

- **Toyota in Bremerhaven**

Bremerhaven, 27.5.77 (BremIn). Japan's largest car-manufacturer will in future, be importing his cars into the Federal Republic of Germany through the biggest car-

handling plant, in Bremerhaven. In 1976 Toyota sold 17,209 cars to West-Germany. In Bremerhaven Toyota utilises the return-transport facilities of the home-market overseas-export movements to that port. The notable car-handling increase of recent times, particularly in the USA and Japanese trades, has been surmounted by Bremerhaven with the establishment of several car-storage areas and of parkdeck plants which are accessible through side-ramps and which, alone, provide space for an additional 2,000 large automobiles.

- **Forwarders using computers**

Bremen, 13.6.77 (BremIn). The world-wide international transport undertaking, Kühne & Nagel—originating with its parent house in Bremen and which can now boast of 9,000 employees in 300 offices in 60 countries—has now, as the first forwarding-agents organisation and first, indeed until now only, tariff-bureau in Europe (including the railways), developed a computer-adjusted system for freight-calculation which is capable of processing a large volume of international railway-tariff data (even though, basically, this is unsuitable material for computerisation) right down to presentable quotation level. The K & N program has now recently been operating successfully for all railway traffic to Turkey, Syria, Irak and Iran; for all routes via the Balkans; as well as for all transportation-variations. Greece-destined traffic has now also been included.

- **Brinkmann:**
  Faster decision-making

Bremen, 13.6.77 (BremIn). "Our port-constructors have always had plenty to do in Bremen and Bremerhaven", stated Bremen's Senator for Ports, Oswald Brinkmann, before the 38th general-meeting of the Association of Technical Port Constructors. "Moreover developments have to date shown us to be right. If the Bremen ports today, however, hold a relatively strong competitive position among Europe's international ports, with no investment errors having been experienced, then this is due only to Bremen's seaport-trade economics having always been quicker, more flexible and less conventional and to have also reacted to the market with greater inspiration, than many of our competitors". Brinkmann called upon the experts to further improve and supplement the cost/application instrument as a means towards more rational decision-preparedness.

- **1st German-Arab Port-Management Seminar in Alexandria developed into Port-Conference; Profitable to All Concerned**

Bremen, 13.6.77 (BremIn). The first German-Arab Port Management Seminar, from the 14th to 25th May 1977 in Alexandria, was a complete success. The instructors and 35 participants from 11 Arab countries-respective managers in top posts in their ports—were all in accord on this. The port experts from Algeria, Tunisia, Egypt, Sudan, Jordan, the Yemen, South-Yemen, Aden, Oman, Dubai and Sharjah converted this, to date, biggest Arab Port-management seminar, having both German and Arab instructors, into a minor downright port-congress—with their lively exchange of views on a consistently high niveau. Dr. Hans Ludwig Beth, director of the Bremen Institute of Maritime Economics: "We gladly took up the challenge of practical men".

The starting point for the papers, debates and discussions was the current, practical, state of affairs existing in the Arabian ports; upon which the problem-orientated scientists raised queries and demands on their methods and means, the keys to which the practical-orientated port-managers were called upon to find—and demonstrate concrete solutions. Not one of the burning questions of port-practice was excluded within the spheres of costs, investment, equipment, port-organisation/efficiency, planning (including the functions and successes of foreign port-planners), traffic systems, techniques and training; so that this seminar resulted in an abundance of valuable discernments and stimulus. The organisers, instructors and participants all then unanimously expressed the wish to see this port-management seminar repeated annually, with latest scientific results and practical experience being incorporated, in one of the Arabian port-towns in similar fashion. The question was also raised relative to Arab personnel receiving training in practical port experience in Bremen.

The Institute of Shipping Economics in Bremen (director Dr. Hans Ludwig Beth and Jens-Uwe Schmidt) produced the initiative for this activity and so was responsible for this first seminar in Alexandria which proved of such significance—together with the Bremen port-managers, Dr. Günter Boldt and Dr. Rolf Stuchtey, of Europe's largest port-handling company, the 'Bremer Lagerhaus-Gesellschaft (BLG)', in Bremen; the Arab Maritime Transport Academy in Alexandria (Director, Dr. Ahmed A. Monsef) and the Arab Organisation for Administrative Sciences—a subsidiary of the Arab League. This organisation was simultaneously participating in the financing of the project, together with the Federal West German Ministry of Economic Cooperation (through the Carl-Duisberg Association) and, not last, the Senate of the Free Hanseatic City of Bremen (through the Senator for Economics and Foreign Trade, Tiedemann).

The preface to this first and, until now for the Arabian side, biggest event of this kind was a brisk contact/scientific and personnel exchange between the Bremen and Alexandrian institutes from the days of the shipping congress 'Future of Liner Shipping' held in Bremen in the Autumn of 1975—relations which will be continued with additional versatile exchanges and contacts already programmed. The next port-management seminar of this description is being arranged by the Institute of Shipping Economics, Bremen, for the first half of October 1977, in Djakarta/Indonesia.

- **International Port Consulting Experience**

Bremen, 13.6.77 (BremIn). Complaints are increasingly being heard in international and shipping circles relative to so-called port-consulting firms, mostly small private undertakings which do not have the necessary qualifications. i.e., the traffic experience of a modern international port and which are endeavouring to infiltrate into the currently flourishing business of port-counselling, but which, however, hardly produce anything but costs. It is recommendable to stay with undertakings which are initiated by successful international ports and which are manned with top personnel and endowed with valuable experience. However, it has to be said that such consulting companies cannot be secured and engaged at will. The much sought after, renowned, Port & Transport Consulting Bremen GmbH (PTC)—a subsidiary of the largest European port-handling company, 'Bremer Lagerhaus-Gesellschaft' of

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The UN, food aid and shipping

By K. J. Loroch

"Seatrade", June 1977 *(The author, who for five years directed the transportation activities of the UN/FAO World Food Programme, is president of Loroch-Harris Trade & Transport Ltd. based in Monte Carlo.)*:—In the last 30 years bilateral and multilateral transportation of food aid may have consumed close to $12bn in shipping costs. This enormous expenditure, as well as the operational complexities, are well recognised but no one has evaluated the performance. We know that frequently the costly input of logistics has been neither timely nor properly assessed and problems were handled as they arose. Food aid shipments have been reported to choke port and internal transport facilities to the detriment of the recipient's basic commercial exports. We can only suspect the extent to which the ultimate benefits were derived at staggering and excessive costs. An objective in-depth survey of the whole post-war experience on food aid transportation is badly needed.

Within the UN family, fragmented line and staff operations in the area of transport reveal a complete lack of communication or dialogue to the detriment of both; this inadequacy has led to demands for the establishment of a UN Transport Centre. By placing centralised and concentrating forward thinking under one roof, UN management as well as member countries could be fed with factual quantitative reports on the relative merits of completed and current ventures as well as all potential courses of action.

Some UN agencies, such as FAO and the World Food Programme with which I had been associated, exhibit a disturbing degree of complacency on transport matters. When getting things done no matter what methods are being employed, operational decisions must tend towards costly and outdated methods. My own plea for proper staff research support to put some backbone into the shipping activities fell on deaf ears and was dismissed, surprisingly enough, as so much academic nonsense. It is easy to see that with the right attitude and competence not only efficiency could be raised but what an impressive body of knowledge and experience could have been accumulated over the years by the World Food Programme and other similar agencies.

Perhaps no problem is distribution management is more troublesome than that of inventory location, size and its proper control. Optimal maintenance and distribution costs also require a compromise between shipping large quantities at low speed and small quantities at high speed in order to benefit from low transport costs as well as reduced storage and inventory expenditures respectively. The proponents of world food reserves need to remember that national schemes are basically predicted on one loading and one discharging operation while internationally controlled food banks would double these operations, increase voyage time and costs.

Any viable physical distribution model under any world food security system must therefore carefully examine the mechanics of food stockpiles and relate them to commercial shipping services. This means being just one among a number of competitive elements in the total demand for those services. Food commodities, because of their nature and destinations, are not very attractive cargoes to carriers while, as a rule, emergencies do not fit well into the established trade routes and finding space may be time consuming and costly.

The supply of suitable transportation for all bulk commodities tends to be inelastic and, similarly, the demand for suitable substitute commodity or source offered by shippers is again almost totally inelastic. Consequently, the relationship between cargo movements and the price of moving the cargo is relatively weak. The picture is further complicated by inelasticity of supply of shipping space under increasing demand and its elasticity under contracting demand. The difficulties of planning on national or international levels when the cost of transport in the free market is such a variable, are obvious. On the other hand, it would seem that an orderly even partial planning of food distribution might be welcomed by the shipping industry as a market stabilising factor.

Location of emergency food reserves restricted to areas such as N. America or N. Europe where ships congregate is likely to ensure a reasonable and fast commercial response for transport. But the idea of a political UN-controlled stockpiles—subscribed to by many developing nations—set up in several strategic neutral points near emergency prone areas of the world, eliminates almost completely (with a few exceptions such as Singapore) normal use of commercial shipping services. This would require creation of a reserve pool and a commitment from the industry to provide vessels at a moment's notice for replacement and replenishment of stocks and unpredictable emergencies.

In the search for practical alternatives one cannot dismiss the possibility of linking UN-controlled food stock piles with a UN-operated merchant fleet. There exists a UN military force composed of member countries—why not a UN merchant marine? I would not go as far as to advocate a fully-fledged international sea transport system under the UN flag, although this may merit more than a cursory examination.

Instead of bilateral arrangements or cash donations for transport of food aid why not place timechartered vessels on a rotational basis at the disposal of a UN vessel operational unit which could be part of the proposed UN Transport Centre. With food stockpiles strategically located around the world that may reach 60 m tons, a sizable fleet could be kept busy with replacements and replenishments. In emergency situations, help could be rendered with minimum delay particularly if a cargo already affloat can be diverted. Moreover, the flag of the United Nations is likely

(Continued on next page bottom)

Bremen—which recently organised the Jordanian port of Aqaba in exemplary fashion and which is currently engaged in Manila, only accepts orders, for instance, which it knows can be executed with certainty in the best interests and to the satisfaction of the client. The PTC also sends, exclusively, first-class personnel whose engagement, naturally, is restricted.

Cathodic Protection of Ocean Steel Structure — Example by Oita Port Sea Berth

by Yoshikata Imakita
Development Chief of Technical Department Nakagawa Corrosion Protecting Co., Ltd.

General

In 1970, a large-scale steel structure, that is, a raw ore unloading sea berth was constructed in Oita Port in Kyushu Island by Nippon Steel Corporation as one of facilities for its iron works newly built by the seaside.

It is such a king-size sea berth as can afford to moor two ore-carriers of 60,000 D.W.T. and one of 250,000 D.W.T. at once for unloading, and consists of a main berth of 620 m length and 45 m width, a connecting bridge of 400 m length and 14.1 m width and four mooring dolphins. Their foundation pipe piling of 1.0 to 1.5 m dia. and 80 to 90 m length each are situated in the average water depth of 30 m.

As the corrosion preventing measure for these pipe piles, inorganic zinc rich primer and coal tar epoxy top coat were applied for the section over and above the tidal zone, while, for the submerged section and the sea-mud section, the galvanic anode cathodic protection system using highly efficient aluminum alloy anodes was applied. To supply the initial protection current of about 12,000 amperes designed for this cathodic protection system, the aluminum alloy anodes of about 70 kg weight each totalling 3,541 pcs were installed.

For confirmation of protection effect, the measurement of potential and wall-thickness of pipe piling were executed five years after completion of the protection work. The measurement results proved the excellent protection effect.

Cathodic Protection Field-Test by Test Pieces

The corelation between protection current density and protection effect which are required for design of cathodic protection system was examined by testing as follows.

Several test pieces of mild steel as same as the material of piling of the sea berth were installed in sea water and in sea mud of the construction site. These test pieces were provided with their respective electric currents of different amperes through the sea water to seize the current density requirement for cathodic protection. According to the test results, the protection current density was known as 115 mA/m² (10.7 mA/ft²) in sea water and 15 mA/m² (1.4 mA/ft²) in sea mud. The test pieces were removed after flowed with the current at the above densities for two months, and weighed to calculate the protection rate. The protection rate of 90 to 98% obtained by the calculation proved those current densities were securely protective for pipe piling of the sea berth. Accordingly both current density values were employed for this cathodic protection.

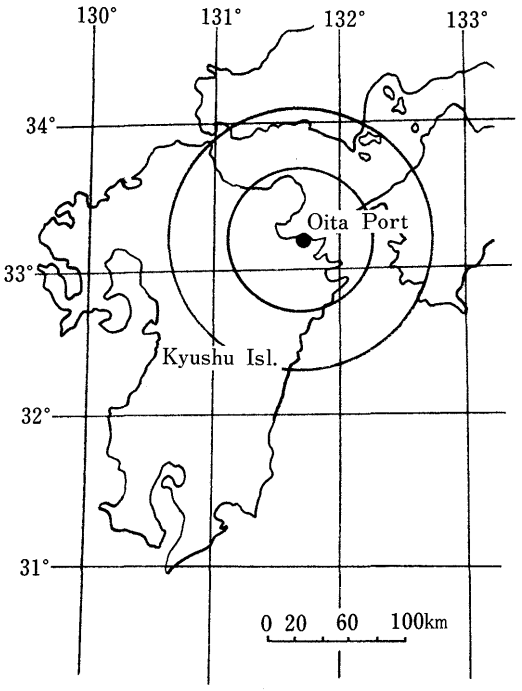

Fig. 1 Location of Oita Port

Corrosion Control Design and Application

1) Corrosion Control System and Application

For the convenience of cathodic protection design, the protected object was classified into three sections, i.e., the submerged section, the sea-mud section and the coated section in the splash and the tidal zones. As forecited, the following corrosion control systems were applied for these sections.

Submerged and Sea-mud Sections	:	Cathodic protection system
Coated Section (in splash and tidal zones ranging from H.W.L. -3M to +2.26M)	:	Protective coating system

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to assure fast clearance, berth priority and obviate other reception difficulties which may confront national flag ships.

This arrangement is workable and none of the objections that commercial or political interests could bring forth appear to be insurmountable or sensible; every one may have his cake and eat it too. To have vessels read around the world, possibly equipped with helicopters for aerial reconnaissance and trucks for inland delivery of the food (clothing and medicine) on board, would be very much in keeping with our quest to work out an effective world food security system.

Photo 1. Whole View of Ore-Unloading Berth

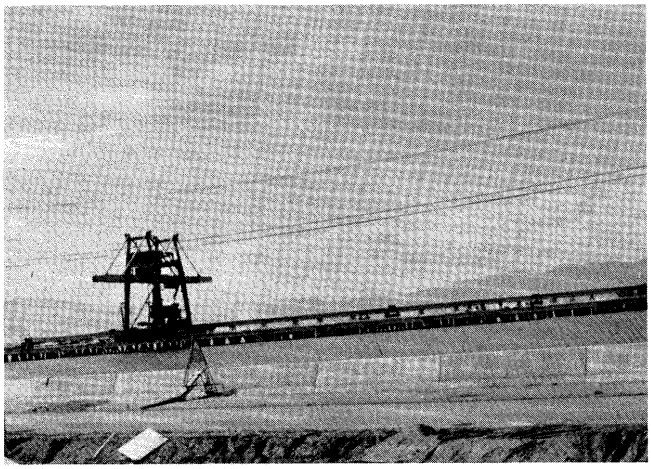

Photo 2. Ore-Unloading Berth Nearing to Completion

2) Choice of Cathodic Protection System

As the cathodic protection system widely known at present, there are the impressed current system and the galvanic anode system.

In the former system, the a.c. received from a power cable is converted to the d.c. by a transformer-rectifier and flowed to the pipe piling from insoluble electrodes through sea water in order to cathodically protect the piling.

While, the latter system supplys the galvanic current as the protection current from sacrificial anodes such as aluminum alloy anodes, which are welded to submerged pipe piling to be protected.

For the present sea berth, the galvanic anode system was adopted from viewpoints of economy and workability for installation and maintenance.

3) Protected Area and Protection Current

The following table indicates the protected areas of respective pile sections of the main jetty and other attached facilities together with their protection current requirements.

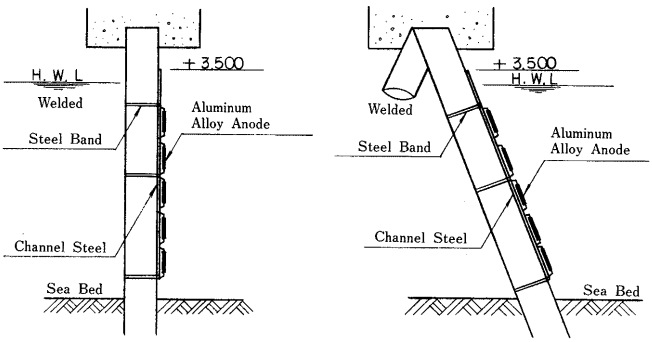

Fig. 2 Anode Installation to Steel Pile

Pile Section / Protection Requirement		Coated Sec.	Submerged Sec.	Sea-Mud Sec.
Protection Current Density		60 mA/m²	115 mA/m²	15 mA/m²
Protected Area	Piers of Connecting Bridge	874.31m²	1,983.17m²	10,440.45m²
	Mooring Dolphins	509.42	2,561.14	4,363.67
	Piers of Catwalk	237.68	872.06	1,510.98
	Main Jetty	14,450.46	72,189.91	125,610.72
Protection Current	Piers of Connecting Bridge	52.46A	228.06A	156.61A
	Mooring Dolphins	30.57	294.53	65.46
	Piers of Catwalk	14.26	100.29	22.66
	Main Jetty	867.03	8,301.14	1,884.16
	Total	964.32A	8,924.02A	2,128.89A
Grand Total of Protection Current : 12,017.23A				

4) Anode and Anode Installation

The specification of aluminum alloy anode used in this cathodic protection system is as follows.

Brand Name	:	ALAP Type H-150
Geometry	:	(90 + 130) x 120 x 2,000 mm
Material	:	Aluminum alloy
Weight	:	69.6 kgs/each
Current Output	:	3.5A/each (initial output)
Quantity	:	3,508 pieces
Service Life	:	ca. 10 years

It is usual to install the anodes by underwater welding, but in this case the underwater welding was avoided in consideration of the strength of low alloy steel piling. Instead four or five anodes were beforehand welded to a channel steel (100 x 50 x 6 mm) on land. This channel steel serving as an anode holder had been cut in the specified length on land and coated with the same paint as used for the steel pile over the range from +3.5M to −1.0M. The assembly of the channel steel and anodes was hung down along steel pile in sea water by means of the crane mounted on the barge, and the upper end of the channel steel was attached to the steel pile by 50 cm long fillet welding at the level of +3.5M after secured to the pile with steel bands (at three or four places) by the hands of diver. (See Fig. 2)

5) Potential Measurement Equipment

For the purpose of confirming the protection effect, the stainless steel terminal attached on the top of a 16 mm diameter round steel bar which was raised from the steel pipe pile was enclosed in the measuring box so that protection potential of the steel pile can be measured

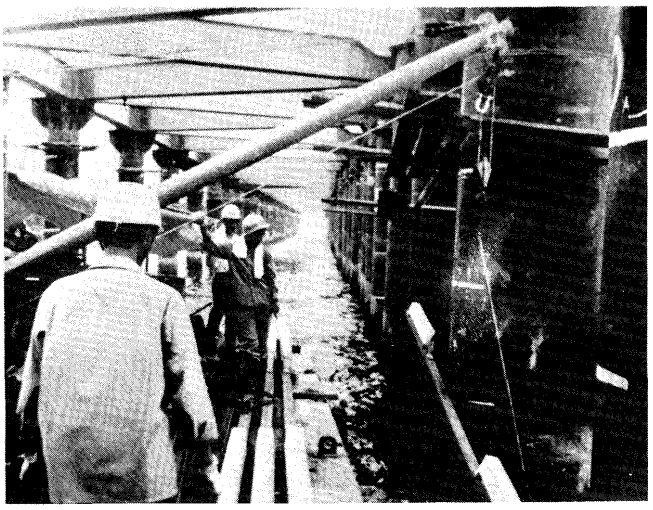

Photo 3. Anode Installation Work

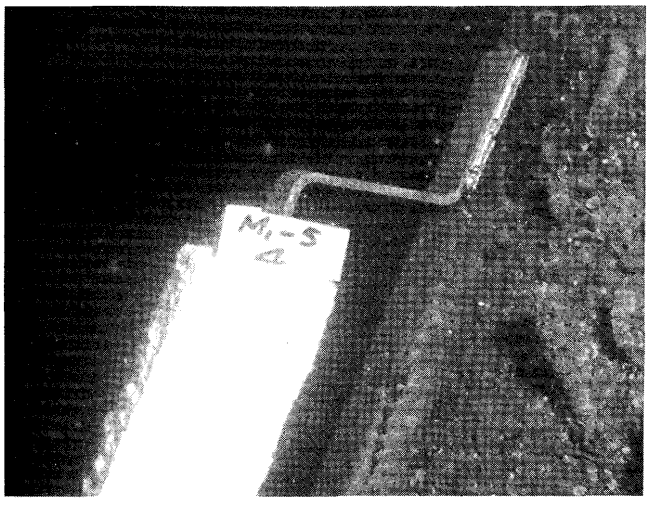

Photo 4. Part of Aluminum Alloy Installed on Pipe Pile Through Channel Steel

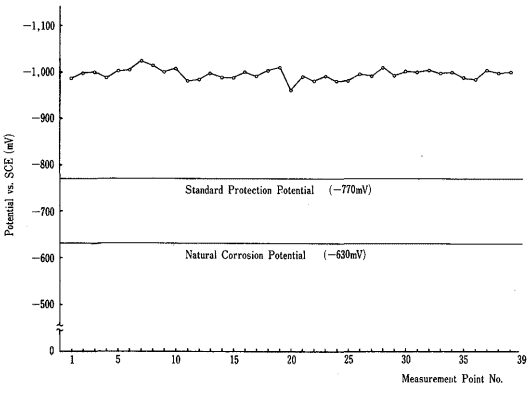

Fig. 3 Potential Distribution of Pipe Piles

occasionally through potentiometer and reference electrode. Such boxes were installed on the same level in the concrete slab floor.

