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October, 1977 Vol. 22, No. 10

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Head Office:

Kotohira-Kaikan Bldg. 2-8, Toranomon 1-chome, Minato-ku Tokyo 105, Japan Tel.: TOKYO (591) 4261 Cable: "IAPHCENTRAL TOKYO" Telex: 2222516 IAPH J

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PORTS and HARBORS

IAPH Head Office Announcements: Pages 7~16

IAPH Replies to IMCO Questionnaire on Oil Pollution Damage

Based upon the individual responses of IAPH Directors to the IMCO questionnaire on "Oil Pollution Damages" which had been circulated from the Head Office last year, Mr. A.J. Smith, our Liaison Officer with IMCO, submitted a formal reply to Mr. T. Mensah, Director of Legal Division of IMCO, on August 18th, 1977 and stressed strongly in his covering letter that those responses should well be taken into consideration when the IMCO's 33rd Session of the Legal Committee deliberates the extention of the 1969 International Convention on Civil Liability for Oil Pollution Damages.

The text of the IAPH reply to IMCO follows. (TKD)

Question 1

The following oils not covered in the 1969 Civil Liability Convention pose a substantial risk of pollution to the marine environment:—

- (i) A range of edible oils, the spillage of which could cause problems similar to those experienced with hydrocarbons.
- (ii) Tankcleaning residuals inclusive of slops, oily wash water and sludge.
- (iii) Naphtha, kerosene, gasoline, jet fuel, diesel gas oil and light diesel fuel.
- (iv) Dirty ballast.
 - (a) Tankcleaning slops, naphtha, kerosene, gasoline, jet fuel, diesel gas oil and light diesel fuel can give rise to serious risk of fire.
 - (b) The substances listed in (iv) (a) can give rise to serious risk of explosion.

Slops contain as much as 20 percent by volume of crude oil. The oil content of oily wash water and sludge is substantially less than that of slops and will vary widely according to the cargo carried, length of washing time, frequency of tankcleaning, wash water temperature, etc.

As far as is known there is no authoritative source which can furnish factual data on annual quantum of tankwash residuals. However, the vast majority of tankers in the black oil trade periodically wash cargo tanks at sea during the ballast voyage and retain the residuals aboard for later topping off with cargo. It is also reasonable to assume that approximately one-half of the world tanker tonnage of 300 million deadweight tons is cleaned preparatory to periodical shipyarding and that 2 percent by weight of residuals is collected for disposal ashore—the transfer being largely made by barges and a substantially lesser quantity by pumping directly to shore tanks.

One can accept the argument that the characteristics of naphtha and the so-called "white" fuels cause them to disperse rapidly in open waters or in a rough sea. However, one must be conscious of the fact that for the most part these refined petroleum products are loaded and discharged at installations situated in confined waters, ports and harbours where large leakages can indeed cause local pollution damage notwithstanding the greater hazard of explosion and fire.

It is worthy of note that Industry has long been aware of the pollution hazard of oil other than persistent oil. The point is underscored by the fact that the TOVALOP Agreement under which tanker owners voluntarily accept liability to cleanup defines oil to mean "crude oil and its residuals (including but not limited to asphalt, bitumen, fuel oil, heavy diesel oil) and lubricating oil whether or not carried as cargo". In respect of carriers of "white" products insurers underwrite TOVALOP liability at a premium rated one-fourth of the rate levided for carriers of "dirty" oils.

Questions 2, 3, 4 and 5

- (a) The following list of chemicals, not exclusive, which could be expected to pass through a port, exemplifies hazards:-
- Legend:-Highly inflammable-H.I., Explosive-E., Toxic-T., Corrosive-C., Poisonous-P., Combustible-COM.

Product	Hazard by Legend
Ammonia Anhyd.	H.I. + T. + C.
Acetone	H.I. + E.
Acrylate:-	
Butyl	H.I. + T.
Ethyl	H.I. + T.
Aluminium Alkyls	H.I. + E. + T.
Alcohol-Butyl	H.I. + E. + T.
Alcohol-OXO	H.I.
Alcohol–W.P.	H.I. + P.
Acrylonitrile	H.I. + E. + T. + C.
Chlorothene)	Т.
Trichloroethane)	Τ.
Cyclohexane	H.I. + T.
Cyclohexanone	H.I. + T.
Ethylene Dichloride	H.I. + T. + C.
Isopropyl Alcohol	H.I. + E. + T.
Methyl Ethyl Ketone	H.I. + E. + P.
Methanol	H.I. + E. + T.
Methylene Chloride	Т.
Methyl Methacrylate Monomer	H.I. + E. + T.
Propylene Oxide	H.I. + E. + T.
Styrene Monomer	H.I. + E. + T.
Toluol (Toluene)	H.I. + E. + T.

Tetra Ethy Lead	Т.
Toluene Di Isocynate	COM. + T. + C.
Sulphuric Acid (Conc.)	E. + T. + C.
Xylol	H.I. + T.

Many of these chemicals are carried in "package tankers" in bulk, some carrying up to 20 different products simultaneously.

(b) Circumstances under which injury or damage has occurred or is likely to occur include the following:-

Collision or grounding; Spillage during discharge or loading; Tank washing, cleaning and repair; Pumping and transfer malfunctions.

Question 6

The substances involved are numerous and special arrangements too varied for any short answer to be given.

Question 7

The maximum amount of cover afforded by the P and I Clubs is in the order of \$US 25 million.

Question 8

Maximum level of insurance available through P and I Clubs is in the order of \$US 25 million.

Question 9

It would be possible to develop adequate insurance to cover the liability.

Question 10

The variety of cartage agreements in existence does not permit a general answer to be given.

Question 11

An adequate insurance could be developed to cover the liability on the cargo.

Question 12

The maximum insurance coverage available in both cases would be in the order of \$US 25 million.

Question 13

Cover in respect of the alternatives (a) where liability is placed on the carrier or (b) where liability is placed on the cargo, would be approximately the same.

Question 15

It is presumed that the 1969 Convention on Civil Liability for Oil Pollution Damage is to be amended to take account of such risks as may not be covered adequately by the 1976 Convention on Limitation of Liability for Maritime Claims.