6) Protective Coating for Pile Section in Splash and Tidal Zones

Perfect protection effect can hardly be attained on the splash and the tidal zones of steel pipe pile only by

Photo 5. Pile-Wall Thickness Measurement

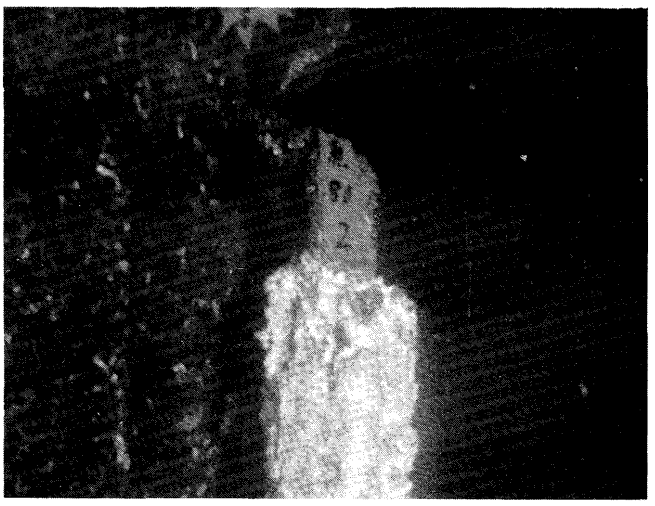

Photo 6. Aluminum Alloy Anode Five Years After Completion of Seaberth

cathodic protection, so in a general way concrete coating or paint coating was taken into account. However, concrete covering may involve some problems in view of workability, so anti-corrosion paint coating was adopted. As for the coating system, one coat of 16 to 20 micron thickness of inorganic zinc rich (zinc dust) paint, ZAPCOAT-M, was applied to the shot-blasted pile surface at the manufacturer's shop, and then two coats each of ZAPCOAT and NB-COAT (coal tar epoxy paint for top coat) were applied onto the primed pile surface at the field, in keeping pace with the processing and assembling of piles.

Confirmation of Protection Effect

1) Potential Measurement

In general the cathodic protection effect on submerged steel is confirmed by measuring the potential of steel surface. If the measured potential is less noble than the standard protection potential value of -770 mV against saturated calomel electrode, it will prove that the steel is in satisfactorily protective condition.

In case of this sea berth, too, the potential measurement for foundation piles have been performed in reference to the saturated calomel electrode more than once a year for the same purpose. Fig. 3 shows the potential distribution of pipe piles of the sea berth measured five years after its completion.

As shown in this graph, since the potential is less noble

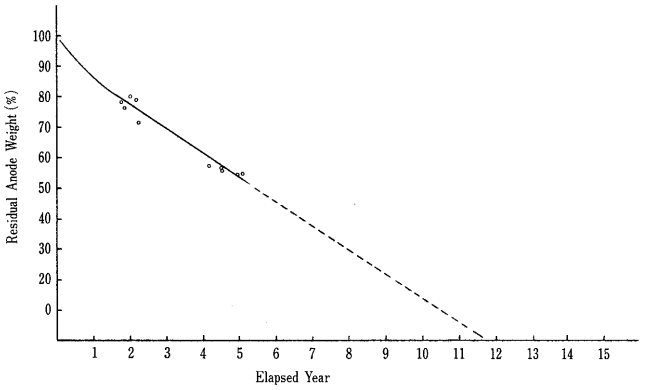

Fig. 4 Estimated Anode Life

than the standard protection potential value at every measurement point, it is assured that these piles are under satisfactory protection.

2) Visual Inspection of Pile Surface and Measurement of Pile-Wall Thickness

The foundation pile surfaces were inspected by divers five years after the completion of sea berth and their even and smooth surfaces assured the sufficient protection effect.

The pile-wall thickness measurement was carried out using a ultrasonic microwave thickness gauge. The measured values scarcely varied from the original pile-wall thickness, also proving the security of protection effect.

Anode Life

The consumption of aluminum alloy anode was surveyed by divers five years after completion of sea berth, that is, the peripheral length of anode was measured to calculate the residual anode weight. The anode life was estimated from the residual anode weight and the anode consumption. As a result, it was presumed that the anode life will be prolonged by one or two years beyond the expected limit of ten years. (See Fig. 4)

Epilogue

The cathodic protection work for this sea berth was commenced in January 1970 and completed in August 1971.

Since the completion, respective pile sections have been satisfactorily protected by the protective coating in tidal and splash zones, and also by the cathodic protection system in sea water and sea mud.

In the future, whenever the coating is damaged or deteriorated it will be recoated, and when the anodes installed for the submerged and the sea-mud pile-sections are consumed, they will be replaced with new ones.

Thus the ore-sea berth will be securely and indefinitely protected from corrosion.

Acknowledgement

The author wishes to express his appreciation of Nippon Steel Corporation Oita Works' permission for publication of this article.

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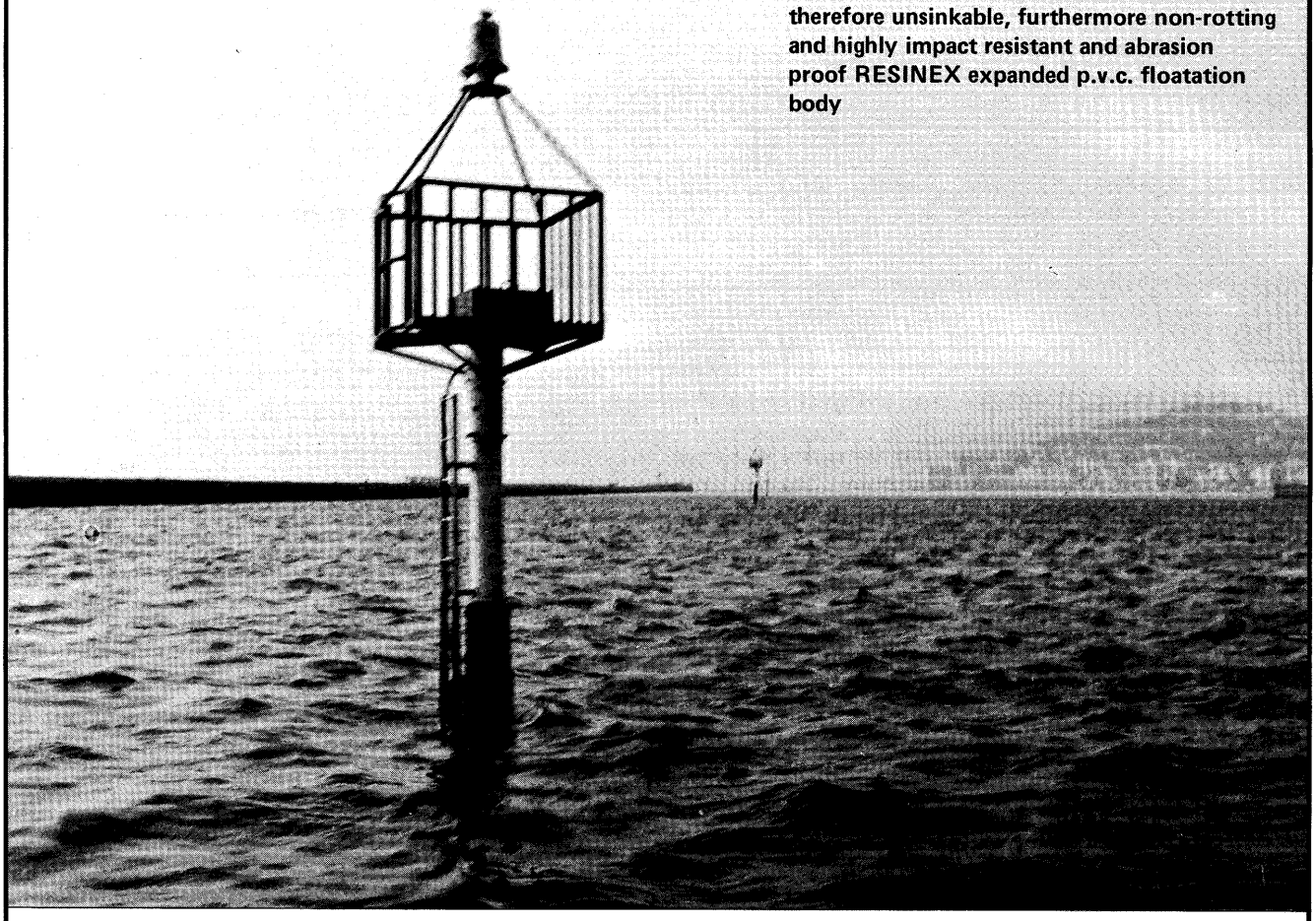

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1976 Foreign Trade Announced by The Port of New York-New Jersey

New York, May 12, 1977:—The Port of New York-New Jersey ranks first among the nation's ports in the shipment of more than half of the 206 commodities imported into the country in 1976, and was the leading United States port in 39 percent of the 213 commodities exported from the nation last year.

This newly developed first place ranking criterion for oceanborne general cargo commodities was the highlight of a special analysis of the Port's 1976 foreign trade announced today by Port Authority Chairman William J. Ronan.

Foreign Trade Up Significantly Over 1975

The Port Authority Chairman, on April 17, reported that the Port's foreign trade, both oceanborne and air cargo, rebounded significantly in 1976 over the recession year of 1975.

New York's oceanborne general cargo reached 15.3 million long tons last year, up 8.8 percent from 1975. Its air cargo foreign trade reached an all-time peak with a volume of 505,233 long tons, up 8.9% from 1975.

In the handling of oceanborne bulk commodities, the New York-New Jersey Port's foreign trade tonnages rose 10.2 percent to 42.9 million long tons in 1976, reflecting primarily higher petroleum imports.

First Place Rankings Criterion

"The 'top commodity' approach to Port general cargo activity supplements the traditional yardsticks of tonnages, value, competitive shares, and value per ton," Dr. Ronan said. "By counting the first place rankings of the more than 200 import commodities and 200 export commodities, by port, it is possible to measure the ability of a port to handle a broad-based product mix.

"This new economic indicator demonstrates the versatility of the Port of New York-New Jersey, which has, by far, the greatest product mix of any United States port."

Port's Imports Especially Strong

The Port's import strength is extremely broadbased with strong representation in virtually all commodity groups. It ranked first last year in 108, or 52.4%, of 206 general cargo import commodities in 1976, according to United States Bureau of the Census data. These commodities comprise raw material, semi-processed goods, food products, consumer goods, and manufactured products.

Among the general cargo import commodities in which New York ranks first are sound recorders, grain cereals and soybeans, coffee, nursery stock, vegetable oils, textile waste, leather manufactures, footwear, paper and paperboard manufactures, steel wire, plastic and rubber materials, copper, machinery for special industries, electric motors and generators, watches and clocks, live animals, furniture, and glues.

The New York-New Jersey Port's dominance of more than half of the first place rankings on important commodities was substantial, with the second port having 15 first place rankings or 7.3% of 206 commodities.

First in Export Rankings Too

In 1976, New York also was the leading United States port in the export of 83, or 39%, of the nation's 213 general cargo export commodities. Here, too, New York's dominance reflects its broad-based product mix. The bi-state port ranks first in a wide rank of commodities, contrasted with a narrow product mix of most of New York's competitors. The second port by this criterion, had 31 commodity first place rankings, heavily concentrated in agricultural products and chemicals.

Among the general cargo export commodities in which New York ranks first are fresh or frozen meat, frozen fruits, cocoa and coffee preparations, alcoholic beverages, crude rubber, iron and steel scrap, footwear, pharmaceuticals, travel goods, fur clothing, tires and tubes, printed matter, steel wire, silver and platinum, central heating equipment, internal combustion engines, scientific equipment, and rail vehicles.

"In summary," Dr. Ronan said, "the first place rankings criterion clearly shows the strength of the Port of New York-New Jersey. The bi-state port ranks first in the handling of more commodities, by a wide margin, than any of its competitors, in both general cargo imports and exports."

Ship Activity

New York:—A tabulation of ship activity at the Port of New York-New Jersey for the year 1976 shows a total of 7,730 arrivals, which is a far greater number than for any other United States port. The arrival figures, gathered by the Maritime Association of the Port of New York, analyzed the total activity at the eleven largest ports in the Continental U.S. during 1976.

The Port of New York/New Jersey share amounted to 17.7% of the U.S. total of 43,600 arrivals. The second largest port (Los Angeles-Long Beach) drew 11.6% or 5,071 arrivals.

The composition of the New York/New Jersey arrivals included 271 passenger liners, 2,387 tankers and 5,072 container, bulk and general cargo vessels. It was noted that the proportion of general cargo vessels at the Port of New York-New Jersey in the liner trades exceeded that of any other east coast United States port.

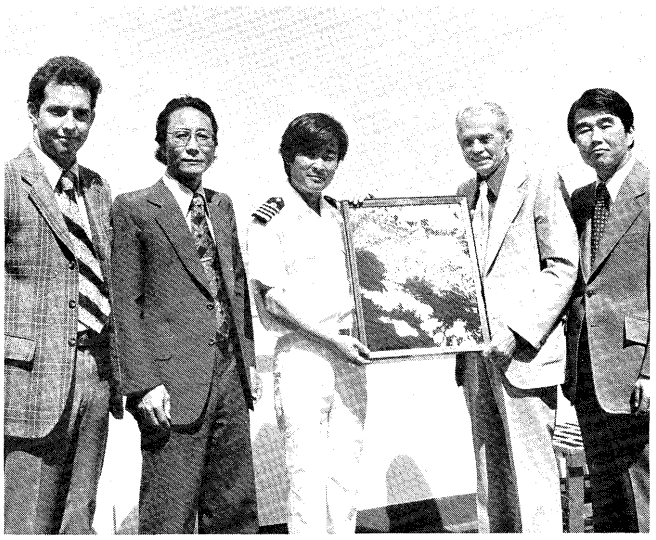
Most significant is that while there was no increase in the amount of ship activity at the Port of New York-New Jersey, the net tonnage of the arrivals increased by more than 6,100,000 as compared to 1975. This is a result of the continuing replacement of small break-bulk ships by fewer, but larger containerships at America's leading containerport.

The arrivals represented a world-wide range of trade routes with the British Isles and Northern Europe predominating with 1,251. This followed by 775 arrivals from the West Indies and the Northern Coast of South America. The next largest volume was 489 from the Far East.

Vessels of the Japanese Merchant Marine were again prominent among the leaders in Port of New York-New Jersey ship arrivals during 1976 when 106 vessels arrived flying the flag of Japan.

Port of Long Beach News

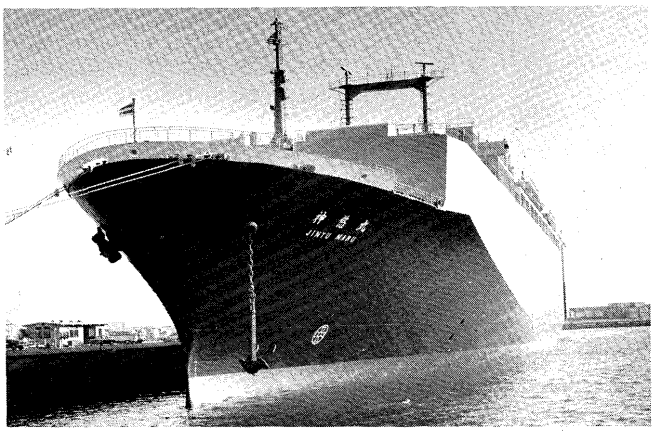
Long Beach, Calif., 070877 (Port of Long Beach News):— RARE DUAL AWARDS TO U.S. TANKER. The USNS Sealift China Sea, 27,000 ton tanker operated by Marine Transport Lines for the Military Sealift Command, has been singularly honored by the recent dual presentation of two of the country's highest awards, the National Safety Pennant for winning the annual American Institute & Merchant Shipping Safety Achievement Awards Contest, and the American Merchant Marine Seamanship Trophy, presented to Captain Richmond A. Fryer for his role in rescuing 31 survivors of a stricken vessel during a heavy storm in the Arabian Sea. Pictured with the coveted pennant at shipboard ceremonies held at Atlantic Richfield Terminal in the Port of Long Beach are (from left in photo 1) Captain Robert Durgin, presently in command of the China Sea; Rear Admiral John T. Coughlin of the Military Sealift Command; Albert E. May of AIMS; Captain Fryer, who commanded the tanker at the time of the rescue; and Fred S. Sherman, Board Chairman of MTL, Inc. In second photo, AIMS' Albert E. May, left, joined Maritime Administration official Oliver T. Henry, right, as he presented handsome silver bowl emblematic of seamanship superiority to Captain Fryer.

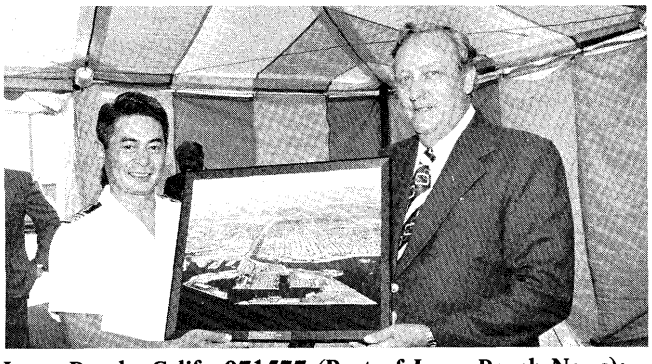


Long Beach, Calif., 071577 (Port of Long Beach News):— MAIDEN ARRIVAL OF KOREAN COMMANDER IN LONG BEACH. The maiden arrival at the Port of Long Beach of the Korean Commander recently, has added to the Korean Shipping American Line's fleet of containerships in service to Korea, Japan and Hong Kong. On hand at the welcoming ceremonies were Dennis W. Donohoe, (left) Operations Manager from Korean Shipping America, Inc.; Young Hohwang, Assistant Vice President for Korean Shipping America; Captain Nam Ki Keop; Dean Petersen, Trade Development Director for the Port of Long Beach and Y.K. Hah, Vice President of Korean Shipping America.

Long Beach, Calif. (Port of Long Beach News):—NEW ARCO MARINER TANKER IN MAIDEN CALL AT LONG BEACH. Atlantic Richfield's latest tanker, the 153,843 DWT Arco Mariner, set yet another petroleum delivery record when it arrived at the Port of Long Beach recently with 1,139,585 barrels of Iranian oil aboard, following a 37 day voyage from Kharg Island at its economic speed of 14 knots. The 151,000 tons discharged during several visits to the Arco Terminal at Long Beach was the largest shipment ever offloaded berthside at any American port in history. Long Beach Harbor Operations

Director H.H. Harnagel, right, went aboard to present Captain E. Spanio Capra with an Apollo-eye photo of Southern California to mark the occassion. Arco Employee Relations Supervisor S.D. Harvey and Chief Officer Peter Altamura are at left.