It should be borne in mind that not all the high risks are caused by substances carried by ships as cargo. A tanker which may recently have carried oil and which is not gas free can present a high risk of explosion. A VLCC can produce a heavy pollution damage by the spillage of oil in her bunkers even though she does not carry any oil as cargo. Both of these occurrences have taken place in France in recent years.

It is contended therefore that an amended Convention should be applicable to ships which will, by themselves, present a high risk of explosion, pollution and so on

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whether or not they are carrying substances as cargo.

President Altvater Stops at Tokyo

Mr. George W. Altvater, President of IAPH visited the Head Office on the morning of September 12th, 1977 to hold a business meeting with Dr. Sato, Secretary General and his staff on broad matters pertaining to the Association.

President Altvater listened to the briefing of the latest membership situation, finance and major activities since the 10th Conference in Houston from the Secretary General. The agenda, among others, included active participations of the IAPH representatives in various meetings of friendly organizations scheduled for the next two years to come, items of the Executive Committee meeting in Mombasa, Kenya, in April, 1978 and guidlines for the 11th Conference in Le Havre, in May, 1979.

President Altvater was content with the fact that 10 Regular Members and 18 Associate Members newly joined the Association after the 10th Houston Conference, and that as of August 1, 1977, Regular Members totaled to 190 (468 units) and the Associate Members to 141 (143 units) for 331 members (611 units) altogether.

Accompanied by Mr. Fentress Bracewell, Chairman of Port Commission, Mr. W.D. Haden, II, Commissioner and Mr. C.A. Rousser, Director of Trade Development, Port of Houston Authority, Mr. Altvater was also visiting other countries in the Far East as the Port Authority's Trade Mission.

On the evening of the 12th September, a reception party "Houston Night" was held at the Imperial Hotel, Tokyo inviting some 300 representatives from shipping and trade companies and a film of "Port of Houston Today" was shown.

The Houston party left Japan on the afternoon of the September 13th for the next destination. (TKD)

Vice-President Bastard Attends PIANC Leningrad Meeting

IAPH was invited to dispatch an observer to the 24th International Navigation Congress to be held in Leningrad, U.S.S.R. from 6th to 14th September, 1977, and Mr. Paul Bastard, Second Vice-President of IAPH left Paris on September 2nd to take part in the Congress.

Secretary General Sato telexed Prof. V. Balanin, Secretary-in-Chief of the Organizing Committee of the 24th International Navigation Congress Leningrad, the following message jointly with President Altvater. (TKD)

"Thank you very much for your kind invitation extended to this Association to send our observer to your 24th International Navigation Congress in Leningrad.

"It is our pleasure to inform you that our Vice-President, Mr. Paul Bastard, Directeur, des Ports Maritime et des Voies Navigables, Ministere de l'Equipment, France, is to be present in Leningrad as the official representative of this Association in recognition of the great significance our members place upon your deliberations in Leningrad.

"The International Association of Ports and Harbors looks forward with interest in common with PIANC to a successful outcome from your convention in Leningrad.

"With best wishes for a most instructive and pleasurable meeting."

Mr. A.J. Smith, IAPH Liaison Officer with IMCO, reported on the recent activity of the following three committee of IMCO.

- 1. Council-23rd to 27th May
- 2. Technical Co-operation Committee-18th to 19th May
- 3. Marine Environment Protection Committee–20th to 24th May

His reports covering the above three meetings follow. (TKD)

COUNCIL

The 38th session of the Council of IMCO was held in London from 23 to 27 May 1977.

IAPH members will be interested to know that the total membership of IMCO now stands at 102 plus one Associate Member.

Council were pleased to note that efforts to widen acceptance of Conventions and other multi-lateral Instruments deposited with IMCO were meeting with success. In particular, the requirements for entry into force had been met in respect of the 1969 Amendments to the 1954/62 International Convention for the Prevention of Pollution of the Sea by Oil and of the Protocol on Space Requirements for Special Trade Passenger Ships, 1973.

Council duly authorised the Secretary-General, IMCO, to accept and perform the depository and other functions assigned to him under the Convention on Limitation of Liability for Maritime Claims, subject to the Understanding agreed to by the 1976 Diplomatic Conference.

IMCO, itself, has now been authorised to accept the functions assigned to it under the Convention, in particular the responsibility for convening conferences, as necessary, to amend or revise the Convention or the provisions relating to limits of liability, the unit of account or the monetary unit.

IAPH members will recall that Council had undertaken a review of organisation in consultative status on a cost/ benefit basis. Council have decided to recommend to the Assembly the continuance of the grant of consultative status pending the establishment of guidelines.

IAPH will welcome the institution by Council of a World Maritime Day to be held on 17 March each year. Consideration is also being given to the establishment of an IMCO Prize.

TECHNICAL COOPERATION

The Committee on Technical Cooperation held its fourteenth session on 18 and 19 May 1977 under the Chairmanship of Captain Tardana of Indonesia.

By institutionalising the Committee in the IMCO Convention, acknowledgement has been given to the confidence shown by Member States in its technical cooperation programme. Close ties have been established with developing countries which are being visited increasingly by technical cooperation staff.

Training and development of expertise has been the prime activity to date followed closely by work in the prevention and control of pollution from ships, work in maritime administration and legislation, ports, ship repairing and ship design.

Training institutions in a number of countries are now sufficiently well established to be able to extend their facilities to students from other countries. What is of great interest to note is that international standards have been adopted by and are taught in these institutions from their inception.

An interesting development in Saudi Arabia is that of coordinating a package of projects including maritime administration, legislation, navigation aids, hydrographic survey and other technical subjects in a comprehensive way.

Regional Advisers are in place in Africa, Asia and the Pacific and for Latin America. Additional Advisers will shortly be sent to Africa to deal particularly with the maritime problems of French-speaking countries and Latin America to give special attention to marine pollution.

There are also Inter-Regional Advisers in Maritime Legislation and Maritime Safety Administration and consideration is being given to providing additional coverage for Maritime training and ports.

IAPH members particularly in developing countries will be interested to know of training opportunities which are being offered by IMCO's Member States. Inventories have been compiled and are subject to regular up-dating by the Secretariat. Members would therefore be well advised to contact their respective national delegations to obtain this information.

IMCO also proposes to organise a limited number of seminars as part of its technical cooperation programme and it is likely that some emphasis will be placed in these on the problems of port and maritime administrations associated with the acceptance and implementation of Conventions of which IMCO is the depository.

Marine Environment Protection

The seventh session of the Marine Environment Protection Committee was held from 20 to 24 June, 1977 under the chairmanship of Mr. P. Eriksson of Sweden.

Amongst the many matters considered by the Committee were a number of especial interest to ports.

The required number of acceptances of the 1969 Amendments to the 1954 Convention have been received by IMCO; the 1969 Amendments therefore will enter into force for all Contracting Governments on 20 January 1978.

Member States were urged to give priority to work aimed at solving problems involved in the implementation of the International Convention for the Prevention of Pollution from Ships, 1973 with a view to its early ratification.

The Committee took note of and discussed in general terms a number of papers dealing with tanker safety and pollution prevention. In particular, the Committee welcomed a United States initiative for improving standards in this regard with a draft of national regulations for the reform of ship construction and equipment standards for oil tankers of 20,000 dwt and over which call at United States ports. There included double bottoms and segregated ballast on all new tankers; inert gas systems, improved emergency steering standards, back-up radar systems including collision avoidance equipment on all tankers.

It was decided however that detailed consideration of all of these matters should be referred to an Intersessional Working Group on Tanker Safety and Pollution Prevention (TSPP) for report to a meeting of the Committee jointly with the Maritime Safety Committee to be held in October 1977.

The intent of the October meeting is to prepare a series of amendments to the 1974 Convention relating to tanker inspection and certification. The TSPP Working Group will also however reflect these amendments in the 1973 Marine Pollution Convention bearing in mind the need to harmonise the two Conventions.

More generally, the October meeting also hopes to consider ways and means of achieving early implementation of the 1973 Marine Pollution Convention. The possibility, for example, of bringing Annex I of that Convention into force separately from Annex II will be explored.

The Committee has always been conscious of the need to relate Convention requirements to current events so as to be better able to judge the merits of changes. The investigation of casualties has been considered important for this purpose and the Committee has therefore decided to ask the IMCO Secretariat to prepare a list of incidents involving significant pollution. The term "significant" relates to all spillages of 100 tons or more of oil or oil products. The data to be collected will include the cause of the incidents, action taken by Administrations and observations on lessons to be learnt.

IAPH members have always been conscious of the fact that the provision of reception facilities in port areas is a key to the effective implementation of the 1973 Marine Pollution Convention. The anxiety of IMCO to make progress in this regard will therefore be understood.

Enquiries are in hand to update the IMCO 1972 document "Facilities in Ports for the Reception of Oil Residues". Associated with this is the Committee's consideration of ways of encouraging the utilisation of facilities provided. In this regard, the Committee expressed an interest in the Swedish system whereby no direct charge is made for the use of facilities; their costs being provided for by, for example, increasing product costs or port dues. The Swedish objective is to ensure that there are no financial disincentives to using the facilities.

The provision of reception facilities for sewage and garbage also came under consideration. It is hoped that Guidelines for Sewage will be finalised at the next session. Draft Guidelines for Garbage are proving to be more difficult to determine though work on them is proceeding under the direction of the United States.

Finally, the Netherlands delegation drew the Committee's attention to problems arising from chemical tankers carrying "stench causing substances" and the desirability of providing vapour return systems for such tankers in ports where open transhipment procedures are known to cause fouling of the air.

In the absence of detailed information on the situations in ports of other countries, the Committee agreed to institute an appropriate enquiry to which Member States were expected to respond by 31 October 1977. Any action to be taken will await the outcome of that enquiry.

ICS Bridge Procedures Guide on sale

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International Chamber of Shipping (ICS) has recently published a handy 30-page "Bridge Procedures Guide" for the use of Masters and their Officers at sea.

The Guide is a loose-leaf type of vinyl coated pages in hard-cover bindings enabling to use it even under the bad weather conditions at sea. Mr. P.W. Graham, ICS Secretary General, outlines the Guide that "it has been designed to provide a description of bridge procedures that are widely recognized as good international practice for vessels of all flags. It has been prepared by mariners, for mariners."

Mr. Graham, further says, that "although the Guide concentrates, primarily, on the most basic measures and procedures, (and many ships will carry similar company and Masters' instructions of a much more comprehensive nature), it does establish a common standard.

"This, if internationally used," he continues, "could result in a considerable enhancement of safety at sea. A feature of the Guide is that it included a number of both 'routine' and 'emergency' check lists ranging from the procedures for the embarkation/disbarkation of pilots to the action to be taken in the event of man overboard. These check lists can be detached and fitted for bulkhead mounting, if required."

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Reach Sydney Port? Make it by Telex

Mr. J.E. Bradstreet, Secretary, the Maritime Services Board of N.S.W., recently informed that the Board installed a teleprinter (telex) service to augment its communications capabilities. According to his information, the receiving service is available 24 hours a day, 7 days a week, while the machine will be manned during the hours of 08:00 a.m. to 04:00 p.m. Monday to Friday, excluding public holidays.

The number is: AA24944 Answer-back code is: MSBSY (rin)

New Address of IAPH Head Office

Due to recent change in the postal address system, there was a slight change in the address of this office effective September 1, 1977. Bold-face part is the new address:

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

Please be noted that since this is not the moving of the office, telephone and telex number stay as they were.

Questionnaire on Port Signals by Joint IALA /IAPH /PIANC Committee

Hereunder is the questionnaire on port signals being prepared by the Joint IALA/IAPH/PIANC Committee, and is being sent by PIANC or/and IALA. Those members who are not in receipt of it or not responded yet are encouraged to return it to this office. (rin)

PORT SIGNALS

A Committee of Port Signals was appointed by the following 3 Associations:-

- (i) The International Association of Lighthouse Authorities (IALA)
- (ii) The International Association of Ports and Harbors (IAPH)
- (iii) The Permanent International Association of Navigation Congresses (PIANC)

The task of the Committee is to ascertain to what extent Port Signals are common throughout the world, and if great differences exist what action is required to benefit the Mariner.

The present terms of reference for the Committees are set out in Annex 1 of this questionnaire.

Annex 2 contains extracts from the 1930 Lisbon agreement concerning maritime signals, which is the latest agreement on the subject.

The purpose of this questionnaire is to gather information concerning current practice in order to assist the committee in its task, and to see to what extent the Lisbon agreement is followed or needs amendment.