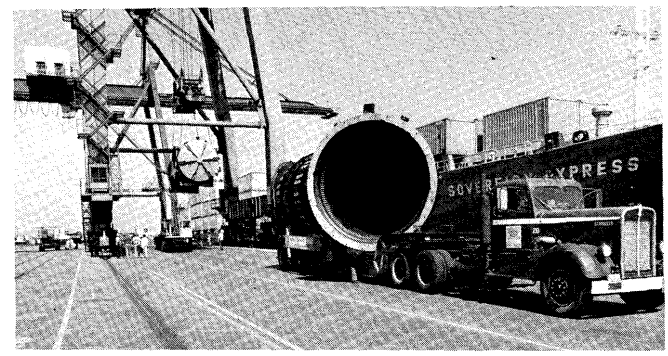
Long Beach, Calif., 071577 (Port of Long Beach News):— WORLD'S LARGEST AUTO CARRIER CALLS AT LONG BEACH. Toyota's first West Coast arrival of a new class of automobile carriers arrived at the Port of Long Beach recently in the form of the Jinyu Maru, which can carry 6,000 small cars, making it the largest such vessel in the world. Long Beach Harbor Commission President Richard G. Wilson, right, was on hand to present traditional aerial view of America's most modern port to Captain Y. Hayashi. Matson Agents acted as general agent for the NYK Line shipment.

Port Traffic Manager

Long Beach, Calif., 072577 (Port of Long Beach News):—Steven P. Resnick, 31, has been named to the newly created post of Port Traffic Manager in the Trade Development Division of the Port of Long Beach by the Board of Harbor Commissioners. He was formerly a Trade Representative in the same division and will continue to report to Trade Development Director Dean J. Petersen.

Resnick, a graduate of UCLA with postgraduate work at Cal State University Long Beach and the University of Hawaii, was formerly Assistant Vice President of Pasha Industries and of MSI's Southern California operations. Prior to that, he was Port Manager in Long Beach for Seatrain Lines' Southern Region.

Active in several maritime organizations, including the National Defense Transportation Association, Resnick is currently President of the International Trade Club of Los Angeles.



Long Beach, Calif., 080277 (Port of Long Beach News):— KAISER STEEL SHIPMENT ARRIVES. The first of three movements of environmental gas exhausters for the Kaiser Steel plant in Fontana arrived in the Port of Long Beach recently when the Sovereign Express of Euro Pacific delivered the 100,000 kilo stacks from Bremen, West Germany, at Pacific Container Terminal's Berth 246. Frank De LaTorre, vice president of Barham Schenkers, left, and Jim Peters, Balfour, Guthrie & Co., Ltd., right, watch as a heavy lift is completed.

Long Beach, Calif., 080377 (Port of Long Beach News):— C.Y. TUNG NAMED HONORARY LONG BEACH PORT PILOT. C.Y. Tung, Chairman of Orient Overseas Container Line, has become the 52nd recipient of the Honorary Port Pilot Award presented by the Long Beach Harbor Commission to leaders in the maritime, industrial and governmental fields. In a tradition dating back to 1954, when President Eisenhower was the first recipient, Commissioners H.E. Ridings, Jr. and Reed Williams, seen at left, made the presentation of a plaque bearing the Port logo and a brass ships clock to the smiling recipient, center, while Captain C.G. Yen of the "campus afloat" liner SS Universe and Captain Paul S. Mead, Vice President Operations/Traffic of Eckert Overseas Agency look on. The ceremony took place in front of one of the anchors from the ill-fated Queen Elizabeth, which Mr. Tung had just completed converting into a floating campus when it caught fire and sank in Hong Kong Harbor. The memorial to the great ship was dedicated by Mr. Tung in front of the American Asian Bank in Beverly Hills.

Port of Los Angeles News

Board's recommendations

June 15, 1977:—The Los Angeles Board of Harbor Commissioners today (Wed., 6/15) requested that the Los Angeles City Council:
– urge the Coast Guard to adopt its proposed tanker safety regulations dated April 19, 1977, with certain qualifications.
– support the establishment of international standards for the training of officers and seafarers at all levels.
– urge the federal government to recognize and support the Intergovernmental Maritime Consultative Organization (IMCO), an international organization for the creation and enforcement of an international system of safety and environmental protection.
– support federal preemption of state oil spill liability fund laws.
– urge financial support for the additional Coast Guard manpower to implement the proposed regulations, including additional inspection personnel.
– support the introduction of crude oil washing procedures in oil tankers of all flags.

The proposed Coast Guard rules would require segregated ballast for all tankers, new and existing, foreign and domestic, weighing over 20,000 DWT; double bottom construction for new vessels over 20,000 DWT; backup radar and collision avoidance systems; improved emergency steering standards; and inert gas systems for all new and existing tank vessels of more than 20,000 DWT (far exceeding the present requirement for vessels over 100,000 DWT).

According to a qualification approved by the board, any feasible technological improvements or alternatives which would result in equivalent pollution protection would be permitted in lieu of double bottoms. In addition, the Coast Guard's proposed rules designate that officer licenses should only be obtained on the basis of demonstrated proficiency, and that proficiency, as well as the physical and mental health of the officer, should be examined periodically. Also, standards for the training of all officers and seafarers should be developed internationally.

The American Petroleum Institute, among others, has demonstrated support for a worldwide safety and environmental protection system, based on and supporting an organization such as the IMCO.

Federal preemption of state oil spill liability fund legislation, to eliminate the proliferation of separate laws and funds, is supported by President Carter, the shipping industries, and some prominent environmental groups. Such legislation would impose strong liability provisions on all oil spillers.

Experimentation with the use of crude oil as a washing medium was recommended along with the introduction of the inert gas system. The oil washing method has proved to be safer and highly successful in the reduction of pollution with a great reduction also in the cost and time needed for washing.

Terminal landscaped by tenant

June 23, 1977:—Another step toward beautification of the Port of Los Angeles was completed recently when GATX (General American Transportation Corporation) landscaped the street frontage of its terminal at Berth 70-71 in the port.

Hollywood junipers, oleanders, day lilies, lilies of the night and other assorted flowers were planted, according to GATX terminal manager Robert W. Luhr.

The landscaping resulted from a request by port officials that each tenant improve the outside appearance of leased port property, according to Luhr. James Larson, of the Harbor Department's property management division, said the request is part of an unofficial port policy.

As each tenant's lease is renegotiated, Larson explained, it is suggested that the tenant landscape the property at his own expense. The plan was derived from a preliminary master plan for the harbor which requested a continued effort at beautification of harbor lands.

This policy is in addition to the extensive landscaping carried on by the Harbor Department's maintenance division.

The GATX project, which cost an estimated $15,000, was completed along with landscaping at Pennzoil, which occupies the adjoining berth. Mobil Oil Company on Terminal Island also recently finished a landscaping project, and one is scheduled to begin soon at the 22nd Street Landing in San Pedro.

FIATA 15th World Congress

July 6, 1977:—Well over half of the 1,000 to 1,200 delegates who will attend the 15th FIATA World Congress in Los Angeles this fall have sent their applications in time for early reservation savings, and still more are expected to make the deadline of mid-July.

Applications can still be received, of course, right up until September 25, 1977, when the 50-year-old International Federation of Forwarding Agents Associations will meet from 100 nations of the world at the Los Angeles Bonaventure Hotel.

Under the 1977 Congress theme, "The Forwarder, the Architect of Transport," the delegates will have the unique opportunity to discuss and compare the multitude of international laws and regulations they must understand as world-wide operators. Knowledge of the standardization of and compliance with various regulatory agencies will also be gained by the freight forwarders who attend the Congress.

According to Enrico Salvo, Congress Committee Chairman in Los Angeles, countries lagging in response thus far include Japan, Canada and Mexico. European counterparts of freight forwarders in the U.S.A. are leading their American colleagues in registration by a wide margin, Salvo reports.

"I hope this merely indicates a sometimes American characteristic of putting things off until the last moment, and that the American freight forwarders will make a good showing by getting their registrations in within the next week or two. This is only the second Congress ever held in

the United States and I am counting on American forwarders to show our U.S. hospitality by their strong turnout."

The Congress will occupy sleeping, dining and meeting rooms at the elegant Hotel Bonaventure, a cluster of five bronzed glass towers in the heart of downtown Los Angeles. The new hotel includes 1,474 rooms, 28 meeting rooms, and the California Ballroom, the largest hotel ballroom on the Pacific Coast, which seats over 3,000 guests.

A once-in-a-lifetime opportunity to see first-hand one of the major commercial hubs of the world will be provided Tuesday, September 27, when the Congress will feature a buffet and a boat tour of the ports of Los Angeles and Long Beach.

One of the entertainment highlights of the Los Angeles Congress meeting will be an afternoon at world famous Disneyland.

August 10, 1977:—Plans for the 15th World Congress of FIATA (International Federation of Freight Forwarders Associations) are in the final stages and the Committee is now anticipating an attendance which may exceed 1,200. Principal speakers and panelists for the plenary session have been identified including Ambassador Robert Strauss, Special Trade Representative for the President of the United States, who will address the opening session.

An exciting program of social events for both ladies and gentlemen, including tours of both Los Angeles and Long Beach Harbors, an early California fiesta, a special ladies tour of the elegant environs of Beverly Hills and surrounding areas, and the inevitable highlight of almost every tourists stop-over—a visit to Disneyland, are included.

The Congress starts Sept. 25 and will conclude on Thursday evening, Sept. 29 with a gala black tie dinner dance in the California Ballroom at the Bonaventure.

An opportunity for those who wish to advertise in the "Souvenir Journal" is available. The book which will be composed of more than 40 color photographs of scenic Southern California, each sponsored by an advertiser is expected to be taken home by registrants as a permanent reminder of the hospitality of the greater Los Angeles area. Those interested in advertising are invited to call the office of the FIATA Committee at 213-625-1977, or contact the office in Suite 550 of the World Trade Center at 350 South Figueroa Street, Los Angeles.

Enrico Salvo, President of Carmichael International and Chairman of the Los Angeles Committee for FIATA '77 reports that advance registrations for the Sept. 25-29 FIATA (International Federation of Freight Forwarders Associations) 15th World Congress now appear as if they will exceed all expectations. Advance registrations are now approximately 1,000 Salvo said, and it is very likely that the final two months preceeding the opening of the Congress will bring the final figure to more than 1,200.

Salvo pointed out that this is only the second time in the history of the FIATA World Congress that it has been held away from Europe. He noted that on one previous occasion, the Congress was held in New York City, and "it appears as if we will be honored with the presence of a considerably larger number".

The recognition of the Southern California area as one of the great financial and trade centers of the world in addition to the lure of our area's great climate, scenic and tourist attractions, along with an outstanding program which has been developed for the Congress, have all contributed to the enthusiam with which FIATA members are responding.

The Congress opening on September 25th will be held at the Los Angeles Bonaventure Hotel and information pertaining to it can be secured by contacting the office of the Committee in suite 550 at the World Trade Center, 350 South Figueroa Street, Los Angeles, or by phone 213-625-1977.

Los Angeles City Council President, John Ferraro has announced that Ambassador Robert Strauss, Special Trade Representative for President Carter is expected to deliver the keynote address during the opening ceremony of the 15th World Congress of FIATA at the Los Angeles Bonaventure Hotel. The International Federation of Freight Forwarders Associations (FIATA) will meet beginning on Sunday, September 25th with the official opening ceremony to be held on Monday, September 26th.

Ambassador Strauss is the chief negotiator for the President of the United States on international trade agreements, and has most recently worked out orderly marketing agreements with Taiwan, Korea, and Japan. His personal views as well as those of the Carter Administration are regarded as key elements in the future of international trade programs, not only for the United States, but for many countries around the world, and FIATA members are expected to study these views with great care.

FIATA is a world-wide association of freight forwarders which has customarily held its bi-annual congress in a major trade center in Europe. Nearly 1,000 registrations have already been received and a total attendance of 1,200 is anticipated Council President Ferraro is serving as honorary chairman for the Congress.

More information pertaining to the Los Angeles Committee for FIATA '77 can be secured by contacting suite 550 at the World Trade Center, 350 South Figueroa Street, Los Angeles, or by phone 213-625-1977.

I.A.A.S.P. Director

July 11, 1977:—Los Angeles Harbor Port Warden Ed Henry has been elected to the Board of Directors of the 160-member international Association of Airport and Seaport Police.

The first West Coast representative to be elected to the six-member Board, Henry is a 34-year veteran of the law enforcement field. When appointed Port Warden of the Los Angeles Harbor Department in April, 1976, he had been a commanding officer for the Los Angeles Police Department for seven years. During a year of this time Henry had been loaned by the LAPD to re-develop the police system of the Virgin Islands.

Contracts approved for dredging

July 20, 1977:—Contracts totaling nearly $7 million were approved today (Wed., 7/20) by the Los Angeles Board of Harbor Commissioners for dredging, landfill and wharf construction as part of a massive 135-acre Terminal Island container complex.

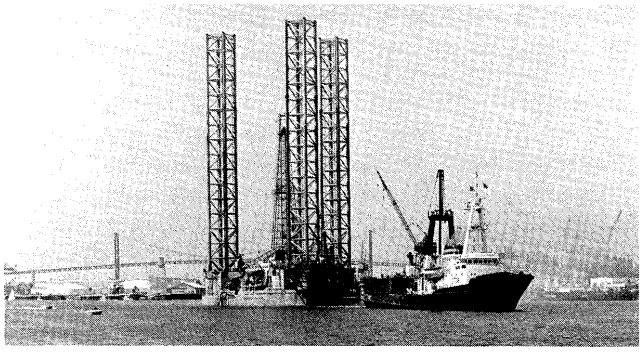
Guy F. Atkinson Co. was authorized to begin construction of a rock dike across the mouth of Slip 232. This will be followed by dredging of approximately 3,500 feet of the east half of the Main Channel, along Berth 228-235, to —45 feet. The dredged materials will be deposited into the Slip

behind the dike and a concrete wharf will be constructed from Berth 231 to Berth 233.

During the dredging operation, which is expected to produce 523,000 cubic yards of fill materials, the westerly half of the Main Channel will remain open to ship and boat traffic.

This initial project, which is expected to be completed by February, 1979, is estimated to cost $6,854,696. Approximately 28% of this amount will be funded by the Federal government under the Public Works Employment Act.

Los Angeles, Calif., 062777 (Port of Los Angeles):—Nate DiBiasi, second from left, President of the Los Angeles Board of Harbor Commissioners, presented a plaque commemorating the first arrival of the Evergreen Line ship Ever Master to Captain K.L. Youg when the ship made its first call at the Port of Los Angeles. Shown from the left are: Gary Syverson, Vice President of Evergreen United Corp.; Commissioner DiBiasi; Captain Yung and William Wang, President of Evergreen Marine Corp. The Ever Master is the eighth Evergreen Line ship to call at the Port.



Los Angeles, Calif., 062977 (Port of Los Angeles):—The world's largest tug, the S.A. John Ross, recently towed the Borgstern Dolphin, a Norwegian-registered oil rig, out of the Port of Los Angeles' shipyard Bethlehem Steel where it had been winterized and outfitted with a helipad. The 311-foot, 27,000 hp tug, skippered for the South Africa Marine Corporation by Capt. Heinrich G. Nagel, will require 45 days to two the oil rig to Sakhalin, a Russian island off the north coast of Japan. In keeping with stringent safety measures in Los Angeles Harbor, two Red Stack tugs and a Port Warden patrol craft escorted the tandem pair down the Main Channel.

Los Angeles, Calif., 071877 (Port of Los Angeles):—Nate DiBiasi, center, president of the Los Angeles Board of Harbor Commissioners, presented a plaque to Captain Lin Yueh Terng, master of the M/V Ever Valiant when the Evergreen Line ship made its first arrival to Los Angeles Harbor recently. From the left are: William Wang, president of Evergreen Marine Corp.; Nancy Lee, vice consul of the Consulate General of the Republic of China; Commissioner DiBiasi; Captain Lin and Captain Oded Rozen, president of Evergreen United Corp. On its maiden voyage, the Ever Valiant is the ninth Evergreen Line ship to enter the service of the Taiwan based firm in its visits to the Pacific West Coast. The Ever Valiant is 600 feet long, 80 feet wide and is rated at 19,000 DWT. It cruises at 23 knots and can carry 1,048 20-foot containers.

Los Angeles, Calif., 080177 (Port of Los Angeles):—Fred Crawford, second from left general manager of the Los Angeles Harbor Department, presented a plaque commemorating the first arrival of the M/S Sumbawa to Captain J.M. Rasmussen when the East Asiatic Company ship made its first call at the Port of Los Angeles. From the left are George Econn, vice president, Terminal Island operations for Overseas Shipping Co.; Fred Crawford; Captain Rasmussen and Chr. Blom, chairman of the board of Overseas Shipping Co. The M/S Sumbawa is a 22,946 d.w.t. dry cargo vessel of Danish registry. Overseas Shipping Co. serves as general agents for East Asiatic Co. on the Pacific West Coast.

IAGLP 17th Annual Meeting in Chicago

IAGLP = International Association of Great Lakes Ports Toronto, Ontario Canada

Toronto, Ontario, Canada, June 28, 1977:—Either the public will have to pay higher taxes or the government will have to increase its deficits if transportation expenditures are not controlled, Paul Normandeau, President of the St. Lawrence Seaway Authority told members of the International Association of Great Lakes Ports (IAGLP) recently.

He also stressed that the user of transportation services will have to assume a greater share of the cost of these services.

Speaking to the delegates attending the association's 17th annual meeting in Chicago (June 16 and 17, 1977), Mr. Normandeau pointed out that increasing taxes or deficits is simply not realistic at a time when most Canadian are expressing a general desire for fiscal restraint by all levels of government.

IAGLP members, representing 16 United States and five Canadian ports, were informed that the user-pay policy of the Canadian Government is the basis for its decision to revise the Seaway Authority's financial structure and is also directly responsible for the proposed toll increase on the Montreal-Lake Ontario and Welland Canal sections of the waterway.

"The government has little choice in the matter of revising the financial structure of the St. Lawrence Seaway Authority since the outlook for the future indicates progressively larger deficits and a mounting debt expected to reach $1 billion by 1981," he said.

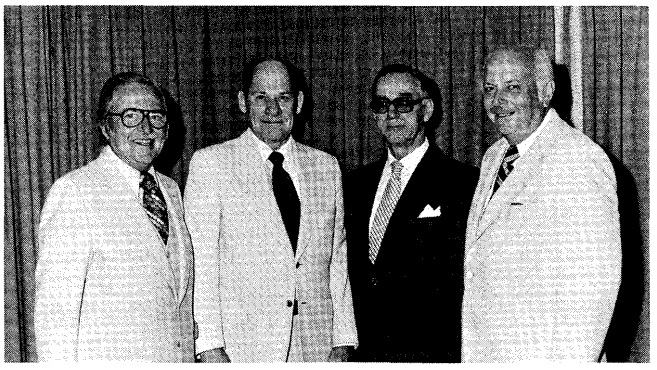
Mr. Normandeau explained that the Seaway Authority has failed to repay the $625 million borrowed for construction of the five Canadian locks on the Montreal-Lake Ontario section and the upgrading of the eight Welland Canal locks. He also reported a net operating loss of $7.75 million for the 1976 season.

The Canadian Government's plan to refinance the debt-ridden Seaway involves converting the loan to equity and forgiving more than $200 million in deferred interest. However, the plan is conditional, and by 1978 the Seaway Authority should become self-sustaining on all accounts and pay a one per cent return on the equity each year.

Mr. Normandeau told IAGLP members that Seaway tolls have remained unchanged since 1959, and to satisfy both the U.S. and the Canadian governments' original objective of a user-pay policy, a substantial increase—slightly more than double—will be required on the two sections of the waterway. The Canadian Government hopes to impose higher tolls by the 1978 navigation season.

Mr. Normandeau said, "Although many feel this increase is too substantial, doubling today's charges will not bring them back to the level that was acceptable when the Seaway opened in 1959."

At the IAGLP's annual meeting, however, members passed a resolution vigourously opposing tolls and agreed that the association should be directly involved in all future meetings on toll negotiations.



David W. Oberlin (second from left) Administrator of the St. Lawrence Seaway Development Corporation, and Paul Normandeau (third from left) President of the St. Lawrence Seaway Authority, addressed the annual meeting of the International Association of Great Lakes Ports in Chicago (June 16 and 17, 1977). With them in the photo are Walter Clemens (left) Lakehead Harbour Commission, Thunder Bay, Ontario, and Past President Sherwood Hamilton, Executive Director of the Port of Oswego Authority.

At the same meeting, Mr. Normandeau's U.S. counterpart David W. Oberlin, Administrator of the St. Lawrence Seaway Development Corporation, told the association that the Seaway Corporation, under its present legislation, will also need added toll revenues by the 1978 navigation season in order to meet operating expenses and to make payments of its debt.

Mr. Oberlin said the greatest concern to the Seaway Corporation about the proposed toll hike is the effect it might have in terms of diverting U.S. cargo away from Seaway ports. Many Canadian companies have no economic alternative to shipping via the Seaway while U.S. shippers have several alternatives. A significant reduction in U.S. traffic would very likely add to the expenses Canadian shippers would have to bear for the system's fixed costs.