DEFINITIONS

SIGNAL: In this document the term "signal" is restricted to day and night visual signals placed, in general, upon fixed supports.

ENVIRONMENT SIGNALS: Provide the mariner with Meteorological or Hydrographic information. The Lisbon agreement defines two such types of signals and the questionnaire seeks information about these and any other Environment Signals that may be in use. The types of signal defined in the Lison agreement are:—

- (i) Signals for "warning of gale expected to affect the locality",-these signals now fall within the province of the World Meteorological Organisation (WMO) and this questionnaire seeks only general information about them.
- (ii) "Tide and depth signals",--the questionnaire is intended to elicit the kind of information provided by these signals. It also aims at arranging them in "classes" to determine where international standardisation is necessary.

MOVEMENT SIGNALS: Convey instructions to the mariner from the responsible Authority concerning the movement of Ships in a port, waterway etc. The Lisbon agreement defines four of these signals and the question-naire seeks information about these and any other movement signals that may be in use. The four signals defined in the Lisbon agreement are:—

(i) "Entrance absolutely prohibited in cases of serious emergency".

- (ii) "Entrance prohibited (in normal circumstances)".
- (iii) "Entrance and departure prohibited (in normal circumstances)".
- (iv) "Departure prohibited (in normal circumstances)".

THE QUESTIONNAIRE

This document covers the following port or ports (if more than one is covered, please indicate under each question the port to which the answer applies).

PORT(S) OF _____

PART ONE ENVIRONMENTAL SIGNALS

1.1. Meteorological information Lisbon agreement Chapter 1

1.1.1. Is a visual signal		YES	NO
(a) Necessary?			
(b) Useful?			
(c) Not useful?			
1.1.2. Do you use a visual signal?			
1.1.3. Do you think that the day signa	l shoul	d comj	prise :
(a) Only marks?			
(b) Only fixed lights?			
(c) Only rhythmic lights?			
(d) One or another depending upon local circumstances?			
1.1.4. Do your signals conform fully w the Lisbon agreement?	rith tho	ose in □	
If not, please describe your signals?			
1.2. Tide and depth signals (Lisbon agreen	nent Cł	napter	2)
1.2.1. Is a visual signal			

(a) Necessary?

PORTS and HARBORS-OCTOBER 1977 11

 \Box

(b) Useful?	YES	NO	what rules are followed:		
(c) Not useful?			case of serious emergency"	/ES	
1.2.2. Do you use a visual signal?			Do you use such a signal? If it differs by day or by night from that provided by the Lisbon agreement, please		
1.2.3. Do you think that the day signal shou	ld		describe:		
comprise: (a) Only marks? □			If you do not use such a signal, do you think one may be needed in the future?		
			Do you supplement this signal with additional		_
(b) Only fixed lights?			signals—e.g. nature of the emergency? 2.2.2. "Entrance prohibited (under normal circumstances)"		
(c) Only rhythmic lights?			Do you use such a signal? If it differs by day or by night from that provided by the Lisbon agreement, please		
(d) One or another depending upon local circumstances? □			describe: If you do not use such a signal, do you think	_	_
1.2.4. Do your signals conform fully with			one may be needed in the future? Do you supplement this signal with		
those in the Lisbon agreement?			additional signals?		
If not, please describe your signals:			If the answer to the last question is YES, please describe these signals and the		
1.3. Other Signals			transmitted messages.		
Do you have, or need other signals concerning environmental conditions, which are not dealt with in 1.1. and 1.2.?			2.2.3. "Departure prohibited (under normal circumstances)"		
If your answer is YES, please describe those which are in use, and how many you have:	~		If it differs by day or by night from that provided by the Lisbon agreement, please		
PART TWO			describe: If you do not use such a signal, do you		
			II you do not use such a signal, do you		
MOVEMENT SIGNALS			think one may be needed in the future?		
	YES	NO	think one may be needed in the future? Do you supplement this signal with		
2.1. Preliminary 2.1.1. Day Signals			think one may be needed in the future? Do you supplement this signal with additional signals?		
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(a) Necessary?		YES	NO
(b) Useful?			
(c) Not useful?			
Do you already use such a signal? If your answer is YES, please describe (day and night)	:		
2.3.2. Entrance prohibited for a short p Do you think such a signal is	eriod	of tim	e
(a) Necessary?			
(b) Useful?			
(c) Not useful?			
Do you already use such a signal?			
If your answer is YES, please describe	them		
2.3.3. Entrance prohibited for a long per Do you think such a signal is(a) Necessary?	riod o	f time	;
(b) Useful?			
(c) Not useful?			
Do you already use such a signal?			
If your answer is YES, please describe	them:		
2.3.4. Locks and opening of bridges in p Inland Waterways	ports a	nd	
Do you use signals for locks? If your answer is YES, please describe	them:		
Do you use signals for opening of brid If your answer is YES, please describe			
2.3.5. Movement signals miscellaneous Do you have, or need, signals for the regulation of ships' movements which belong to the above categories?			
If your answer is YES, please describe	them:		

Note :

Terms of Reference of the Joint IALA/IAPH/PIANC Committee

- 1. Determine how Part 1 (Agreement concerning Maritime Signals) of the "Conference for the Unification of Buoyage and the Lighting of Coasts, Lisbon, October 1930" is currently employed.
- 2. Review this Agreement where necessary since it may be inadequate in the light of new technology. Noting in

particular:

- a) That in many cases lights are preferred for day signals rather than the signals detailed in the Lisbon Agreement;
- b) That the Lisbon Agreement did not provide for the marking of multiple port entrances or multiple dock entrances;
- c) That the gale warning signals provided under the Lisbon Agreement may be inadequate to meet present day requirements.
- 3. To examine the need for harmonization between the movement signals used in coastal waters, in ports and in inland waterways (1).
- 4. To submit proposals to deal with the above matters.
- (1) There is a European system of inland waterways port movement signals (Resolution n° 1 of the Working Party on Inland Water Transport, Inland Transport Committee of the Economic Commission for Europe of the United Nations).

AAPA's 66th Annual Convention in Mexico City

AAPA (American Association of Port Authorities, Washington, D.C.: President: Mr. Thomas T. Soules, Port Director of San Francisco Port Commission) will hold its 66th annual convention from October 24 (Mon.) to October 27 (Thu.) at Maria Isabel-Sheraton Hotel, Mexico City, under the convention theme of "Puertos Amigos".