Mr. Oberlin announced that two major recommendations, based on the analysis of a Seaway Corporation survey of shippers, carriers, ports and interested parties, are now under consideration. If a rise in tolls is necessary, the Advisory Board to the Corporation has suggested that a limited commodity tariff be established, with lower tolls on some additional categories of commodities that are most sensitive to toll hikes. A second recommendation suggests that any increases should be phased in over several years.

According to Mr. Oberlin, the Development Corporation is still carefully analyzing all facets of Canada's toll proposals.

"There is goodwill on both sides and I hope that a mutually satisfactory solution can be arrived at this year," he said.

Expressing the same concern, Mr. Normandeau said, "The Seaway Authority firmly believes that the proposed toll increase will not result in any reduction in the use of the waterway. If that were the case, the volume of traffic would have been affected already because of other escalating costs to users."

ANNOUNCING !!

Bohdan Nagorski's "Port Problems in Developing Countries" is also available from the following distribution centers.

New York :	Marine Terminals The Port Authority of New York and New Jersey One World Trade Center New York, N.Y. 10048, U.S.A. Phone: (212) 466-7000
Houston :	Office of the Executive Director Port of Houston P.O. Box 2562, Houston Texas 77001, U.S.A. Phone: (713) 225-0671
Oakland :	Office of the Executive Director Port of Oakland 66 Jack London Square, Oakland California 94607, U.S.A. Phone: (415) 444-3188
London :	Office of the General Manager The Port of London Authority World Trade Centre London, E. 1, England Phone: 01-476 6900
Le Havre :	Port Autonome du Havre B.P. 1413 76067 Le Havre Cedex France Phone: (35) 22.81.40 Poste 341

Orbiter Probe

ICHCA Obituary

London, August 11th, 1977 (Press Information, International Cargo Handling Co-ordination Association):—The Central Office of the International Cargo Handling Association (ICHCA) announces with deepest sorrow the death at age 66 on Wednesday, August 10th 1977 of Mr. Chris Baker, Assistant Secretary General of the Association after a long illness.

" Portos e Navios "

Rio de Janeiro, Brazil:—

APRIL 1977

Ports & Waterways

- President Geisel inaugurates the São Gonçalo dam in Lagoa Mirim, in the State of Rio Grande do Sul, designed to prevent the salinification of the Lake and also to serve irrigation projects in areas of Brazil and Uruguay, other than allow the navigation of vessels with up to 5 m draught.
- The Terminal of the Cooperativa Central Regional Iguaçu (Cotriguaçu), in Paranaguá, was inaugurated on March 6 by President Geisel, increasing the Port's loading capacity to 1.5 ton per hour.
- The works of construction of the Port of Sepetiba shall be slowed down in view of the delays in the national siderurgical program.
- The Companhia Docas do Estado da Bahia has been formed to administer the Ports of Salvador, Aratu and Ilhéus; the Presidency has been taken over by General Álvaro Cardoso.
- Tocantins-Araguaia: a first-class waterway.
- Administration of the Port of Maryland has new headquarters.
- The bridge over the Bertioga Canal, connecting the Barnabé Islands and Santo Amaro, is part of the railroad system which will link the left margin of the Port of Santos to the railroads Ferrovia Paulista S.A.—Fepasa and Estrada de Ferro Santos-Jundiaí—EFSJ.
- Mr. José Olympio de Abreu Lima, Director of Portobrás, announces that the Company is not going to install new grain stores this year, considering that the priority investments will be channelled to wheat and soja terminals in Rio Grande, for coal and ore in Sepetiba and for siderurgical products in Praia Mole, Espírito Santo.

MAY 1977

Port & Waterways

- Portobrás, according to its policy, is investing this year about 4 billion cruzeiros, mainly in port equipment and in specialized marine terminals.
- During the past year the ports of Santos, Rio de Janeiro and Vitória presented significant results in their cago handling.
- Minister Dirceu Nogueira, of the Transports, visited on May 2 the works of the Port of Sepetiba, together with Portobrás' President Arno Oscar Markus, with the President of Companhia Docas do Rio de Janeiro, Saulo Pires Vianna and the President of Ecex, Fernando do Vale.

Oshawa Port traffic hit record in 1976

Oshawa, Ontario, Canada (By Wilfred A. Gillberry, Port Manager):—With the exception of gasoline, which showed a reduction in gallonage due to chronic berth congestion, bulk commodities handled at Oshawa in 1976 showed an average increase of 12.8 percent over the 1975 season, which in itself was a record year.

In addition, a substantial quantity of general cargo was handled for the first time, together with import and export movements of structural steel from South Africa and reinforcing bars shipped to Newfoundland and the United Kingdom.

An interesting first for Oshawa was the movement of 150 pieces of 10-foot, six-inch diameter concrete sewer pipe made by Lake Ontario Concrete Pipe Company of Whitby.

These pieces weighed approximately 16 tons each and the transportation of these sections of pipe to Thunder Bay via the Great Lakes system resulted in very considerable savings over what it would have cost to transport this shipment by road, the conventional mode of travel for such products.

When you consider that the shipment of pipes of this size is, to all intents and purposes, shipping a load of holes, it can be readily appreciated that shipping costs using water transportation in comparison to road or rail must be very competitive indeed.

Accordingly, a high value commodity occupying a much smaller cubic area than the space encircled by the wall of a concrete pipe would incur a very competitive rate of freight.

For the coming year, it is expected that shipments of steel will continue to utilize the Port of Oshawa, both imports and exports. Concrete pipe will also be moved via the Great Lakes system to destinations within this geographic watershed.

It is interesting to note that within about a 600-mile radius of the Golden Horseshoe resides 75 per cent of the population of North America which in itself must constitute one of the larger consumer markets in the world.

One of the drawbacks of Oshawa's location as a port, along with other harbors in the Great Lakes is the limited season of approximately 8½ months. However, despite the extremely severe winter we are currently experiencing, it is

felt that a 10-month season of open navigation is attainable and to this end certainly those concerned with navigation on the Seaway in the United States are working towards this goal.

In respect of a roll-on, roll-off vehicular ferry service across Lake Ontario, the Harbor Commission is still actively pursuing this concept and as fuel prices soar, the economic viability of such a service will soon be realized.

Executive Committee Formed

Saint John, New Brunswick, Canada (May-June 1977, "Saint John Port News" published jointly by The Saint John Port Development Commission and The National Harbours Board Saint John Office):—Under a new agreement, the National Harbours Board has delegated a "substantial degree" of executive power to a new five-member executive committee of the Port of Saint John.

Jack Vreeswijk, vice-chairman of the board, said after a day-long meeting with local port officials that the five members of the Saint John Port Authority have been appointed to comprise the new executive committee.

F.G. Elkin, chairman of the Port Authority, becomes chairman of the new committee. Members are Philip W. Oland, A. David Case, Cecil E. Brownell, and T.C. Frink.

Mr. Vreeswijk said the executive committee will "provide the vehicle to make the decisions at the local level in regard to the Port of Saint John."

The committee will have decision-making power which the port authority does not have. The port authority is appointed by the transport minister and is to continue its purely advisory role.

Executive committee members, on the other hand "become officials of the National Harbours Board," explained Mr. Vreeswijk.

Meeting Stevedore Managers

Saint John, New Brunswick, Canada (May-June 1977, "Saint John Port News"):—One of a continuing series of meetings between National Harbours Board staff, the Port Executive Committee, and people involved in the day to day operation of the port was held in June.

The Riverside Country Club overlooking the beautiful Kennebecasis River was the location of the meeting with people involved in the stevedoring business in the port.

The port General Manager, G.C. Mouland presided and a frank and valuable discussion took place concerning the present and future operations of the port.

Those attending included Joseph Streeter, Chairman of the Port Development Commission; F.G. Elkin, Chairman of the Port Executive Committee, and committee members A.D. Case and C.E. Brownell.

The committee would also be "very much involved" in the selection process for a new port manager should that ever be necessary, Dr. Stephen Weyman, NHB Atlantic Representative said.

There would be executive power for the new committee over works projects up to a maximum worth of $50,000. This compares to the previous maximum of $1,500 which the port can approve without NHB approval.

The $50,000 figure, according to Dr. Weyman is the maximum which the NHB can carry out itself without going to the cabinet for approval.

PARTICIPANTS AT PORT OF NEW YORK-NEW JERSEY WORLD TRADE CONFERENCE: William F. Gibson, Manager of the Port of New York-New Jersey Trade Development Office in Tokyo, and Tetsuya Fukagawa, Resident Managing Director of The Bank of Tokyo Ltd. in New York discuss manufacturing sites at Elizabeth-Port Authority Marine Terminal as illustrated by model on exhibit at New Jersey Trade meeting.

The committee would also have the power to enter into leases for various items up to a maximum of five years.

Mr. Vreeswijk declined to give specific financial figures for leases and other new powers such as port marketing, public relations, advertising and travel.

According to Mr. Vreeswijk, the powers being given to the Port of Saint John are comparable to those given similar agreements with other NHB ports.

How would the present authority being given the executive committee differ from the port commission recommended in a new ports policy announced in Charlottetown last fall by Transport Minister Lang?

Under the new policy—not expected to become law until at least the fall—port commissions are to become "self-sustaining business enterprises with operating and maintenance costs, financed from port revenues."

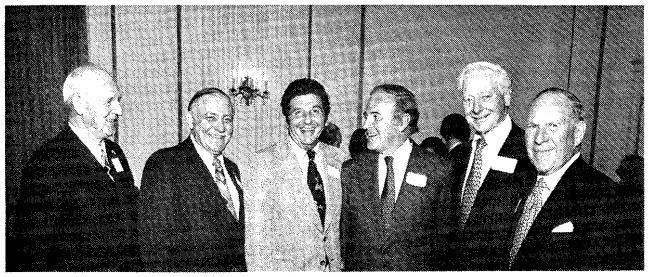
Mr. Vreeswijk said he was not in a position as an NHB member to say whether the policy document will become law, but he indicated that the port commission concept would give a greater degree of autonomy than now being offered under the new executive committee.

Tonnage bettered in 1977

Houston, Texas, July 27, 1977 (Port of Houston News Release):—Total cargo tonnage moved through the Port of Houston in the first six months of 1977 was 12% better than the total tonnage for the same period of 1976, as shown by statistics just released by the Port of Houston Authority.

The through-June total for 1977 came to 50,364,111 tons, compared to 44,982,075 tons for the first half of 1976.

Goods moving in foreign trade showed a 19% increase in tonnage with 24,112,407 tons handled at the Port in the first six months of 1977 as against 20,194,127 tons for the same period in 1976.



New York, N.Y., June 27, 1977 (The Maritime Association of the Port of New York):—Among guests at the cocktail reception preceeding the annual Congressional Breakfast held recently, which is sponsored by three major NY-NJ port groups, were the above (1 to r) Admiral John M. Will, USN (Ret.) an honorary director of our Association, Congressman Joseph P. Addabbo (N.Y. 7th Dist.), Congressman Leo C. Zeferetti (N.Y. 15th Dist.), Congressman John M. Murphy (N.Y. 17th Dist.), Francis J. Barry, president, Circle Line-Statue of Liberty Ferry and James P. McAllister, chairman of the board, McAllister Brothers, Inc., and president of the NY-NJ Port Promotion Association, one of the sponsors of the event. At the breakfast the following morning shipping and other business and civic officials from here met with members of Congress from the New York-New Jersey port region, and members of federal committees and commissions whose work is concerned with national maritime affairs, to urge their legislative support for local harbor improvements and the development of shipping and commerce in the bi-state area. The Breakfast is sponsored jointly each year by the New York-New Jersey Port Promotion Association. The Port Authority of New York and New Jersey and the New York City Council on Port Development and Promotion.

A 47% jump in foreign bulk imports accounted for most of the increase in both total and foreign trade tonnage. The 14,190,751 tons bulk import figure includes 12.2 million tons of imported crude petroleum.

For the same period last year, the bulk import figure was 9,665,490 tons including 8 million tons of imported crude petroleum.

General cargo moved through the Port during the period was down 3% at 3,285,496 tons compared to 3,373,110 tons for the first half of 1976.

Container movements were up 11% for the first half of the year with 94,503 containers shipped and received compared to 85,146 units for 1976. Automobile imports remained steady with 92,905 cars brought in over the wharves through June of 1977 as against 93,492 cars for the same period of 1976.

Associate General Manager

Houston, Texas, 8/4/77 (Port of Houston News Release):—George W. Altvater, Executive Director of the Port of Houston Authority, is pleased to announce that C.E. Bullock, presently General Manager-Operations for the Authority, has agreed to postpone his previously announced retirement.

Effective Setp. 1, Bullock will become Associate General Manager of the Authority responsible for activities in the Operations Department.

Also on that date, R.P. Leach, currently General Manager-Administration, will become General Manager of the Authority, as noted in a prior release.

George W. Altvater will remain as Executive Director of the Port of Houston Authority.

New York, N.Y., July 29, 1977 (The Maritime Association of the Port of New York):—PLANNING THREE-DAY WEATHER CONFERENCE AND EXHIBIT. Members of the committee planning the three-day conference and exhibit MARINE WEATHER AND OCEAN SYSTEMS—TODAY AND TOMORROW—which will be held at the Downtown Athletic Club, New York City, September 14, 15 and 16, gather around a world globe, symbolizing the international aspects of the atmosphere and oceans of the world, following one of their meetings in New York City recently.

Sponsored by the Maritime Association of the Port of New York, the first comprehensive three-day conference and exhibit to be held in downtown Manhattan will feature panels of individuals from industry and government agencies expert on weather systems and equipment.

The panels will conduct seminars on such subjects as SHIP ROUTING, CURRENTS, WEATHER EQUIPMENT, HARBOR AND COASTAL WEATHER, ICE, FACSIMILE, HEAVY WEATHER and FUTURE PLANS.

Exhibits will be on display by internationally renown manufacturers of weather equipment and systems utilized by shipping companies for efficiency of vessel operations and safety of lives and cargo at sea.

Seen above are: (1 to r) Robert Ragusso, Bendix Marine Science Services, Lawrence W. Moore, Sea-Land Services (conference chairman), Armand Bouchard, Alden Electronic & Impulse Recording Co., Inc., Winfield Sylvester, Professor, Rutgers University, Dr. Kirill Chekotillo, Acting Chief Section for Sea and Ocean Affairs, United Nations, and Raymond Yturraspe, Griffith Marine Navigation, Inc. (exhibit chairman).

Principal speakers and guests of honor at luncheons during the three-day conference and exhibit will be universally recognized authorities on present and developing weather systems.

The cost of a reservation and ticket for the three-day event is $100 a person. The price includes morning and afternoon conference sessions, hosted cocktail receptions, coffee and

danish breaks, two luncheons and a printed copy of all speeches and panel discussions, which will be recorded live and transcribed.

A ticket is interchangeable among members of a company's staff, so that an individual can attend only those panels and principal addresses in which his professional interests lies. For reservations and tickets write to the Maritime Association of the Port of New York, 80 Broad Street, New York, N.Y. 10004 or call (212) 425-5704.

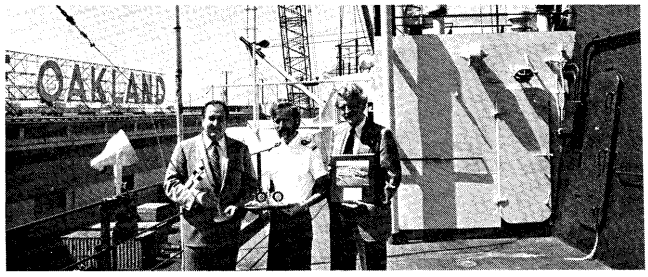
Oakland, Calif., July 27, 1977 (Port of Oakland):– CLEARING FOR ACTION–As a giant Sea-Land SL-7 containership loads Far East cargo in the background, demolition progresses to clear the way for the Port of Oakland's newest marine terminal. Designated Outer Harbor Berth Seven, the 13½-acre container facility will be served by the 30-ton Sea-Land Paceco A-frame gantry container crane at far left–one of four available. Because the 940-foot Berth Seven wharf is almost perpendicular to the Sea-Land wharf, the crane is undergoing modification to turn along a curved track connecting with the new terminal. Scheduled to receive its first vessel by midsummer 1978, the $5.1 million Port of Oakland Outer Harbor Berth Seven facility will accommodate containerships of various lines whose steadily expanding commerce has made Oakland the leading containerport on the U.S. West Coast.

New brochure on container terminals

New York, N.Y., August 16, 1977 (News from The Port Authority of New York & New Jersey):–The Port Authority of New York and New Jersey has published a new brochure containing detailed descriptions of all containership terminals in America's Container Capital. Virtually all of these facilities for intermodal freight handling have been built during the last 15 years to give the bi-state port an entirely new physical plant and enable it to be the world's foremost handler of containerized freight. The port is currently handling foreign and domestic waterborne container freight at a rate in excess of 12,000,000 long tons annually.

Designed primarily for exporters, importers, freight forwarders, and others concerned with the movement of international trade, the 16-page brochure provides, for the first time in a single publication, individual full-color photos of the twelve containership terminals in the port, a tabulation of the specialized handling equipment and facilities, as well as the name, address and phone number of each terminal operator. Maps locate railroad container yards and show the location within the port of all containership terminals and their proximity to major highways as well as railways.

Copies of "Port of New York-New Jersey Containership Facilities" are available free when requested on company letterheads from the Port Promotion Division, One World Trade Center, Room 62W, New York, New York 10048.



Oakland, Calif., July 28, 1977 (Port of Oakland):– FINNISH FIRST–M.V. Solano, of Hanseatic Vaasa Line, paid her first call at the Port of Oakland recently, on the line's direct monthly container and general cargo service to France, Belgium, Holland, Germany and Finland from the American West Coast. Captain Matti Ahlstrom, center, accepted mementoes of the new port of call from Marvin Garrett, left, and Bob Middleton, right, Port of Oakland representatives. Captain Ahlstrom, 31, is the youngest ship's master in the Hanseatic Vaasa fleet, and perhaps the most junior–albeit with 16 years of seagoing experience–in the entire Finnish merchant marine.

Portland News

Portland, Oregon (June 1977 issue of "Portside"):–

• Dry Dock Bonds Earn Best Rate

Port of Portland general obligation bonds totaling $84 million were sold in May to Salomon Brothers and Associates at an interest rate of 5.538886 per cent.

The bond revenues will finance the entire expansion project at the Swan Island Ship Repair Yard, including construction of the West Coast's largest floating dry dock.

Prior to the sale, Moody's Investors Service Inc. rated the bonds Aaa, the highest rating given by the firm. The bonds were rated AA by Standard and Poor's Corp.

"The ratings indicate a great deal of confidence in the Port and the community supporting it from the leading investment agencies," Gabriel Vallicelli, Port director of finance and administration, said.

Vallicelli anticipated a "good climate for the sale of the bonds" and, in fact, the Salomon Brothers was significantly lower than the 5.75 percent interest rate predicted by Port staff.

Vallicelli said the result of the favorable bid was a savings of more than $4 million over the life of the bonds.

Oakland, Calif., August 10, 1977 (Port of Oakland):—MILLION-DOLLAR OPENING—With a snip of the shears, Port of Oakland and American President Lines officials this week opened the doors on a new 36,000-square-foot, 35-bay container freight station for the loading, unloading and consolidation of cargoes at APL's Port of Oakland Middle Harbor Terminal.
Walter A. Abernathy, left, Executive Director of the Port of Oakland, said the new facility is part of a $1.5 million Port improvement program for the terminal, which also includes a two-story warehouse/storage building.
Special features of the new CFS include a direct transfer ramp for refrigerated cargo and 10 power outlets for reefer containers, a 15-foot wide loading platform with automatic door-levelers, and equipment for the handling of heavy-lift cargoes such as outsize machinery and tractors.
Gordon Bart, center, APL senior vice president, noted that the centralized on-dock facility will increase the efficiency of the line's cargo consolidation and container freight operations at the Port of Oakland, where 11 containerships sail six times monthly to and from the Far East, Southeast Asia, South Asia and the Arabian Gulf.
"Oakland is known throughout the shipping industry for the quality of our marine terminals," commented H. Boyd Gainor, right, of the Oakland Board of Port Commissioners. "This new Middle Harbor CFS is an example of our constant commitment to upgrading facilities to meet the needs of lines serving Oakland."

Closing date for the sale is June 14, after which the Port will advertise for bids on construction of the major shipyard improvements, including the dry dock.

• Port Seeks Trade Zone

Establishment of a Foreign Trade Zone in Portland Harbor is being sought by the Port of Portland.

Preparation of the zone application is underway involving extensive market research and follow-up user solicitation, reports William E. Plymale, the Port's director of marine development.

Initial market surveys revealed significant need for such a facility in Portland, Plymale said.

Applications must be made to the Foreign-Trade Zones Board, Washington, D.C., and a public hearing conducted.

In general, importers using a Foreign-Trade Zone benefit from lower customs duties or deferred payment of duties, depending upon distribution and operating methods. The zone does not eliminate imposition of duties but benefits importers and encourages development of overseas markets.

San Francisco, Calif., 6/29/77 (Marine Exchange of the San Francisco Bay Region):—Multiple honors were bestowed on Ben E. Nutter, retiring Executive Director of the Port of Oakland, during recent Propeller Club, Port of the Golden Gate, luncheon. Making presentations were (1 to r) John Pullen, Maritime Administration representative, who gave Mr. Nutter certificate designating him a member Emeritus of the National Defense Executive Reserve; Robert Langner, Executive Director of the California Marine Affairs and Navigation Conference, who presented certificate on behalf of the Conference; and John Doherty, Propeller Club president, who presented certificate on behalf of the Port of the Golden Gate chapter.

• Port Says Thanks

Shipper appreciation dinners were hosted last month in Spokane, Washington, and Boise, Twin Falls and Idaho Falls, Idaho, by a Port of Portland delegation whose primary mission was to say thank you.

The dinners also provided Port of Portland staff, Portland custom house brokers, freight forwarders and steamship company representatives an opportunity to explain Portland Harbor services and shipper advantages.

The thank yous were occasioned because during the past nine months the Port of Portland has experienced a 27 per cent increase across its docks in commodities other than grain. Portland has long been the leading grain export port in the Pacific Northwest, thus non-grain tonnage is considered an important measure of the Port's growing, diversified commodity mix. All general commodity cargoes are handled across Port of Portland docks.

Portland is the third largest seaport on the U.S. West Coast in total foreign ocean commerce and leads all ports in total exports.

Accounting system purchase approved

Seattle, Washington (June 1977, Port of Seattle Reporter):—The Port Commission has authorized the senior director of Finance and Administration to purchase an

San Francisco, Calif., 6/8/77 (Maritime Writers Association):–SALT SPRAY QUILLS–Maritime writers of the Golden Gate recently elected new officers at a gala aboard the SS MONTEREY, Pacific Far East Line cruise ship at the Port of San Francisco. The association also honored one of its founders–retiring San Francisco Examiner newsman Henry ("Hank") Kusserow (2nd from left). Participants included 1976-77 president, Shirley Tate (left) and past president Bob Langner (right), San Francisco Marine Exchange executive director. Elected for 1976-77 terms were William Wion, publisher of May Day magazine, as president, Helen Reilly, schedule editor of the Pacific Shipper, vice president, and Barney Evans, Crowley Maritime Corp, public relations director, reelected secretary-treasurer.

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accounts payable system that will help to increase the effectiveness of budget management and control.

A system designed by the Mc-Cormack & Dodge Company has been selected for Port use. It will be converted from its standard IBM computer format to fit the Port's Burroughs equipment, so that it will interface with the other systems already in use.

The accounts payable system consists of procedures, computer programs, input forms and reports designed to facilitate the processing of purchase orders and invoice payments. The proposed design will be a support system for the new general ledger/budget system.

It should also increase control and editing to better detect duplicate or over payments, and make possible a more accurate projection of cash requirements for meeting obligations. And according to James L. Hogan, senior director of Finance and Administration, it will enable the Accounting Department to pay invoices at the optimum time, in order to receive discounts.

The new system should be complete by early 1978. The projected cost of the program is $150,889. Of that sum, $78,920 will be spent on the license from the McCormack & Dodge Company and on contract programming. The remainder of the expenditure will be for in-house design and programming of the system.

Container terminal work project ok'd

Seattle, Washington (June 1977, Port of Seattle Reporter):–Port Commissioners have granted authorization for preparation of plans and specifications and advertisement for bids for two phases of development between Piers 37 and 42.

The container facility to be built between the piers will be the future Terminal 37.

Although the chief engineer had asked to proceed with only Phase I of the project, Commissioners also voted to authorize the second phase because of escalating costs and

San Francisco, Calif., 6/9/77 (Marine Exchange of the San Francisco Bay Region):–THE ICEBREAKER COMETH–Timing her arrival ironically with the onset of a heat wave, the Coast Guard's 269-foot BURTON ISLAND was greeted at her new home port at the Oakland Naval Supply Center. First icebreaker to be stationed on San Francisco Bay, her entrance produced a welcoming committee including VADM. Austin C. Wagner, Pacific Area and 12th District Coast Guard Commander (center), and Robert Langner, Marine Exchange executive director–the latter presenting the polar vessel with a commemorative engraved tray. Accepting was the commanding officer, CMDR. R. Farmer, on behalf of the 195-man crew. Formerly based at Long Beach, the BURTON ISLAND's stay in the Golden Gate may be brief . . . another Antartic tour, then probable decommissioning. But a new adventure is also likely–being locked into Artic ice to drift 5,000 miles across the top of the world over a three-year period, a feat only once before accomplished, in 1878-79 by Nordenskiold's VEGA–also a scientific expedition. The twentieth century version would be manned by the Coast Guard under National Academy of Science auspices.

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urgent need for space.

Phase I work includes dredging, fill, grading, paving, utilities and construction of an apron from Piers 39 to 42 at an estimated cost of $9,383 million.

Phase II work includes some demolition and filling of the area between Piers 37 and 39, surfacing, drainage and lighting at an approximate cost of $8,709 million. Tentative completion date of both phases will be January 1979.

In the future, a third stage will extend the apron to Terminal 46. Work on that phase awaits completion of an environmental impact statement and approval by the Port's Capital Investment and Utilization Committee.

Foreign Trade Zone

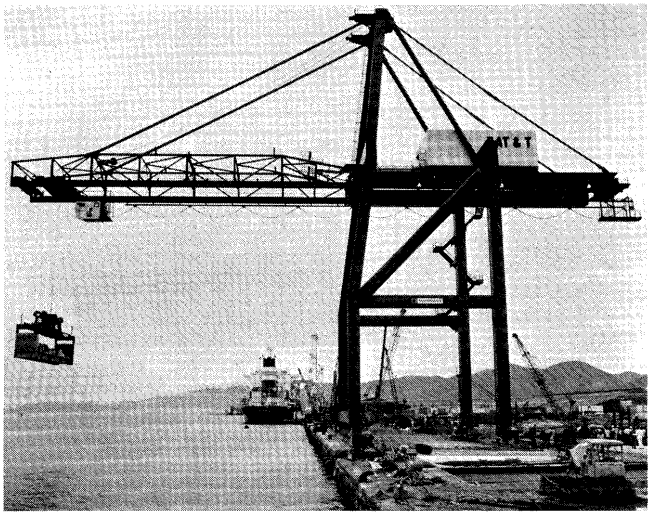
Holloywood-Fort Lauderdale, Florida, July 25, 1977 (Port Everglades News Release):–Florida's first Foreign Trade Zone became operational July 19 with approval of Port Everglades Authority's temporary site by the U.S. Department of Commerce.

According to Commissioner Fred J. Stevens, who spearheaded a Commission effort last year to obtain a trade zone when he served as Port Chairman, this action means that the temporary zone, located in a 47,000-sq. ft. building in Dania a mile south of the seaport, is open and that tenants

can begin moving in.

The temporary arrangement was made to permit zone users to begin business while the permanent trade zone is being constructed on a 30-acre Port-owned site in the south area of the harbor. Construction of a 110,000 sq. ft. main building and two other structures has been underway for more than a month, following a Commission award of a $2.2 million contract to the Tom Murphy Construction Co., Stevens declared.

The construction contract is part of an overall $2.6 million public works grant authorized last December by the Economic Development Administration (EDA).



Alameda, California, August 12, 1977 (PACECO News):—FIRST CONTAINER CRANE FOR TRINIDAD DEDICATED. The Port of Spain, Trinidad, recently held key handing over ceremonies for its newly installed container handling crane.

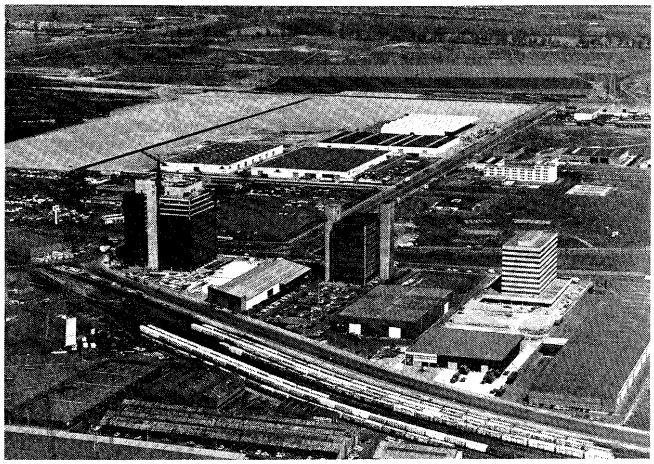
The new Portainer crane built by Paceco, Inc., A Subsidiary of Fruehauf Corporation, is the first of two 40 Long Ton capacity cranes to be erected at the Port. A second Paceco Portainer crane is awaiting shipment for later installation. The new Portainers are reported to be the fastest container cranes in the Caribbean. Both cranes were built by Paceco's Gulfport Plant.

The Minister of Works, Trinidad and Tobago, Mr. Hector McClean, accepted operating keys from Paceco's General Sales Manager, Meryl W. Stratton. Port officials and Consulting Engineers also attended the ceremonies.

San Francisco, Calif. 7/7/77 (San Francisco Customs Brokers and Freight Forwarders Association):—"A Policemans's Life is Not a Happy One"—sometimes, that is—according to James Hubert of the U.S. Customs Service's Office of Investigation. Hubert (2nd from left) was recent guest speaker at a San Francisco Customs Brokers and Freight Forwarders Association gathering, where he was introduced by president William Bosque (left). "Thirty-three ways to go wrong, or how to stay out of trouble with U.S. Customs" was the title of his remarks, listened to with interest by Customs District Director George Brokaw and Association vice president Ted L. Rausch. With assignments including narcotics interdiction and overseas training programs, the enforcement specialist cited the variety of responsibilities involving the investigation task force, including INTERPOL, fraud, pilferage, organized crime, neutrality laws, currency control, navigation—and not the least, smuggling!

San Francisco, Calif., 7/18/77 (Marine Exchange of the San Francisco Bay Region):—Danish modern interior design provided a stylish setting for the welcoming presentations to Capt. J.M. Rasmussen, master of the new East Asiatic cargo vessel M.S. SUMBAWA, first of at least four new liner replacement vessels expected to call at the Port of San Francisco. Maiden voyage mementoes were presented by Paul O'Leary, Marine Exchange director and vice president of Connell Bros. Co., Ltd., and Tom Soules, San Francisco port director. Also present for the celebration were (standing from left) Chris Blom, board chairman, Overseas Shipping Co., agents for the line, Karl Larsen, East Asiatic Co. (Canada) Ltd. Pacific manager, and Jorgen Fredriksen, East Asiatic Co. vice president.

Antwerp, Belgium:—Containerterminal of the Belgian Railways



Antwerp, Belgium:—New physical distribution centres, set up in the vicinity of Churchill dock.

800-ton floating derrick

Antwerp, 15/6/1977 (Press release from Port of Antwerp Promotion Association):—The city council of Antwerp approved the proposal to entrust a specialised and independent study-office with the elaboration of a project concerning a new floating derrick having a 800 tons lifting capacity.

The study will be made on the basis of the characteristics of a design, worked out by the Technical Services of the port, under the direction of Mr. Thues C.E., Chief Engineer-Director.

This design refers to an engine having a lifting capacity of 800 tons by a maximum outboard of 8 m and a hoisting height of 38 m.

For loads of 500 tons the outboard reach becomes 17 m (with a hoisting height of 33 m).

The new derrick will considerably extend the possibilities of Antwerp for the handling of heavy loads, the number of which is constantly growing.

Cargo receiving in Antwerp

Antwerp, 13/6/1977 (Press release from Port of Antwerp Promotion Association):—Under the "Antwerp landing clause" the master or agent of the ship is authorized to discharge the goods on quay directly into lighter, railway waggon or motorlorry, where the delivery is done under the control of the ship's agent, but at the expense and risks of the goods.

The "regulations dealing with reception charges" contain the tariffs for these operations and settle the terms of application thereof. They are promulgated by the Antwerp Shipping Federation in concert with the Federation of Antwerp Master Stevedores', Wharfingers' and Similar Associations (FASNAG).

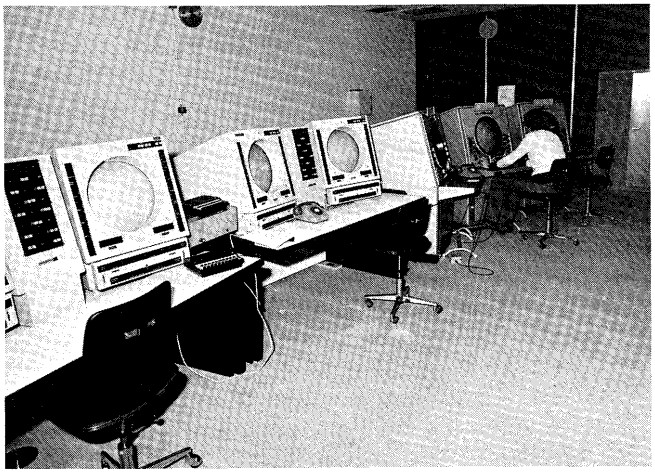
As a result of the recent modifications to the private cargo handling tariffs in the port new net tariffs for the reception charges have been elaborated, which are in force as from 15th June, 1977. On request of FASNAG and the Antwerp Shipping Federation the Port of Antwerp Promotion Association (Brouwersvliet 33, bus 5, B-2000 Antwerp) published those new tariffs in a brochure which figures as an appendix to the "Quadrilingual Vade-Mecum of the Port of Antwerp". However, this brochure can also be obtained separately from said Association at the price of 195 BF/copy (including modifications till 30th April, 1978).

Antwerp, Belgium:—Radarization of the Scheldt-river. New unmanned radarpost recently brought into service.

Traffic increase by 17.6%

Antwerp (Press release from Port of Antwerp Promotion Association):—From figures communicated by the Study-centre for the Expansion of Antwerp it appears that the overall maritime cargo traffic during the first quarter of 1977 increased by 17.6% as compared to the corresponding period of 1976.

When considering the incoming and the outgoing traffic separately then the rates of increase are 7.4 and 33.3%

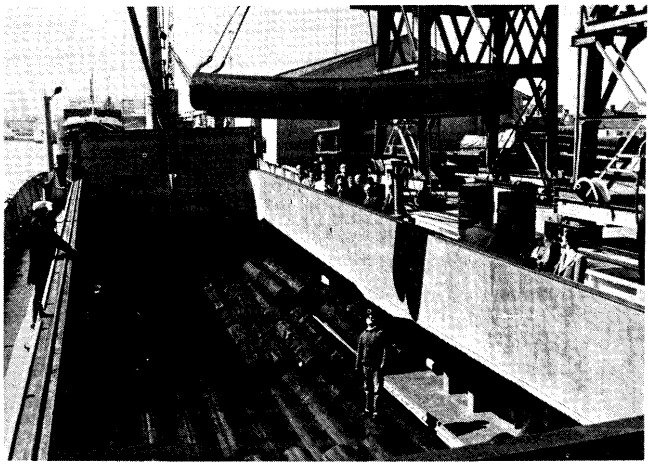


Antwerp, Belgium:—Radarization of the Scheldt-river. Control-room in operation at port entrance.

respectively.

The relatively faster increase of the outgoing against the incoming traffic also appears from the figures of the oil traffic. Here the outgoing traffic increase amounts to 173.9% against 16.6% for the incoming traffic, thus resulting in an increase of the overall oil traffic of 67.4%.

Rubber Dock Fenders



Akron, Ohio, U.S.A. (Goodyear International Corporation News Bureau):—RECORD EXPORTS—500 tons of rubber dock fenders are carefully loaded at the Belfast docks. The largest single order ever to leave the Goodyear Northern Ireland industrial rubber products plant is bound for the Port of Jubail in the Middle East. The fenders are designed to protect shipping when entering and leaving harbours.

Major blaze averted

Bristol, July 6, 1977 ("Portfolio" A Newspaper for the Port of Bristol):—The prompt action of local firemen prevented a major shipping disaster at Avonmouth last month when fire broke out aboard the m.v. City of Worcester, berthed at 'W' Shed, Royal Edward Dock, Avonmouth.

When the fire was discovered at 4.15 p.m. on Monday 27th June, the local brigade was quickly on the scene. The blaze was confined in one of the ship's four holds amongst a cargo of rubber gym shoes and cotton goods, and with back-up crews quickly arriving from other City stations, there were soon ten appliances and some 40 or 50 men at the scene.

The decision was then taken to flood the hold and thousands of tons of water, eventually at the rate of 12 tons a minute, poured into the hold. Firemen had to move swiftly to cool red-hot metal bulk-heads which were dangerously near a lubricating oil tank. At the same time the stability of the ship had also to be closely watched.

Although the fire was under control by late evening, smoke still persisted throughout the night and a special chaincutting appliance was brought from Bristol to enable hatch boards to be cut so that firemen could reach the offending bales of cotton piece goods.

Port of Bristol Authority Safety Officer, Mr. Frank Elson, praised the prompt action of both the Fire Brigade and the ship's master in getting the fire so quickly under control.

"The quick decision of Captain Perry in allowing the hold to be flooded was a major factor in the success of this operation", he said, "and that together with the highly efficient manner in which the Fire Brigade went about their task enabled the whole operation to be brought swiftly to a successful conclusion".

What they say. . .what they write

Dunkirk ("Nord économique", The Port of Dunkirk, supplément trimestriel au No. 12 du 25 mars 1977):—In 1977, what does ⟪The Port of Dunkirk⟫ mean?

Let us quote Mister Segard, Secretary of State: ⟪Dunkirk, as well as Marseilles and Le Havre, is one of the three main industrial port schemes the French Goverment took at heart to develop. This policy consisted in giving France one international port per maritime front and per economic region. Therefore Dunkirk is the port on the North Sea at the outlet of the Nord-Pas-de-Calais region.⟫

Let us also quote Pierre Garcette, a journalist: ⟪At Dunkirk, or rather between Gravelines and Dunkirk, there started an industrial adventure and neither the people from Lille, nor the people from the North of France, nor even the French themselves usually realise how important it is and what the consequence of it will be. For one must go on the spot to actually realise. What takes place in Dunkirk as a whole amazes, and sometimes makes one wonder. The modern and extended port facilities acted as an incentive on industrialists, then the industrial requirements meant more port facilities and the result of all this is very impressive indeed.⟫

Even the ⟪Gault et Millau⟫ famous restaurants handbook exclaims: ⟪What's new in Dunkirk, this big city whose development has been quite fantastic for some time . . . ? ⟫

Where are we then, what are the results of the traffic for the past year? Can we feel safe and be proud of these opinions or, on the contrary, do we have to feel like the French newspaper ⟪Le Monde⟫ who said that 1976 had been ⟪disappointing⟫ both for Dunkirk and for France, i-e. the result of a ⟪slowing down production, of a relapse or of a pause after the sprint, of a dull autumn following a promising spring? ⟫

(Continued on next page bottom)

N.P.C. Bulletin

Improving Throughput at Container Terminals

London, 12th April 1977 (National Ports Council News Release):—The extent to which the throughput of container terminals is limited by the length of time for which some containers are left on the terminal awaiting collection is the subject of a paper published in the latest issue of the **National Ports Council Bulletin***. The problem was identified in the analysis of container berth systems recently carried out for the Council, a report of which is to be published later this year.

One of the authors of the paper, Mr. H.K. Dally, one of the Council's Assistant Directors, Technical Services, said today that the length of time containers remain on the terminal—the "dwell time"—was a problem which concerned all terminal operators, whether at ports or inland depots, but this was the first occasion on which a method of calculating terminal throughput in relation to dwell time had been published.

"We hope that those concerned in such operations will react to our paper with comments and ideas which could be taken account of in any future work which may be initiated into the problem", he said.

The joint authors of the paper are Mr. Dally, Mr. J.K. Marshall (General Manager, Research and Development Division, Overseas Containers Ltd), Mr. T.E. Shrimpton (Chief Operational Research Officer, NPC), and Mr. F.J. Maguire (Manager, Operational Research Unit, OCL).

The paper points out that the Council's systems study had identified several areas where further research would be worthwhile, in particular the problem of containers remaining on the terminals for long periods of time. Dwell time directly affects the throughput capacity for a given size of container berth: the longer the dwell time, the lower the capacity. To increase capacity there must be more ground slots, higher stacking, reduced dwell time, or some combination of these.