According to information, Gen. Robert E. Mathe of Inter-American Development Bank, which had sponsored the earlier OAS/AAPA "Puertos Amigos" program, Ing. Jorge Diaz Serrano, Managing Director of Petroleos Mexicanos, and Mr. Conrad H.C. Everhard, President of Dart Containerline, Inc., will deliver keynote speeches.

In addition to many of IAPH members in the area, it is expected that Mr. G.W. Altvater, President, Mr. A.S. Mayne, 1st Vice-President and Mr. Anthony J. Tozzoli, 3rd Vice-President will attend the Convention. (rin)

Fiji Hosts 1977 South Pacific Ports Conference

Mr. Loh Heng-Kee, Director-General, Ports Authority of Fiji sent a letter to Secretary General Dr. Sato inviting IAPH members to the 1977 South Pacific Ports Conference which is scheduled late November, 1977.

Mr. Loh says that "while all IAPH members are quite welcome to attend a pre-conference event of a two-day Container Seminar, this program is mainly for local participation". It is requested therefore to indicate in your application whether you will attend both the Container Seminar and Ports Conference. Information about accompanying ladies will also assist the Organizing Committee in planning the programs.

The tentative program of the conference as provided by Mr. Loh on 16th August, 1977 is reproduced hereunder in the hope that as many IAPH members as possible may find it possible to attend the Conference in Fiji. (TKD)

Further information on the conference will be available from: Ports Authority of Fiji

GPO Box 780 Suva, Fiji Cable: PAFIJI SUVA

(Continued on next page bottom)

Pre-opened New Tokyo International Airport Visited by Mr. Altvater

During their recent 3-day stay in Tokyo, Mr. George W. Altvater, IAPH President and Executive Director of Houston Authority, and Mr. Fentress Bracewell, Chairman of the Port Commission visited the pre-opened New Tokyo International Airport lying about 60 km north-east of Tokyo.

The airport, according to New Tokyo International Airport Authority, is nearly three times the size of the present Tokyo International Airport at Haneda, comprising 4,000 m, 2,500 m and 3,200 m runways with a passenger handling capacity at the first stage of 5,400,000 and at its best of 16,000,000 per year. This huge terminal which began its construction in 1969 is now fully prepared to function as a new sky gate to the world's most congested city of Tokyo inhabited by 12 million people, only waiting for "go" sign of the government.

Mr. Altvater and Mr. Bracewell accompanied by his law school student son were guests of Mr. Toru Akiyama, Secretary General Emeritus of IAPH, at his farm villa near the New Airport after their observation tour on Sunday, September 11th, 1977, who arranged the airport visit tour for the guests from Houston. (See photos on next page.) (TKD)

(Continued from page 13)

PORTS AUTHORITY OF FIJI Tentative Programme Outline PAF FIRST CONTAINER SEMINAR

- 1. Date: 28 and 29 November, 1977 (to be confirmed)
- 2. Venue: SPEC Conference Hall (to be confirmed)
- Suva, Fiji
- 3. Papers: (e.g.)
 - (a) Fiji Enters the Container Age
 - (b) Shipowners and Containerisation
 - (c) Why Containerise
 - (d) Container Operations in a Port
 - (e) Labour Reactions to Mechanisation in Port Operations
 - (f) Layout of a Container Terminal
 - (g) Some Financial Considerations on Container Operations
 - (h) Container Haulage
- 4. Panel Discussions:
- 5. Inspection Tours:
- 6. Receptions:

PAF and Sponsors

- 7. Participants:
 - Fiji Business Community, Chambers of Commerce,
 - Shipping firms, truckers, Customs/
 - Transport Departments and others.
 - Overseas Port/Marine delegates attending
 - South Pacific Ports Conference.
- 8. Registration Fee:

\$20 per participant (luncheons, transport to wharf, etc).

PORTS AUTHORITY OF FIJI Tentative Programme Outline SOUTH PACIFIC PORTS CONFERENCE

- 1. Theme: Ports Co-operation Towards Regional Understanding.
- 2. Date: 30 November to 1 December 1977
- 14 PORTS and HARBORS-OCTOBER 1977

(to be confirmed)

3. Venue: SPEC Conference Hall (to be confirmed) Suva, Fiji

4. Papers: (e.g.)

- (a) The Role of Ports in Economic Development
- (b) Labour Management in Ports
- (c) Berth Occupancy and Ship Turn-round Time
- (d) Pacific Forum Line-Its Objects and Operations
- (e) Port Administration in South Pacific Countries
- (f) Shipping Economics
- (g) The Role of SPEC in Regional Co-operation
- (h) Training of Sea-going Personnel, Pilots
- and Port Operators.(i) Navigational Aids in Ports
- (j) Introduction to Port Management
 - Accounting
- (k) Port Statistics
- 5. Talkback Panel:
 - First Day
 - Second Day
- 6. Orientation Visits:
 - Ports of Suva and Lautoka
- 7. Inspection Tours: Ships working in Port
 - Inland Freight Stations
- 8. Films: "Gateways"—also other port/shipping films, if available.
- 9. Receptions:
 - PAF and Sponsors
- 10. Ladies Programme:
 - Sightseeing and other Tours
 - (a) Ladies Only
 - (b) Ladies & Delegates
- 11. Participants:

South Pacific Ports and Marine Departments Representatives.

12. Registration Fee:

\$50 per delegate (luncheons, transport etc.)



Photo taken at the apron, from left Mrs. Tatsuta (Mr. Akiyama's daughter), Mr. Bradlay Bracewell, Mr. Fentress Bracewell, Mr. G.W. Altvater, Mr. Toru Akiyama, Mr. H. Kusaka, Miss K. Takeda and Mr. R. Kondoh. Other photos are courtesy of New Tokyo International Authority.



No. 1 A bird's-eye view of New Tokyo International Airport, Narita, Chiba Pref., Japan



No. 2 New Tokyo International Airport-a view of the passenger terminal building with an elevated approach road.



No. 3 New Tokyo International Airport-Satellite with the boarding bridges.



No. 4 New Tokyo International Airport-The baggage claim area.

Visitors

- Mr. Teng-Kao Chu, Vice-Minister of Ministry of Communications of the Republic of China, being accompanied by Mr. C.L. Hsu, Director of Navigation & Aviation, Mr. C.Y. Wang, Director of Engineering of the Ministry and by Mr. S.C. Fong, Vice-President of China Merchants Marine Company, visited Japan during the last week of August, and called on the offices of Directors-General of Port of Kobe on August 29 and Port of Yokohama on August 31.

He was in Japan, after visiting the Korea Maritime and Ports Authority, to explore the probable causes of damages to the container cranes of Ports of Kaohsiung and Keelung where two separate typhoons hit each of port and destroyed practically all of the container cranes. During the discussions with the port engineers he disclosed that the results of their studies would be known to port people of the world because he believed that it would help to expedite the preparedness among many ports of the world against the possible disastrous natural phenomenon, typhoon, cyclone and or hurricane.

According to an information, Thelma, the typhoon which hit Kaohsiung on July 25, alone destroyed eight container gantry cranes leaving but one crane which was then being constructed, without referring to the damages to other facilities, and caused the Port to virtually shut down the operation. It is reported that the damage to the port facilities and cranes at least amounted to 70 million dollars.

Mr. Chu has been long associated with this Association throughout his twenty years service in the development of ports and harbours of the Republic of China. Also, he has attended the recent 10th Conference in Houston.

- On September 1, Mr. Yoo-Soo Hong, Chief, Senior Economist, Economic Analysis Group of Korea Research Institute of Ship & Ocean, Seoul, Korea, visited the Head Office and was met by Dr. Sato, Secretary-General, and his staff. Mr. Hong informed that he was being assigned to study the items of comprehensive development program of shipping and shipbuilding industries of Korea, tariff structure of newly developed port of Busan and rationalization of stevedorages in Korean ports and was conducting series of studies on the corresponding situations in overseas.

Mr. Hong was on a two month study tour to Europe and scheduled to visit various ports and port related organizations in the area. He applied to a D class associate membership status and was duly approved by the Secretary-General.

- On September 8, Mr. Fred B. Crawford, General Manager of Port of Los Angeles visited the Head Office and was received by the secretary-general and his staff, during his recent trip to S. East Asia. During his stay in Tokyo, he visited Tokyo Bay Port Development Authority, Bureau of Port and Harbour of the Tokyo Metropolitan Government and Chiba Prefecture Corporation Agency to observe the port development works as well as the LNG reception facility at Chiba, in addition to various visits to the business contacts of the Port.

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Port of London Authority Chairman's Statement to Report and Accounts 1976

(The underlined parts are the key points for ease of reading and future reference, marked by Mr. Geoffrey Ennals, News Co-ordinator, External Affairs Department, Port of London Authority.)

21st June, 1977:-This is the last of six Statements which I have had the honour to make as Chairman of the Port of London Authority. The Statement is concerned with the past seventeen months but it also reflects the experiences of these six years, the knowledge of what can be done and the certainty of the difficulties that attend full achievement. I welcomed the chance given me in 1971 of trying to help in the success of a major public sector enterprise and of working with people dedicated to their duty in that enterprise. I have to admit just before I give up the Chairmanship that after a number of successes and of setbacks there is much still to be done to produce the results in service to port users, and in financial terms worthy of the people who work within the PLA.

The PLA Annual Report explains the modest but not unimportant increase in the trade of the Port of London during 1976. The total of traffic passing through the Port was, however, still below the level of 1973. As I will explain, we have taken steps to recapture some of the share of United Kingdom trade which has been lost to the Port of London in recent years. So far in 1977 the indications are that we can do that—and indeed are already winning back some traffic.

The Accounts show an improvement in the financial results from continuing operations. A loss of £4.1 million before net interest charges in 1975 has been converted into a profit of £3.9 million before net interest charges in 1976. After interest the loss of £8.36 million in 1975 has been reduced to £1.75 million in 1976. It is right to remind those who study the PLA's finances that the PLA has no interest free element in its capital, other than its rather small reserves; and a high interest charge can hide successful operating results. Once the reorganisation, to which I will refer, is seen to be effective, further consideration might well be given to some reorganisation of PLA's capital so that there may be an equity element, on which dividends will be payable when profits are sufficient. That does not mean that I am excusing the 1976 loss for that reason.

At the end of 1976 the reserves were £6.7 million lower than at the end of 1975. The balance sheet records this in a larger reduction in Reserves offset by an increase in the Stock and Loan Redemption Fund. The balance sheet also reflects the effect on the Reserves of the decision to eliminate the outstanding balance of £193,000 in respect of Discount and Expenses on Issue of Port Stock. Restructuring, including giving effect to up-to-date valuations of certain assets, has cost nearly £5 million, substantially adding to the burden of the loss on continuing operations. The provision of £20 million made last year was intended in part to cover the possibility that the Cutler Street sale would not be proceeded with, as in fact happened. The end 1976 valuation, which excluded plant and equipment, shows that operational assets in Tilbury are substantially undervalued on the books; but we have not sought to reflect this in the Accounts. Where certain assets are overvalued in the books, adjustments have been made.

Future organisation

Over the last year we have been working out, discussing, considering and consulting about a new design for running the Port of London Authority with the object of winning back a substantial part of the U.K. traffic which has been lost in the past decade or so. In this we had the advantage of the help of McKinsey & Co., but I must emphasise that their help was given, as is normal with them, only after close discussion with the top levels of management and many in other parts of the organisation. The new design has been worked out by management and approved by the Board in November last. It involves a change of attitudes and a change in organisation and working arrangements. Change of attitudes comes first: we have to cease being principally an administrative authority with responsibilities for running the Port of London, and we have to become a first-class competitive commercial undertaking offering the best port facilities and cargo-handling services. Essential administrative and other responsibilities connected with these functions will be retained and managed on the same commercial basis. Other statutory responsibilities will be fully honoured but without prejudicing the service to our customers. This important change in attitudes will greatly help all those connected with strictly port or cargo-handling activities. But to many employees who think of the PLA as an administrative authority, the change will have come as a shock. Let there be no doubt that we understand their feelings. And let there be equally no doubt that in the interests of the Port of London, not only today but even more so for the future, we have a duty to make the change.