"From the ports point of view, reducing dwell time appears to be the most rewarding approach", the authors point out, "since increased capacity can be provided without the need for additional physical resources".

The paper discusses various factors which appear to effect dwell time at port container terminals for both import and export containers, including frequency and type of service (short, medium or deep sea), time taken for customs clearance, the level of charges for demurrage, and whether the Council is a common user or a single user facility.

In advocating a study of the factors and constraints affecting dwell time, the authors point out that there is at present insufficient information on which to assess the problem. Any study would involve the "tracking" of a sample of import containers at a few terminals to establish precisely what was governing the length of time containers remained on a terminal and what was happening to the documentation associated with those containers.

The "tracking" of container documentation would involve discussions with shippers, shipping companies, agents and customs and should identify the constraints on the speed of documentation procedures up to the stage at which containers are cleared by customs and, subsequently, to a container being collected from a terminal. It is suggested that H.M. Customs should be closely involved in the selection of sample containers, and in the appraisal of improvements to documentation procedures, in view of the important role customs would play in this area.

The latest issue of the **NPC Bulletin** also includes articles on the development of a harbour traffic management service, by K.J. Radley and J. Tyas of the NPC; the political economy of port development by R.E. Baxter, Director of Economics and Statistics, NPC; Ports and emergency fire services, by A.C. Tanner, Deputy Chief Fire Officer of the Hampshire Fire Brigade; and the control of pleasure craft in harbours by Bernard Hayman, Chairman of the General Purposes (Legal) Committee of the Royal Yachting Association. Also included is the presidential address to the Chartered Institute of Transport of the Council's Director General, Mr. J. Morris Gifford, entitled "Value for Money in Transport".

* National Ports Council Bulletin No. 10. Published by the National Ports Council, Commonwealth House, 1-19, New Oxford Street, London WC1A 1DZ. Price £3.00.

Le Havre Flashes

MARCH, 1977

- **Unusual transhipment**

When the Liberian LNG carrier Crystal suffered damage on her way from England to the USA with a cargo of butadiene, the owners decided to tranship the load on to another vessel, the Norwegian Fernbank. The operation was carried out in the port of Le Havre, at the private berth of a company specialising in the handling of petroleum products, the Société Havraise de Manutention de Produits Pétroliers. 7,200 tonnes of butadiene from two tanks were pumped on to the Fernbank which was moored alongside the Crystal. Provided safety regulations are properly observed, there is no particular danger about a transhipment

(Continued on page 50)

No, for Dunkirk, like its weather profits from an economic micro-climate in favour of its modern facilities and the conscience of its inhabitants.

Of course, the figures of the traffic could have been far higher, but the traffic still reached a somewhat satisfactory level.

Therefore, not the best, but certainly not the worst.

Although Dunkirk sometimes lives like a British or a Scandinavian city as it lies at the centre of the Common Market, Dunkirk does not always escape the symptoms of the ‹‹French Disease››. The following quotation from Alain Peyrefitte's book reminds Dunkirk of a primary truth: ‹‹Why is this quick, generous and gifted people so often appearing at the same time divided and powerless?›› But the author goes on: ‹‹We are not behind any longer, from now on we are as good if not better than the others.››

To-day, this last remark also applies to the port of Dunkirk.

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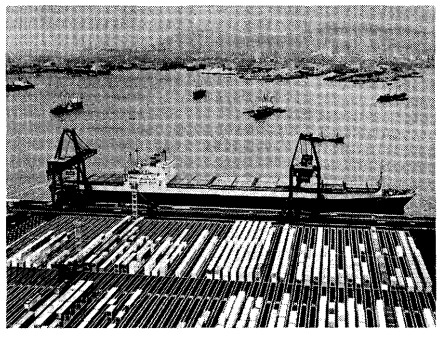

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(Continued from page 48)

of this kind, which was successfully carried out, due to the efficient collaboration of the port services concerned, the owners, and the agents (Jokelson).

- **Container Association holds general assembly**

The "Cercle du Conteneur" is a non-profit-making association whose many members are all connected with the world of containers. It held its general assembly in Le Havre on January 19th, when the 70 members present had a chance to inspect the reception facilities at France's number one container port. It would have been hard to find a more suitable place than Le Havre for a meeting closely associated with the very traffic for which Le Havre is so splendidly equipped.

- **The 100,000th container–twice!**

The 100,000th container to be handled at the Quai de l'Europe terminal in 1976 passed through on December 11th, when the Sovereign Express was being worked by GAMAC, the container handling firm. The Sovereign Express belongs to the Euro-Pacific pool, which is represented in Le Havre by the North American division of the Compagnie Générale Maritime.

The 100,000th container to be handled at the other terminal, the Quai de l'Atlantique, passed through on December 22nd, when the Hong Kong Container was in port. She is an OOCL vessel belonging to the ACE pool and is represented in Le Havre by Jokelson, with the Compagnie Maritime des Chargeurs Réunis in charge of the container handling.

- **General cargo in 1976**

The Port Authority's principal objective at the present time is to develop the trade in general cargo, all bulks excluded, and it was therefore gratifying to see an 18.2% increase in 1976. This put Le Havre into first place among French ports dealing in general cargo, which is a great generator of employment.

The growth in containerised traffic was particularly spectacular, going up by no less than 45% compared with 1975. The increase in general cargo from 5.3 m tonnes in 1975 to 6.3 m tonnes in 1976 is partially due to the general economic recovery, but at the same time is indicative of Le Havre's greatly improved position in the league table of international trade. The port of Le Havre has successfully played its allotted part in solving the country's economic problems, especially as the tonnage of outgoing general cargo was for the first time higher than that imported, with exports forming 50.5% of all general cargo passing through the docks, against 42% in 1970.

It is worth mentioning, too, that 20 new scheduled services were set up in 1976.

APRIL, 1977

- **Container traffic in 1976**

327,910 T.E.U. containers were handled in the port of Le Havre in 1976 against 231,675 in 1975. Of these, 158,778 were discharged from incoming vessels, while 169,132 were passed outwards, giving exports the edge over imports, which is a matter of some significance. Le Havre's mushrooming trade in "boxes" has pushed the port another rung up the European container ladder, where it now lies 5th, after Rotterdam, Bremen-Bremerhaven, Hamburg and Antwerp.

- **Air-sea operation**

A good example of the interdependence of a port and its airport occurred here on February 11th, when some prefabricated houses passed through Le Havre on their way from Canada to Italy. They arrived on the Swedish ro-ro vessel Montmorency in the form of 25 tonnes of components, which were discharged at the Quai de l'Europe terminal and transferred to the airport, where they were reloaded on to an American freight plane, a Conroy C.L. 44, which had arrived the same morning from Jeddah in Saudi Arabia. The plane belongs to an American company, Trans-Meridian Air Cargo Ltd, and is the largest air freighter to have landed so far at Le Havre, with a take-off weight of 80 tonnes. It left the next day for Trieste with the components safely aboard.

- **Shipping movements in 1976**

16,240 arrivals and departures were recorded in 1976 against 15,726 in 1975, marking a slight increase of 3.3%. Net tonnage rose by rather more, from 111.7 million tonnes in 1975 to 123.6 in 1976. Taken together, the two sets of figures reveal an increase in the average size of vessels using the port.

- **New car ferry service from Le Havre**

A new cross-Channel car ferry service is being inaugurated this year by Townsend Thoresen, operating between Le Havre and Portsmouth. Between May 28st 1977 and the beginning of September there will be a total of 58 crossings at weekends, with sailings from Le Havre at 9.0 a.m. and from Portsmouth at 2.30 p.m. The crossing will take 5½ hours.

- **Mutual help**

Canon France, a subsidiary of the world-renowned Japanese company that makes cameras, cine cameras, photocopiers and calculating machines, has decided to open a factory on the Gonneville plateau near Honfleur, across the river in Calvados. It has acquired 9 ha/22 acres and plans over the next five years to open a storage complex and an assembly and repair plant for its photocopiers. Work is to start next spring.

The main reason underlying the choice of site was the proximity of the port of Le Havre, with its regular shipping services to Japan. As mentioned here on an earlier occasion, three international shipping companies last year decided to include Le Havre as a port of call for their deep-sea containerships on the North Europe/Far East run. This is of special importance to Canon France, which at the moment imports its Japanesemade spares and replacements through Rotterdam.

The setting up of the new plant close to Honfleur is a clear reminder of how the two banks of the Seine are economically complementary to each other and is a fine instance of the creative influence that a great port has on its surrounding area.

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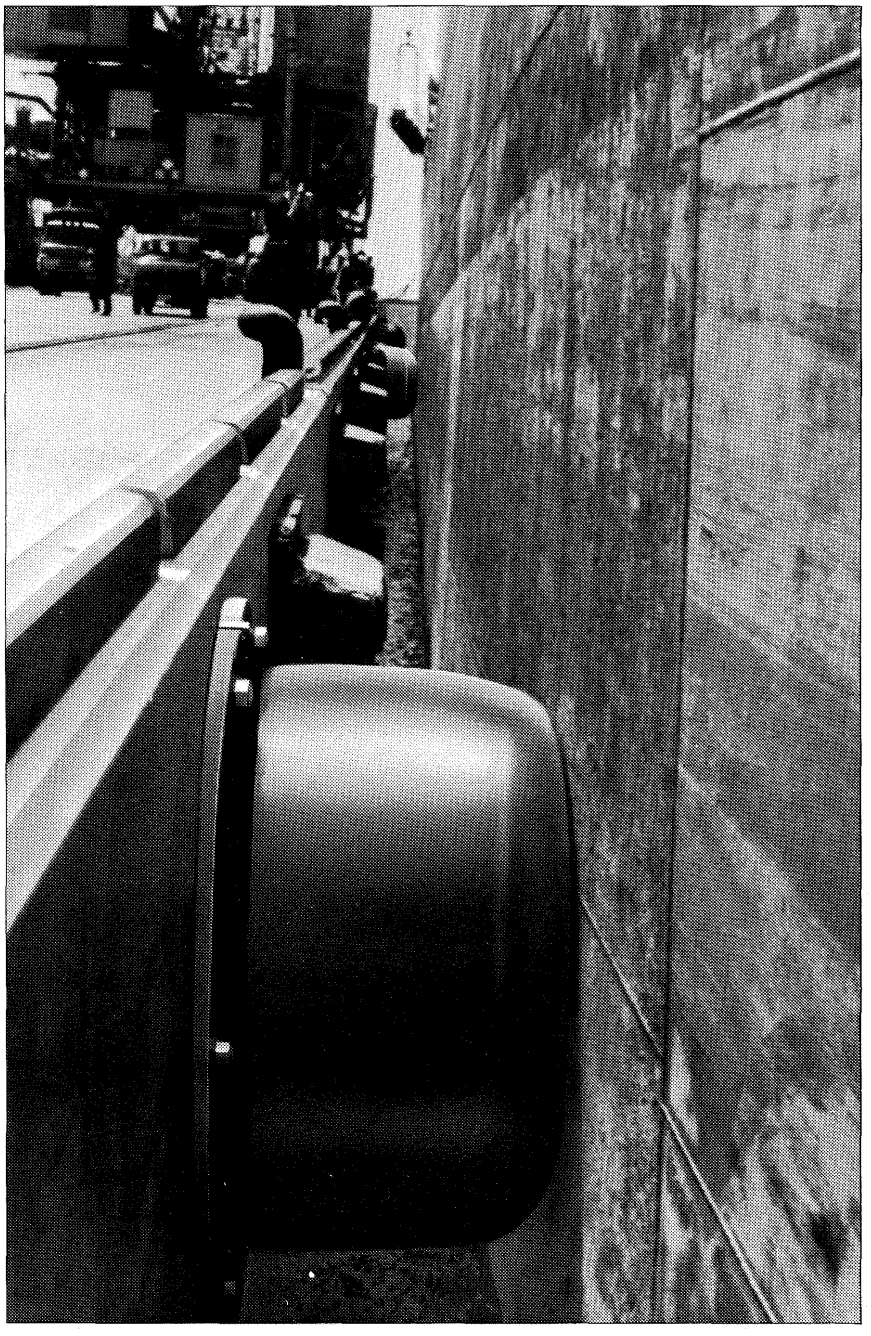

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New Marshalling Yard at Maschen

Presse-Dienst Hafen Hamburg

Hamburg, 4 July 1977:—Shippers and seaborne cargo recipients in numerous places in inland Germany can reckon with transport time reductions which in some cases are sensational when the new marshalling yard at Maschen, south of Hamburg, goes into action. The German Federal Railways marshalling yard, costing some DM 800 million, will be officially declared open to traffic on 7.7.77, exactly seven years after the ground-breaking ceremony. In particular it will bring the Port of Hamburg closer to the industrial regions of the Federal Republic by many hours.

With the closing of formerly used shunting yards between Hamburg and the inland stations, as well as easing of the burden on certain long-range stretches in the Port of Hamburg's arrival and departure traffic, there will be savings of over 30 per cent in the previous running time, initially in southbound waggon traffic. For instance a transport time saving of up to 24 hours in calculated from Hamburg to Munich.

Altogether, prior to Maschen going into operation, some 65 per cent of the goods volume in rail traffic with Hamburg was dealt with on the tracks within the 36-hour rhythm, the so-called DND (day-night-day-) system; following commissioning of the new marshalling yard this is intended to be 95 per cent.

In this connection the extent of the entire transport volume of the German Federal Railways in long distance traffic from and to Hamburg is interesting: it amounted in 1976 to some 50 million tons, and thus coincidentally was almost identical with the Port of Hamburg's transshipment figures. In direct port traffic the Federal Railways at the moment transport about 20 million tons.

The most important factors for the conception and planning of the 280 hectares shunting area, with which over 300 kilometres of rail tracks, some 1,000 points, 21 bridges and 29 buildings, were the desire to improve traffic infrastructure in the greater Hamburg area and to increase the competitive position of the bigges German seaport.

Acting on the realisation that seaports are only as efficient as their connection with the sea and with the interior, several transport projects were effected over the past years in the Hamburg region. These so-called "projects of the century," such as the Köhlbrand Bridge, The Elbe Lateral Canal, the Elbe tunnel in the course of Europe Raod No. 4, and deepening of the Elbe approaches to take 110,000-tonners, guarantee the port users a traffic service which stands comparison with any other in the world.

On the land side the new marshalling yard in Maschen forms the necessary, and for the time being concluding, supplementing feature of this traffic service. The rail traffic centre, packed to the brim with electronic and technical aids, the first construction phase of which has now been completed, will, after final completion in three years, take over the work of ten marshalling systems in five different stations. The waggons will then be centrally assembled here, uncoupled and sorted out according to destinations. Therefore, in future considerably more direct long-distance trains can be formed, which means that more economic centres in the Federal Republic and border crossings will be directly linked with Hamburg and the port facilities. As regards express freight traffic this also means that in the near future 50 major German cities can be reached in one night.

Marshalling Yard Maschen
More economic centres in the Federal Republic and border crossings will now be directly linked with Hamburg and its port facilities. Europe's largest shunting yard at Maschen will go into operation on July 7th, 1977.

The total capacity of the new marshalling yard is geared to handle some 11,000 waggons, which correspondends to 270 trains. Of these, about 4,500 waggons will go via the North-South system, and 6,500 the South-North system. This disequilibrium results from the export intensity of the Federal Republic.

Marseilles/Fos "Europort South"

- **March 1977 Editorial**

"The reefer ship "S.A. LETABA" belonging to the South African Marine Corporation and under time-charter to Fabre-S.G.T.M., sailed from Port-Saint-Louis-du-Rhône" for Iran with a cargo of 206,205 cartons of apples weighing 4,200 tonnes. This is the largest cargo of fruit ever shipped from France. The ship had been sub-chartered for the voyage by the Garonne valley G.I.E. group which groups the exporters of the Toulouse region."
(Journal de la Marine Marchande, 27th January 1977, page 227)

"The first complete container train (thirteen wagons carrying thirty-one containers, total weight 371 tonnes)

(Continued on page 54)

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(Continued from page 52)

recently left San Benigno station in Genoa for Marseilles-Fos. The containers will be loaded on the container ship "NIHON" belonging to the Scandutch line, which will be passing through the Suez Canal for the first time on its regular runs from Europe to the Far East."
(Journal pour le Transport International, 28th January 1977, page 415)

"For the first time, the great North European ports are complaining about the competition from the Mediterranean ports."
(Le Progrès de Lyon, 8th February 1977, page 1)

"Trucks and trailers from Britain, Denmark, Holland and Germany are being loaded onto giant RO/RO barges at Fos which sail regularly for Saudi Arabia."
(Regional Press–Provence-Alpes-Côte d'Azur)

"During five months, three self-propelled trains per month will be shipped from Nuremberg to Tunisia via Marseilles."

So things aren't going too badly at Marseilles-Fos at the beginning of 1977. And Europort South is living up to its reputation as Europe's Southern Gateway.

- **April 1977 Editorial**

Since Napoleonic times there has been a tendency in Europe to equate France with Paris. As far as port matters are concerned, the tendency now seems to be to equate France with Marseilles; but funnily enough, only when difficulties occur.

When dock strikes close down other ports for several days, the press tries to associate the conflict with minor problems of a totally different nature occuring at Marseilles.

When the level of pilferage in European ports causes concern, Marseilles is cited; in spite of the fact that, due to the vigourous measures taken by the Port Authority, the level of pilferage at Marseilles is lower than at many other ports.

When a one-day strike of certain port workers hits all French ports, a great fuss is made about the effects at Marseilles, the other ports being hardly mentioned.

Success incites envy, and as the first port of France Marseilles has to take its knocks; but only its fair share and only on condition that its achievements, which keep it in the top half-dozen of the world's ports, are given equally wide coverage.

- **May 1977 Editorial**

This May issue of "EUROPORT SOUTH" will come off the presses a few hours before the opening of the information meeting which the Port of Marseilles Authority is holding in Paris, and we hope that its contents will support the remarks made at that meeting by transporters and representatives of the Port concerning the growing volume of traffic, the efforts made to attract new lines, and the economic dynamism of the Marseilles Region.

It is not sufficiently emphasized that the Paris region constitutes one of the most important "clients" for the Port of Marseilles–almost equally important as the Rhône-Alpes region. And although groups of forwarding agents from Paris visited the facilities of Marseilles-Fos in October 1975 and May 1976, followed by groups of shippers in December 1976 and March 1977; it is to be hoped that the Parisians will get to know us even better and that there will other occasions for them to see for themselves the recent developments that have been made, not only at the Marseilles docks, but also in the Fos-Port Saint-Louis harbour area. The growing importance of Marseilles-Fos as a RO/RO port to the Middle East and Mediterranean countries, and as a container port offering numerous sailings to America, Africa, Asia, Australia and the Far East, which has been reinforced since the reopening of the Suez Canal, now represents an important contribution to the French foreign trade balance.

Growth — Amsterdam

Amsterdam, June 1977 (Haven Amsterdam):–A port must grow to survive. New port facilities must be anticipated–often years ahead of time–and made ready before they are actually needed.

In this issue, we report about the new harbour basin, the Afrikahaven, which has just been announced. This new large port basin will lie about mid-way on the North Sea Canal and is designated for medium-sized industry and storage and distribution of bulk goods.

The Afrikahaven is a lógical extension of port facilities to the West. Amsterdam is one of the few continental range of North Sea ports to truly have sufficient room to expand. There is still space for expansion, both for industry and distribution.

Elsewhere, we report on the inauguration of Overslagbedrijf 'Amsterdam's'–OBA's–new gantry crane, the largest in the world. The crane was officially dedicated by H.R.H. Prince Bernhard on May 18th.

During the ceremonies surrounding this affair–which some 900 people from all over the world witnessed–OBA Director Mr. B.W.E. Koning urged the Dutch government to give the green light to the proposed deep water port facilities to be built adjoining the south mole of the present harbour mouth at IJmuiden.

Mr. Koning said that this facility was in the national interest and 'Putting his money where his mouth was', he said that OBA had an option on a second similar crane which would be decided upon the same day that the government approved the Outerport proposal.

In general, Mr. Koning ugred the government to give more support to Dutch ports, a move which would help them attract more traffic by enabling them to better serve their customers. He said that the bend in the Waal River, a major Rhine River branch, near Nijmegen, must be rectified in order to allow six-pushbarge convoys to pass.

Aside from the bend at Nijmegen, navigibility of the Rhine must be improved overall to accommodate the six-pushbarge convoys which were efficient and economical. A solution, Mr. Koning noted, would be to form six barge units at Tiel where the Amsterdam-Rhine Canal joins the Waal, using barges from both Amsterdam and Rotterdam to make up the convoys. This was really an example of the spirit of national cooperation fostered by the Dutch Seapor Council, he said. Mr. Koning's suggestions are the best example of the forward-thinking necessary for a port–or a country–to survive.