Once the need for the change in attitudes in accepted, the need for changes in organisation follows. Those who run the two dock systems, that is the Tilbury Docks and the Upper Docks, and those who run the river with all those responsibilities, namely conservancy, navigation, etc. will have the responsibility for their functions combined with the power to meet that responsibility. There will be proper devolution from the centre which will co-ordinate and direct, but will not remove from the two Dock Directors and the River Director the responsibility for attracting the traffic and handling it. The decentralisation process which started some years ago and was symbolised by our move from the old PLA Building in Trinity Square will now be carried to its logical conclusion. At the same time there will be a measure of devolution down from the Docks Directors to Business Unit Managers who will have the responsibility for operations. This way we hope that not only customer relations will be improved because those who are handling their affairs will have responsibility and powers attributed to them, but also that industrial relations will be improved because our employees will be closer into contact with their immediate managers.

There are bound to be elements in the new organisation which will be strange and unattractive to many who have been with the PLA for a long time. Depending upon temperament and experience, change is exciting and stimulating to some and unattractive to others. But of one thing we must be clear; there is ample evidence that changes in attitudes and organisation are needed to achieve success with customers and to bring work to employees. It is my hope that the thorough work done during 1976 in working through and discussing the basis of the new design and the consultations which have followed and will continue in 1977 will have produced the right basis for the future.

The process of consultation in some parts of the organisation has been slowed down as the result of differences with some unions on matters affecting operations as well as employment conditions. With great care and understanding. Proper consultation about the new organisahave steered these differences through a number of awkward squalls so that we can now look forward to a better understanding. Proper consultation about the new organisation and working arrangements has been delayed as a result of the differences, but is now in process again. Consultation is conducted in a thorough manner in the PLA. Our purpose is to explain, to elicit opinions and reactions, and then to improve the original proposal. In this way we get understanding and acceptance as well as better decisions. A good example of the way in which consultation has worked was the Upper Docks proposals in 1976. The same thoroughness will, I know, attend the consultations on the reorganisation. But in the end, as was done with the Upper Docks, decisions have to be taken and decisions are the responsibility of management and the Board. In the whole process I am anxious to ensure that not only all who work in the PLA individually but also each of the trades unions concerned shall look at the problems of what is best for the future of the PLA together so that sectional interest can be balanced against the whole.

Surplus manpower

The PLA employs a very high proportion of the port employees in this country, and this proportion does not bear a proper relation to the amount and type of traffic we handle. We must therefore face up to the simple fact that for what we are doing, and even for what we may do if we are successful in attracting more trade, we have still too many people.

As in 1975 one of the principal reasons for the loss of £1.75 million in 1976 was the cost of carrying surplus personnel, both amongst registered dock workers and the other employees. Against the estimate that a reduction of 1,000 registered dock workers was required from the PLA during 1976, the actual reduction achieved before taking account of men reallocated by the NDLB and those previously employed by Fred Olsen was 504. Even if there is a larger amount of conventional cargo than we had hitherto expected moving through London in 1977, there is still a debilitating surplus, now entirely in the medically restricted categories which before the introduction of the new NDLB voluntary severance scheme for these categories was costing the PLA about £50,000 a week. In the case of the voluntary severance of registered dock workers, the NDLB arrange the finance and the PLA with other port employers fund this finance over a period of years through the NDLB levy. I continue to regard the release of surplus people both RDWs and others as essential to the survival of the PLA as an autonomous trust port, and therefore as an absolute essential before the PLA can be seen to be on a recovery course. The existence of surpluses is bad for

morale generally. It is also a sign that the National Dock Labour Scheme is not working properly; but as I have said in previous Statements, it is not proof that the National Dock Labour Scheme should be scrapped. After some months of discussion and negotiation, the NDLB raised the national maximum severance payment to £7,000, which is £1,750 higher than the severance payment under the normal scheme. We strongly supported this increase, especially to deal with the problem of the men in medically restricted categories. I very much hope that it will be successful in persuading the men in these categories for whom there is no opportunity of suitable employment in port work in London at present and for whom there will never be an opportunity for full employment in port work, to take this substantial grant to help them resettle. I have long wanted to see help given towards resettlement in other suitable work to those men who are unhappily prevented on medical grounds from being able to do the full work of a docker. Where we have such work in the Port of London, for example the work of the tally clerks, we are helping by offering suitable jobs; but the numbers are small in relation to the total surplus. Taken over a period of some ten years or so, PLA's finances will be greatly helped by the elimination of the cost of people who in the nature of things cannot contribute to revenue. Indeed, PLA cannot be properly profitable until that.

The same reasoning applies to the encouragement of voluntary severance of surplus staff. I explained last year that PLA in effect recover the cost of voluntary severance payments in something just over three years. I can best explain the effect of surplus staff by giving an example: the retention on the PLA's payroll of 500 people in the staff for whom there is no proper requirement, costs PLA something around $\pounds 2\frac{1}{2}$ million a year on the payroll, more in premises and associated costs, and more too because of the impracticability of getting a slim and efficient organisation whilst surplus people are still in post. The full extent of the surplus in staff cannot be quantified until the details of the new organisation have been worked out. Not as much progress has been made in 1976 or even up to date in 1977 as I would have wished in streamlining the staff of the PLA so as both to reduce the overhead costs of running our business and to increase our efficiency. The voluntary severance scheme which has been in operation in the PLA for nearly ten years requires a large cash outflow at the time of severance, and also the agreement to individual severances not only of the individual concerned, but of the unions. At the time of writing there are over 700 individual applications for severance but it will not be possible to identify those posts surplus to requirements until the decisions on organisation and working arrangements are taken and then agreement about their release will have to be reached with the unions. That, however, is not the only cause of delay. Though the cash position of the PLA improved in 1976, resources are not sufficient without special financing arrangements for a large number of severances. A loan of £15 million has been arranged for severance and general financing and I refer to this later.

I have given assurances to the Secretary of State that the PLA Board and management will play their proper part in securing a correct balance between staff and dock workers on the one hand and the level of trade and work on offer on the other hand. The problem generally is well understood in the PLA where people have seen total registered dock worker employment in the Port of London reduced from some 24,000 in 1967 to about 8,800 in 1977. They have also watched the reduction of trade and traffic coming through the Port of London during those ten years. In the next ten years we intend to capture more trade year by year, both in absolute tonnage and in the share of the UK trade. But as technological changes take place, and as efficiency increases, we do not expect to have to increase our labour force accordingly. Once, however, we have completed steps necessary to get our total labour force, registered and staff and others, down to the level set by really efficient organisation and productivity, I see no reason to expect further large severances.