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Port of Gothenburg

Passenger and roll on/roll off cargo ferries meet by one of Gothenburg's landmarks, the Älvsborg Bridge. Two ferry terminals, handling traffic to Denmark and Germany, will soon be the only harbour activities left on the south bank of the River. Other traffic is to be concentrated to the northern bank.

Gothenburg, Sweden, June, 1977:–

Investments of 36 m. Swedish Kronor (£4.8 m.) at the Port of Gothenburg during 1977

The construction of the large Älvsborg harbour which is going on west of the Skandia container harbour at the Port of Gothenburg will take 20 m. of the Port's total investments of 36 m. Swedish Kronor this year.

The fulfilment of the first quay to be ready at the harbour–quay nr 711–will cost 12 m. and an additional 3.5 m. will be put into making ready the adjoining cargo spaces, which cover no less than 60,000 m^2. Altogether the 711 quay will have cost the Port some 35 m. Kronor when it is ready.

The work on the next quay–nr 712–which now has started up, will take 5 m. Kronor this year and is estimated to have cost around 13 m. when it is ready in 1979.

As the Älvsborg harbour together with the Skandia harbour, according to plans published a year ago, will form the future centre of the Port's activities, these two harbours are those in which most money is being invested. 13 m. Kronor will this year go into two new large cranes at the Skandia harbour, and in a new railway system at the harbour. The total costs for this new harbour equipment will be around 26 m. Kronor, 13 of which thus are covered in the 1977 budget.

Both the Skandia and the Älvsborg harbours have been built by filling out shallow-water parts at the north bank near the mouth of the Göta river. The old harbours of Gothenburg, are located a bit up the river at the centre of the town. Still nearer the river mouth lies the Tor Bay–close to the Tor oil jetty–where the Port now has walled in an area and is pumping in mud to prepare for an additional new harbour.

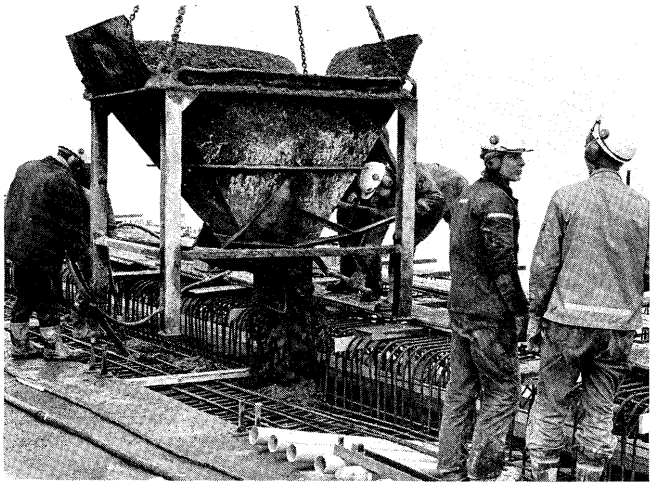
Gothenburg ferry lines carried 3.5 million passengers during 1976

In a speech at a "Port's day" recently arranged by the Port of Gothenburg, the managing director of the Swedish Shipowners Association, Mr. Nils Grenander, mentioned that the ferry lines which serve Gothenburg carried no less than 3.5 millions of passengers and 2 m. tons of goods during 1976.

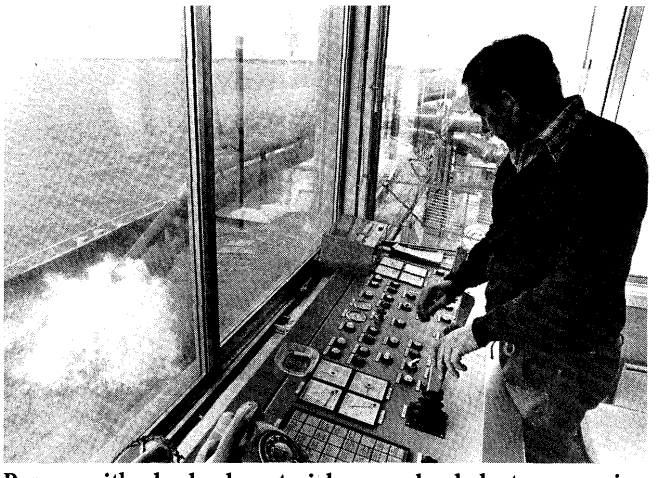
The fast and steady growth of Gothenburg's ferry lines is seen of the following passenger figures:

The Tor Bay between the Tor oil jetty and the Torslanda airport in the western part of Gothenburg, a bay has been walled in to receive the port's dredging material (open sea dumping is no longer permitted for environmental protection reasons). A pump station at the centre of the wall will suck material from barges and pump it into the bay via a movable pipe-line. The bay will satisfy the needs for the port's dredging for at least ten years.

The Älvsborg Harbour, situated immediately to the west of the Skandia Harbour in the River Göta estuary, is to be Gothenburg's No 2 unit load facility. It has been created by reclamation, and the total area is at 850,000 square metres.



Construction work on Gothenburg's Älvsborg Harbour has the highest priority among the Port Authority's construction projects. The harbour will handle unit-loads of different kinds in the future.



Barges with dredged material are unloaded at a pumping station, situated on a man-made rock wall that closes the Tor Bay from the sea. Sucking pipes and diluting water jets are manoeuvred from an adjacent control room.

1960	300.000 passengers
1963	1.000.000 passengers
1964	1.500.000 passengers
1971	2.000.000 passengers
1974	3.000.000 passengers
1976	3.500.000 passengers

Nearly three quarters of the total number of passengers 1976 come on the Gothenburg-to-Frederikshavn lines, run by Sessan Line and the Stena Line. About half of the rest comes on the same two companies lines on Travemünde and Kiel and a similar number on Tor Line's Immingham, Felixstowe and Amsterdam sailings and the Swedish Lloyd's Gothenburg-Tilbury line. Included in the 1976 figures are also around 15.000 passengers which started cruising trips from Gothenburg–and a small number of passengers which in the summer time took the Göta Kanal Steamship company's nearly 100-year old–but still very popular–ships on Sweden's "blue ribbon" inland waterway from Gothenburg to Stockholm or vice versa.

Speaking of the Swedish ferry lines present situation Mr. Grenander said that the costs for the crew had risen with no less than 85% in a three-year period, and in addition comes the rise of the fuel costs. Swedish ferry owners are therefore working under hard conditions. A number of ferries have been laid up and are for sale. The 500 m. Kronor state loan guarantees for Swedish owners recently decided by the Riksdag (Parliament) is, however, hoped to bring some relief also to the ferry owners and to help them to avoid selling to too low prices.

Gray Mackenzie Monthly Bulletin

JUNE 1977

- **Bahrain**

81 vessels called at Bahrain during June, 1977 to discharge 85,635 tons and load 171 tons. In the same month last year 63 vessels discharged 67,192 tons and loaded 32 tons. Vessels were not subjected to any berthing delay throughout the month and it is hoped that this position will continue in the coming months.

62 tankers called at Sitra during the month as compared to 66 in June, 1977.

- **Dammam**

During June, 1977, 157 vessels called at Dammam to discharge 643,194 tons including 355,410 tons cement and to load 10,500 tons urea as compared to 85 vessels offloading 340,028 tons cargo including 121,982 tons cement in June, 1977.

There were no berthing delays.

- **Abu Dhabi**

85 vessels called at Mina Zayed during the month of June, 1977 and discharged 84,398 deadweight tons of cargo. Imports consisted of 63,606 deadweight tons general cargo, 4,662 deadweight tons of steel, 13,873 deadweight tons of cement, 957 deadweight tons of pipes and 1,300 deadweight tons of bitumen plus 17,562 cubic metres timber, 1,871 vehicles, 84 containers of general cargo and 5,000 heads of livestock.

Additionally, 4 tankers called for the purpose of discharging gas oil, and two vessels called for loading and lifted 119 deadweight tons of contractors' material for Antwerp.

Delays during the month varied between 27 to 36 days and the number of vessels registered and awaiting berths was between 45 and 57. Berthing delays during July are expected to be in the region of 24 to 28 days.

A £18.5 million ($31.4 million) contract for five deep water berths at Mina Zayed has been won by Howard Algeemi Construction Company. The berths well be 1,150 metres long and will have a dredged depth of between 9½ and 11½ metres. Other works in the contract are roads, surfaced areas, fresh water reservoirs, a water tower, port services and other buildings. Work on this project has already started which is scheduled for completion in 16 months. These berths are separate from a £43 million ($73.1 million) first stage outer port 34-berth contract awarded to Dong Ah of South Korea. Consultants for port development projects are Sir Alexander Gibb & Partners of the U.K.

- **Khorramshahr**

During June 79 vessels discharged 256,483 tons of import cargo.

Berthing delays ranged from one to five days.

- **Bandar Abbas**

During June, 1977 26 vessels called at this port and discharge 50,666 tons cement, 80,469 tons grain, 16,434 tons steel, 3,018 tons fruit and 17,620 tons general cargo. In addition to the foregoing, 599 cars, 90 containers and 4 lash barges were also discharged.

4 tankers discharged 92,000 tons refined oil products.

4 vessels called to load 6,000 tons chrome ore, 10,000 tons drilling rig, 34 trailers and 4 lash barges of pistachio nuts.

Berthing delays ranged from one to three days for general cargo and from two to seven days for bulk/charters.

- **Kuwait**

During the month of June, 148 vessels called at Kuwait port discharging 287,635 tons cargo inclusive of 7 vessels discharging 79,450 tons of cement.

There was a berthing delay of 40 to 45 days for Conference vessels and 45 to 50 days for non-Conference vessels.

Other Details

Port authorities have issued a circular No. 3/77 dated 16th June, 1977, implementing various amendments/ additions to Port rulings, the full details of which have been advised direct to Principals.

Toa Harbour Works of Japan has signed a contract to build a Naval Base in the South. Toa was awarded the KD. 38 Million (US$131 Million) contract in February. After Brian Collquhorn and Partners of the United Kingdom prepared feasibility studies and designs. The base will cost a total of US$275 Million.

A KD. 892.000 (US$3 Million) contract has been signed for an underground concrete tank to store 10 Million gallons of drinking water for Failaka Island. Minister of Electricity and Water Abdulla Yusuf Al-Ghanim has also signed a contract for the establishment of a power station in the Shuaiba District.

Trade at Brisbane at record level

Brisbane, Queensland, Australia (Port of Brisbane Authority):—Trade through the Port of Brisbane in the 1976-77 financial year improved by more than a million tonnes to a record level of 8,862,000 tonnes.

The figure eclipsed the previous best of 8,557,000 tonnes, set in 1974-75.

The 1975-76 result was 7,812,000 tonnes.

General Manager of the Port of Brisbane Authority (Mr. F.M. Wilson) said all indications were that trade activity was regaining its momentum.

He felt that the port could look forward to another good year.

The only disappointing aspect of the picture was general cargo exports which did not reach the predicted level and were "down" on the previous year.

Mr. Wilson said 1,285 ships called at Brisbane during the year.

He said the conventional general cargo ship arrivals dropped by 12% but container and Ro/Ro vessels were up by 24% and 28% respectively.

Major trade improvement occurred in the oil industry where imports rose by 20% to a record 4,181,000 tonnes and exports also increased 20% to 1,056,000 tonnes.

Exports of grain reached a new record of 1,273,000 tonnes.

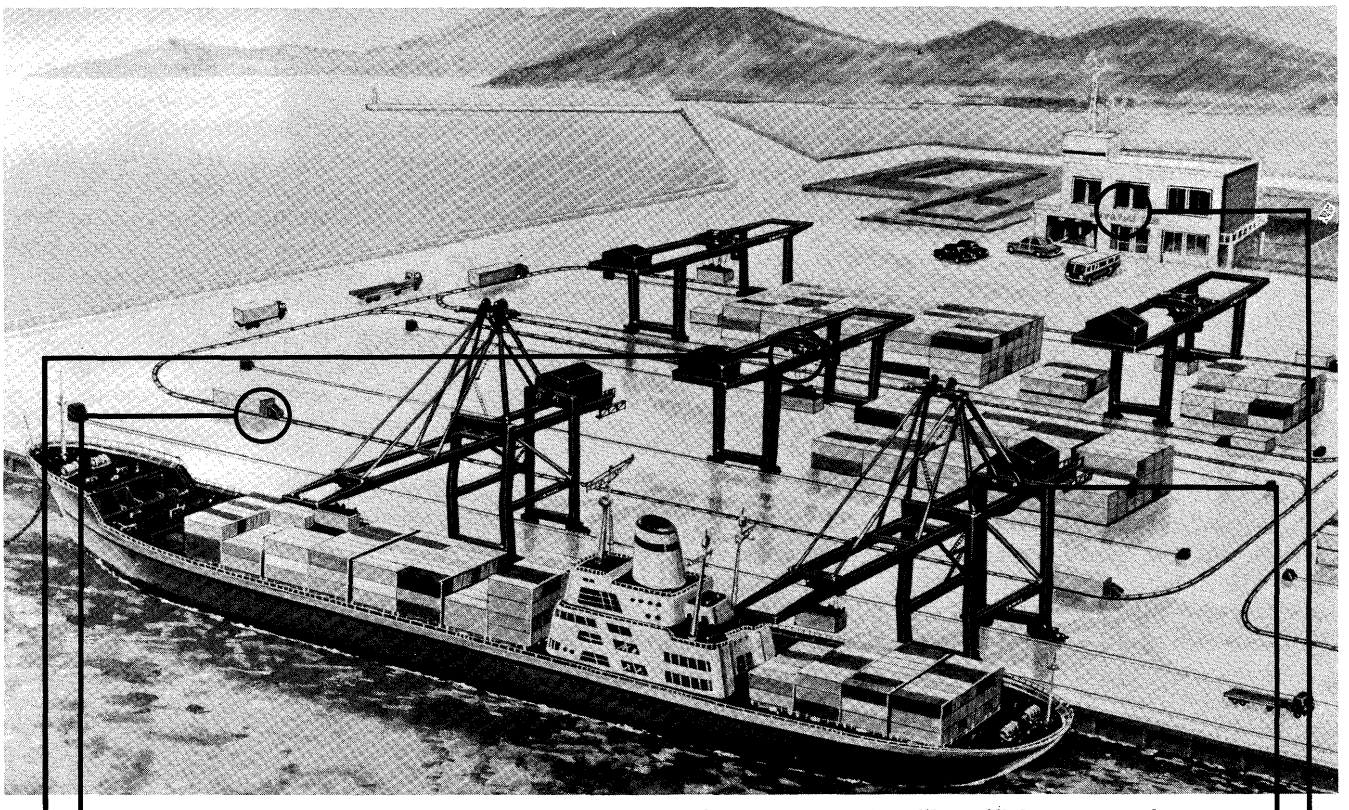
(Continued on page 60)

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.

60% increase in handling efficiency, container sway reduced to ±5 cm in 5 seconds

Quay cranes are equipped with Hitachi's exclusive Sway Stop System which dampens container sway to ±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%.

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.

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.

HITACHI

Hitachi, Ltd. Industrial Machinery Dept. International Sales Div. No. 6-2, Otemachi 2-chome, Chiyoda-ku, Tokyo 100, Japan
Phone: Tokyo (03) 270-2111 Telex: J22395, J22432, J24491, J26375

(Continued from page 58)

Mr. Wilson said general cargo exports were "down" by 39,000 tonnes to 683,000 tonnes.

It had been hoped that the devaluation of last November would have helped Australian manufacturers to compete on export markets but, generally this did not eventuate.

Announcement by Queensland's Toursist Minister

Brisbane, Queensland, Australia, August 1, 1977:—A spectacular 1,000 mile ocean power boat race to be run from Cairns to Southport in October has been officially named the Queensland Pacific 1000.

Queensland's Tourist Minister—Max Hodges—said today, the race organisers had chosen the name from dozens submitted, some from the general public.

Mr. Hodges said the Queensland Pacific 1000, to be run from October 10 to 15, would be the highlight of the 1977 Tourist Development Week.

One of the longest power boat races in the world—the Queensland Pacific 1000—would take in some of Australia's most spectacular coastal scenery, with overnight stage stops in the Townsville, Mackay, Rockhampton, Cooloola and Sunshine Coast tourist areas.

Mr. Hodges said that already 20 boat owners had applied to enter the race which was open to vessels of a minimum length of 19 feet and equipped with two-way radio. The organisers retained the right to refuse any entry.

He said local race committees representing tourist interests and boating clubs had been formed to give assistance and to arrange special events at each stage stop.

The Minister said the overall administration of the race would be undertaken by the Moreton Bay Boat Club and the Australian Power Boat Association.

The Minister said tourist operators right along the coast saw the race as an ideal opportunity to attract both national and international attention as the 'One-Thousand' was expected to the most spectacular event in Queensland, if not Australia, in 1977.

"Queensland Pacific 1000"

Brisbane, Queensland, Australia, 11.8.77 (Press Statement by the Honourable A.M. Hodges, M.L.A. Minister for Tourism and Marine Services):—Nominations are being called for the Queensland Pacific 1000—the World's longest powerboat race.

Queensland's Tourism Minister, Max Hodges, said today that entries for the 1000 nautical mile, five-day race would close on September 26.

The race, from Cairns to Southport, will be run from October 10-15—Tourist Development Week—with overnight stage stops in the Townsville, Mackay, Rockhampton, Bundaberg, Cooloola and Sunshine Coast areas.

Mr. Hodges said there would be three race classes with the entries restricted to a minimum boat size of six metres and a minimum motor capacity of 1750cc.

At least $20,000 would be offered in prize-money.

Mr. Hodges said race details and entry forms could be obtained immediately from the Race Chairman, Mr. G.A. Gow, 48 Lamington Avenue, Lutwyche, Brisbane, 4030, or within the next few days from any Queensland Government Tourist Bureau or Office of the Department of Harbours and Marine.

New Anti-collision Rules for Boats

Sydney, Australia, July 13, 1977 (The Maritime Services Board of N.S.W. Press Release):—The President of the Maritime Services Board of N.S.W., Mr. J.M. Wallace, announced to-day that "as from noon on Friday next, July 15, the new International Regulations for Preventing Collisions at Sea come into force. It is important that every member of the boating fraternity should know and understand the scope of the new regulations."

"Boats of every kind, from the smallest craft to large ocean-going vessels, will be required to conform with these new, more precise and different anti-collision rules. And of course, they apply to all coastal waterways as well as offshore. In addition, there are other special rules covering the operation of boating in N.S.W."

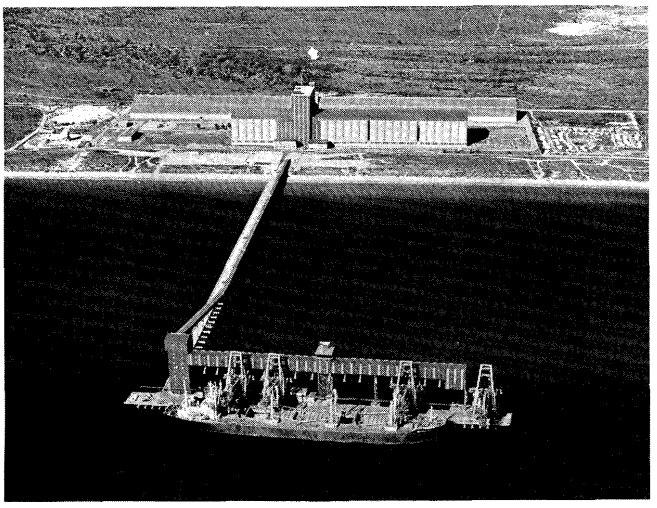
"Skippers of all boats will have to be familiar with the changes in lights, shapes and action to be taken to avoid collision under the new rules", said Mr. Wallace.

"Everyone engaged in boating activity will need to understand the small but significant changes to Rules 5 to 8, which now introduce specific requirements to keep a proper lookout, to go at a safe speed, to use all available means to obtain early warning of risk of collision and the action to be taken to avoid collision. There is now responsibility imposed on the helmsman, who feels that he has right of way, to carefully consider his action as the stand-on vessel. There are also changes in the design and positioning of lights on small craft."

Mr. Wallace further stated that "There are many other changes you should know about. If you own a boat, you will be required to conform with the new Rules now in force. Get your free copy of the complete Rules now."

Mr. Wallace extended an invitation to all boat owners to call at any Office of The Maritime Services Board of N.S.W. to obtain a copy of the New International Regulations for Preventing Collisions at Sea.

Kwinana Grain Terminal Opened at Port of Fremantle



The Bulk Carrier "Mexican Gulf" loads the first shipment of wheat at the Kwinana Grain Jetty on 4th July, 1977.

Fremantle, 9.8.77 (News Release from Fremantle Port Authority):—The largest single grain shipping complex in the world commenced operations at Kwinana in the Port of Fremantle in Western Australia on 30th June, 1977.

The huge $70 million facility became fully operational when the Monorovian registered bulk carrier "MEXICAN GULF" loaded 44,986 tonnes of wheat for Egypt.

The Kwinana Grain Terminal was built in two stages; first consisting of a horizontal storage cell being completed in 1969.

Work began on stage two of the project in 1972. This work consisted of a vertical storage cell complex, another horizontal cell, jetty and loading apparatus, quality control installation and the administrative blocks which house the computer and control room.

Grain can be received at a rate over 4,000 tonnes an hour and the total storage capacity is over 900,000 tonnes.

By far the most impressive shore structure is the working house complex, situated on top of the vertical cells which towers to a height of 50 metres over the 21 hectare site.

A complicated system consisting of 27 kms of moving belts carries the grain from the storage areas through dust extraction, fumigation, weighing and quality control functions. By means of an extensive gallery system the grain is then transferred from the storage area along the jetty to the loading gantrys.

The jetty, extending 750 metres in to the protected waters of Cockburn Sound in the Port of Fremantle Outer Harbour is equipped with four massive loaders each weighing 800 tonnes and standing 60 metres above the jetty decking.

These loaders have a combined rated capacity of 5,000 tonnes an hour.

With 17 metres of water alongside, the jetty is at present capable of handling ships of up to 70,000 tonnes. When the approach channels to Cockburn Sound are deepened ships of 100,000 tonnes will ultimately be handled.

By virtue of its use of modern technology the Kwinana Grain Terminal is expected to serve the wheat producers of Western Australia in a competitive world market for many years to come.

Lyttelton Container Terminal

Christchurch, New Zealand, 2nd August, 1977 (Lyttelton Harbour Board):—(See front cover also.) The Lyttelton Container Terminal (above) handled its first ship-exchange with the arrival of ACT 2 (ACT/ANL) on 18th June, 1977, followed by JERVIS BAY (ANZECS) 8/11 July and LINDFIELD (Shaw Savill-West Indies Service) 29th July.

These operations have gone off without a hitch and the handling rates have been most gratifying to the Board who is the terminal operator.

The following container lines have already announced their programme of calls at the Terminal:

N.Z.—European Service
ANZECS 20 calls per annum
ACT/ANL 6 calls per annum
N.Z. West Indies—U.S. Gulf Service
Shaw Savill 35 days—10 calls per annum

Farrell Lines are also making calls with LASH vessels commencing this month while other lines are considering visits.

Official Newsletter begins at Fiji

Suva, Fiji (July 1977 issue of "PAF Talanoa", The Official Newsletter of the Ports Authority of Fiji):—The Chairman of the Ports Authority of Fiji Board, the Hon Jonati Mavoa, Minister for Communications, Works and Tourism, has welcomed the idea of a newsletter for PAF. In a special message to mark the first issue, he says:

This publication marks the first issue of the Ports Authority's monthly newsletter "PAF Talanoa."

The publication will enable us all to keep in touch with each other and will also tell us what is happening in the ports in Fiji particularly Suva, Lautoka and Levuka.

An internal magazine of this nature fulfils the important role of communication between management and employees.

I wish "PAF Talanoa" all the success for the future.

Message from the Director General of the Ports Authority of Fiji, Mr. Loh Heng-Kee:

It is another mile-stone for PAF.

The issue of "PAF Talanoa," although a modest beginning, will serve as a vehicle to generate better relationship and understanding between the Ports Authority and its employees.

In order that "PAF Talanoa" will grow and flourish, Management and employees must blend and merge as one entity.

Hawke's Bay Harbour Board, N. Z. Chairman's Review — 1

Extracted from Annual Report 1975 (Port of Napier)

The Members,

HAWKE'S BAY HARBOUR BOARD.

Gentlemen,

I am very pleased to present this, the 100th report of the Board, for the year ended 30 September 1975.

On 1 April 1975 the Board, under the authority of the Hawke's Bay Harbour Board Act 1974, changed its name from the Napier Harbour Board to the Hawke's Bay Harbour Board to indicate that the Port of Napier serves the whole of the province of Hawke's Bay.

1. TRADE:

Although the trade through the port totalled 1,019,294 tonnes, which was a drop of 171,972 tonnes, I consider this recession in trade of comparatively short duration, and look forward to a return to the continuing annual growth of traffic over our wharves.

This check in our annual growth rate arose mainly from the reduced importation of bulk fertilisers, 155,812 tonnes, petroleum products 47,145 tonnes and general cargo, 15,117 tonnes, which were partly offset by increases in our export cargoes which have reached a record total of 505,795 tonnes. It is interesting to note that despite inroads into our traditional cargoes by aggregation of cargoes to container ports, the export of frozen meat increased by 26,261 tonnes from last year to 101,594 tonnes.

The total traffic through the port suffered two of the weakest trade months for a number of years. The first was in October 1974 and the other was in September 1975. The drop in fertiliser imports exceeded our estimates and was due mainly to a decline in sales and reduction in the stockpile. Present indications are that we should see a return to nearer normal imports of these commodities. Petroleum products were affected by Gisborne being re-opened for tanker discharges and also no doubt by the endeavours being made to conserve energy in the national interest.

The exports reached new record levels with the biggest impact coming from timber and woodpulp, which more than offset a drop in log exports. Fruit, as predicted, continues its upward trend, while frozen meat exports exceeded estimates to a surprising extent. The outlook for 1975/1976 is very encouraging and a further improvement is expected in ship turnround.

The Board, as wharfinger for import cargoes, handled through its sheds and open storage areas 42,401 tonnes of import cargoes during 1975 compared with 46,203 tonnes in 1974.

Pulp and timber handled by the Board through its woodpulp shed and open storage area were 182,792 tonnes compared with 117,371 tonnes in 1974; while the Board handled 121,387 tonnes of fertiliser through its phosphate shed, compared with 10,160 tonnes last year.

2. SHIPPING:

The number of ship entering the port dropped by 6 to 282, but of these, overseas ships showed an increase of 13 to 232 this year. The total aggregate nett tonnage of shipping arriving at Napier totalled 1,252,236 as compared with 1,298,733 in 1974.

Berthage utilisation of available berths amounted to 75.76% compared with 77.76% compared with 77.5% last year.

Whereas in 1974, 13 ships were taken to sea and 13 ships brought to standby because of weather conditions, with the completion of the first stage of our breakwater extension, no ships have been taken to sea and only 3 ships placed on standby.

Berthage utilisation remained high:—

Higgins North berth	70.40%
Higgins South berth	84.56%
Geddis East berth	61.95%
Geddis West berth	75.15%
Herrick East berth	77.21%
Herrick West berth	72.47%
Kirkpatric Wharf	87.76%

"A" Wharf was used by commercial vessels on 8 days.

3. FINANCE:

The Board finished the year with a small deficit of $15,202. This was encouraging, having regard to the drop in trade, and to the Board financing from revenue the stockpiling of rocks, while awaiting authority to proceed with raising a loan for building a seawall and extending the breakwater. The alternative could have proved costly to the Board as it would have meant the closing of the two quarries supplying the Board with rock and their later reopening at probably a higher cost.

The total expenditure of $1,823,791 on capital works indicates the high tempo of our Harbour development programme.

The Board's loan indebtedness now stands at $8,256,683 with Sinking Funds at $533,602, and unexpended loan moneys at $1,310,808, making a nett indebtedness of $6,412,273.

4. REVIEW OF CHARGES:

It was necessary to review our charges to produce sufficient additional revenue to meet the rapid escalation in costs that had taken place and the opportunity was also taken to make a change in the system of charging for services to shipping. The Board adopted the system of charging a rate per day based on the length of a vessel instead of the nett register tonnage of a vessel. The previous charges of port dues, berthage, moorings and hawsers, wharf lighting and garbage collection are now combined in the new berthage charge, based on a rate per metre of the overall length of vessel. A fixed charge is made for pilotage

services, instead of a rate per nett registered tonnage.

The effect of the change in the system of charges is for vessels able to achieve quicker turnround to have reduced port costs, compared with the previous system.

5. WHARF HANDLING CHARGES:

The Board continued to collate information on wharf handling charges and the local Wharfingering Committee comprising representatives of the Shipping Companies, Stevedores, principal users of the port, was under the chairmanship of our Chief Executive Officer. This committee fixed the wharf handling charges for the Port of Napier from time to time. This arrangement ceases on 30 September 1975 and is replaced by the establishment of a New Zealand port services charge, so that consignees and shippers, using an efficient low cost port such as Napier, will pay the same amount for wharfage and wharf handling charges as the highest cost port. The Board has drawn the Minister's attention to our dissatisfaction with the changed method of collecting these charges and sought an independent enquiry as to whether the proposal is in New Zealand's interests. **(To be completed in the next issue.)**

Rise in timber traffic

Penang (Berita Pelabuhan, October 1976):—The export of sawn timber through the Port of Penang has risen substantially. It is now the second largest export commodity moving through the port; rubber being the largest export commodity.

During the first eight months of this year, 110,148 tonnes were exported through the port as compared to 68,140 tonnes handled during the same period in 1975. This represents a rise of 61.6%. In the whole of 1974 and 1975, 82,757 tonnes and 109,627 tonnes were exported respectively.

The increase in the volume of timber export has been brought about by the improvement in the timber market over the past few months and more stabilised prices for timber and timber products.

The bulk of the export is to the United Kingdom and Northern Europe. Other importers include Japan, United States and Australia. During the period January to August 1976, timber export to United Kingdom and North Europe rose to 103,180 tonnes as compared to 61,512 tonnes exported during the same period in 1975. Rises were also recorded in the export to United States. There was however, a decline in the export to Japan from 2,804 tonnes to 1,042 tonnes.

A large percentage of the timber traffic is carried by conventional vessels. Recently, the Malaysian International Shipping Corporation introduced a bulk carrier service to United Kingdom and Europe with three new bulk timber carriers specially designed to meet the needs of shipping timber in bulk. Over 2,000 tonnes were loaded by each of the vessels.

Timber traffic through the port is nearly all handled through Butterworth Wharves where excellent facilities are available. There is an open-sided timber shed of 90,000 sq. ft. for the storage of timber awaiting shipment. Adjacent to the shed is large open-space ideal for bundling purposes.

Timber exported through Butterworth Wharves come mainly from kedah and Perak by road although increasing quantities are being transported from Kelantan by rail. With the completion of the East West Highway, a greater volume of timber can be expected from Kelantan. A rise in the volume of timber export through Butterworth Wharves can be expected.

Rise in port tonnage

Penang, Malaysia (Berita Pelabuhan, January, 1977):—The Port of Penag handled 4,216,853 tonnes of cargo in 1976 as compared to 3,839,412 tonnes in 1975. This was 377,441 tonnes or 9.8% higher than the volume handled in the previous year. This rise in tonnage handled is a reflection of the improved economic condition in the country during the year.

Exports for the year was 1.69 million tonnes as compared to 1.46 million tonnes in 1975, a rise of 16%. Commodities which showed significant increases were ilmenite ore, palm oil, rubber, timber, cotton goods and fibres. The export of ilmenite ore rose to 122,577 tonnes, an increase of 43,404 tonnes; palm oil to 145,576 tonnes up 38,458 tonnes; rubber to 531,499 tonnes up 27,345 tonnes and timber to 158,255 tonnes up 48,668 tonnes.

There were however decreases in the export of coconut oil, drums latex and charcoal. The export of coconut oil dropped to 15,407 tonnes from 22,372 tonnes in 1975, drums latex from 75.133 tonnes to 65,049 tonnes and charcoal from 20,560 tonnes to 12,616 tonnes.

Imports for the year was 2.52 million tonnes as compared to 2.37 million tonnes in 1975, a rise of 6%. Commodities which recorded increases were fertilizers, chemicals, petroleum products, provisions and onions. The import of fertilizers recorded an increase of 16,847 tonnes to reach 97,352 tonnes while the import of chemicals, petroleum products, provisions and onions rose to 61,803 tonnes, 75,370 tonnes and 78,024 tonnes respectively.

Decreases in tonnage were recorded for the import of textiles, animal feed, tin ore and sugar. Tin ore dropped by 23,595 tonnes to 12,895 tonnes, and sugar dropped by 60,830 tonnes to 23,300 tonnes.

Mobile container crane

Penang, Malaysia (Berita Pelabuhan, January, 1977):—The Penang Port Commission has added a new truck mounted Container Crane, a Coles Colossus LT 4,000 to its container handling equipment. The crane costing $2.4 million is now operational. With the addition of this new mobile container crane, Penang Port is all set to serve container vessels and feeder container vessels that are not self sustained as well as conventional vessels that do not have container lifting equipment.

The Crane, with a SWL of 30 tons at 80' radius is specially designed to handle containers from any type of vessel. The average discharge rate is 10 containers per hour.

The mobile crane mounted on a 10ft. by 8ft. chassis, has the flexibility to move around the wharf and has unique features such as multipoint outrigger spreaders to reduce point loading on the wharf plus an elevated control cab to enable the operator to see down into the hold of the vessel

for faster and smoother operation. An indicator showing the weight of the lifted container is also available.

Safety features of the crane include self resetting automatic limit switches to prevent over hoisting, over lowering or over derricking in either direction.

The availability of the Mobile Crane, the latest step taken by the Commission to equip Penang Port with modern and efficient container handling facilities is expected to bring about an increase in the volume of container traffic through the port. In fact, the volume of container traffic has risen steadily since 1973 when only 516 T.E.U.s were handled. With the availability of a 30 ton mobile crane, prime movers and trailers in 1974, the volume rose to 2,994 T.E.U.s. In 1975 with 2 straddle carriers and a Container Freight Station added to the facilities available, 8,854 T.E.U.s were handled. In 1976 the volume of container traffic reached a high of 14,189 T.E.U.s. This was 60% more than that handled in 1975.

In addition to the new mobile container crane, other container handling facilities include a container yard of 16 acres, a container freight station of 42,000 sq.ft., 2 straddle carriers, several prime movers and trailers for handling both 20′ and 40′ containers and twenty reefer points. A Sixth berth which will be a container berth with Ro-Ro facility is under construction and will be ready by the end of 1977. Other proposed container handling equipment for the terminal include a gantry container crane for the six berth and transtainers and additional prime movers. The availability of these modern container handling facilities will establish Penang Port as an important container handling terminal in the region.

Picture shows the master of the ship MV "Yulsan Poseidon" Captain Kim Jae Ho (right) receiving a commemorative pewter salver from the Port of Singapore Authority Keppel Wharves Zone Manager Mr. Tan Kay Juay at a maiden voyage presentation ceremony on board the vessel on 24 Jun 77. The 22,646 dwt cargo vessel of speed 15 knots was launched in March 1977 from the shipyard of Ishikawajima Harima Heavy Industries Co. Pte. Ltd. and takes a regular route between the Far East and Middle East. (Port of Singapore Authority)

The 14,483 GRT ro/ro vessel "SEASPEED AMERICA" called at the Port of Singapore Authority's wharves early this month while on her maiden trip from Japan. She now has joined her two other sister ships the "SEASPEED ARABIA" and "SEASPEED ASIA" on Seaspeed Services' Far East/Gulf route. To mark the occasion, a small reception was held on board the vessel. Mr. Chow Peng Tien, Assistant Director (Management Services) of the Port of Singapore Authority presented commemorative gifts to the Master, Capt Perivolaris K. on behalf of the Port Authority. Mr. Chow (left) and Capt Perivolaris are seen here with the special pewter tray presented to the Master. (Port of Singapore Authority)

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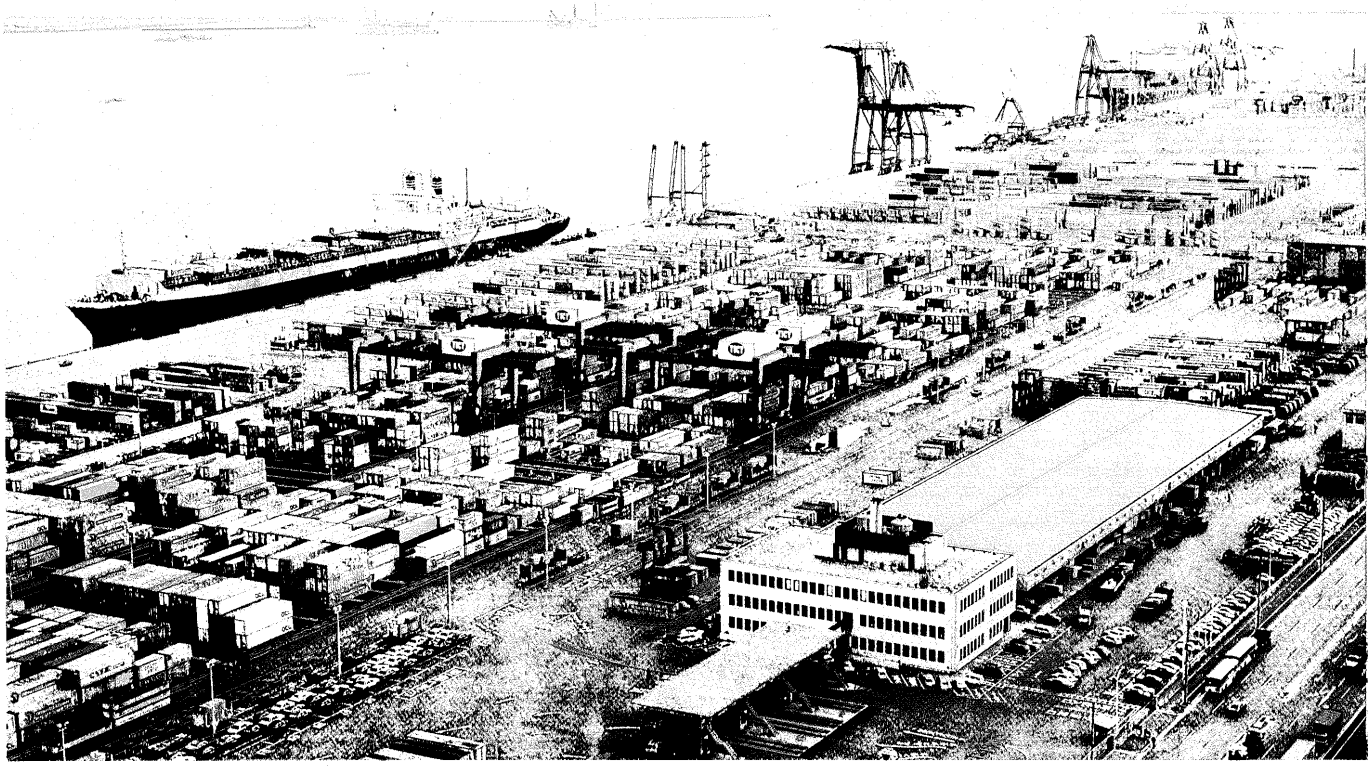

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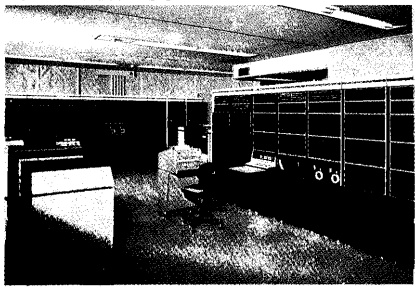
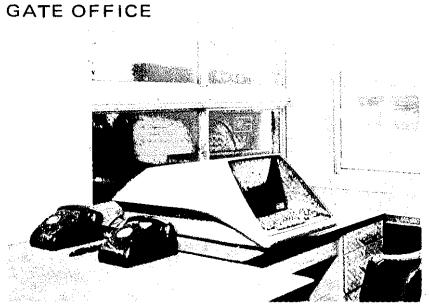
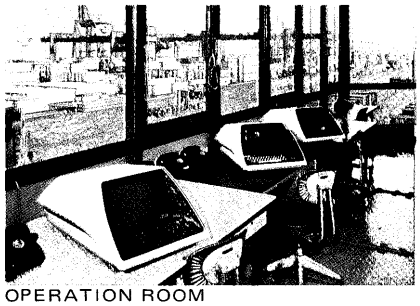
COMPUTER ROOM

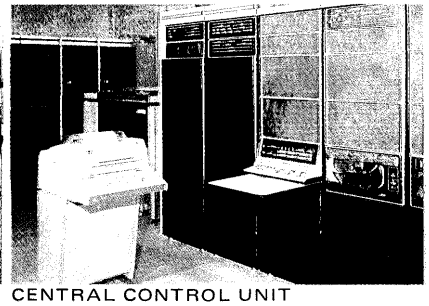


GATE OFFICE





OPERATION ROOM



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