Financial implications

As I have already indicated, the implementation of the plans for reduction of surplus personnel requires financial support—so too does our basic reorganisation plan with its positive attack on the cargo market. With the aid of an independent examination by Price Waterhouse on behalf of the Secretary of State and contemporary examination by McKinsey, we have been able to confirm our own forecasts that given reasonable conditions, for example a sufficient slimming down of our organisation and freedom from industrial dispute, we could return to profitability and in due course make the proper return on the large capital which we employ.

The loan of £15 million to which I referred above, and which we have arranged with bankers in the City of London, will provide the necessary funds for the planned restructuring. The Secretary of State has given his formal consent to the loan and the bankers are aware that Government powers stand behind the PLA in its obligation to repay. Government consent was only given—rightly in my view—after the Secretary of State had received my assurances concerning the reduction of surplus personnel and the improvement of our efficiency through the reorganisation plan, of the broad outlines of which I informed him. £5 million of the loan is being drawn at once, and the remainder will be drawn as required in accordance with the loan conditions.

It is important that all employees of the PLA should understand that proper profitability must be achieved in the next few years in order to enable the money the PLA has borrowed from the public and from bankers to be repaid at due date. If this is to be done, and the port's services are to be improved and kept in good condition, proper profit should be earned, which also means that costs must be reduced. If it were not thought that the PLA could earn a proper profit in the future, the borrowing would not have been negotiated and the loan would not have been given.

In present circumstances where assets are accounted for on historic values, our very lowest prifit target should be a return of around 15% on the capital we employ, namely a return of about £15 million before interest on capital loans. That is a low target: for once we move to depreciation of assets on replacement values we shall need much higher margins. The arrangements for the new Northfleet Hope complex aim to produce a proper return and I have no doubt that will be done. But in different circumstances with different arragnements, we do not make yet a proper return on the very high capital equipment which we have in the multi-user container berths in Tilbury; and this, despite the fact that the main assets there were installed and paid for in or before 1970. There are other expamples of quite efficient equipment not being efficiently used. In order to get a better return, we have in recent years concentrated on higher charges. In times of inflation there has to be some increase in charges. Our present intention is to moderate such increases in the future and to pitch them in such a way that we increase our competitiveness. In short, if we are not producing the right return on the capital we employ, we must seek further to cut costs and improve efficiency rather than rely on an increase in charges.

Indeed we have already started to implement this policy. And I am happy to say that management efforts to compete more aggressively for traffic including quite extensive travelling overseas by the Managing Director and other colleagues have already begun to show results.

For the future I remain of the opinion that the Port of London Authority will need facilities in the estuary, and Maplin is far the best that anyone has thought about, with a constantly modernised Tilbury.

Upriver, the enclosed docks certainly have some years to run, and riverside berths must always be needed. And I expect the freight traffic through London by way of the river Thames to be greater in 20 years than it is now.

I very much hope that the counties on whose shores the port is located fully understand the significance of the port to their people. It is important to them and to us that proper provision is made for development of the port in their Structure Plans. I am glad to record that PLA's relations with the authorities adjoining the tidal Thames are good.

Ports are not of importance by themselves-they are of importance to the nation as part of the nation's throughtransport systems. The efficiency of the port link in the through-transport system is an essential part of the economy of an island sea trading nation. The development of the road and rail systems on either side of the Thames has always influenced the PLA's development. And so logically there must be co-ordination of all port facilities in the Thames area and that must include the Port of Medway. I am happy to record good relations between PLA management and Board and the Port of Medway management and Board.

On 28th April 1977 "The Port" newspaper reached its tenth birthday. In my first Statement I wrote about communications within the PLA and of how fortunate we were to have "The Port" to help us with them. Its coverage and its readership have grown even wider since then. Its editorial freedom may have annoyed most of us at least once, but that freedom has enormous value no-one can doubt. The confidence I expressed in 1971 I now repeat.

I end this Statement by thanks to the Vice-Chairman, John Meyer, now happily recovered, to Sir William Rendell who acted for him when he was ill, and to all my colleagues on the Board and to all who work in the PLA. I mention in particular the Managing Director, William Bowey, who has good reason to be proud of his first year in a most exacting office.

I am very pleased that the Secretary of State has appointed to succeed me Mr. John Cuckney, a man of proven distinction in both the public and private sectors. He has my best wishes in what I know will be as enjoyable and rewarding an appointment as it will be challenging.

Aldington (Rt Hon Lord Aldington, PC, KCMG, CBE, DSO, TD, DL)

FORTH PORTS AUTHORITY (1976) Chairman's Statement on Annual Accounts

This year brought us very much better operating results than 1975, £1.489 m against £580,000. Of the £650,000 improvement in surplus after depreciation part is due to a renegotiation of our main oil agreement, the rest to higher rents, more towage and oilfield construction activity. Total tonnages handled by the main ports have recovered somewhat, but not to 1974 levels. The increase over 1975 is concentrated on oil, while dry cargo continues to drop. This trend has been evident over the past four years. However this is due more to the ending of special shipments than to a general decrease. We hope that the return of the pipe coating contracts in Leith and the new investments in Leith and Grangemouth will stabilise, and perhaps improve, tonnages in the coming years.

While our financial position is gradually strengthening, our earnings are still lower than we would like to have to give full provision for replacing our capital equipment and a good reserve for modernisation and new developments. We are managing to keep our rate increases below the general advances in prices and expect to obtain the necessary improvement in earnings by expanded activity. It is now generally understood that depreciation of capital equipment, on the basis of historic cost, is quite inadequate in present inflationary conditions. I consider that a substantial portion of our surplus will be required to augment the present depreciation provisions as our assets are replaced.

The estuary continues to draw benefit from North Sea oil and is now becoming the most important centre in the country for the oil industry. In retrospect, the progress of the industry has divided itself into three phases, exploration, development and production. The Forth was too far away from the oil exploration areas to gain significantly from the first phase, which gave opportunities to the ports further north for warehousing and oil-rig servicing. In the second phase we obtained a good share of the development activities. Those came through rig and module building installations on both sides of the Forth, pipe coating in Leith, and the increasing use of the Forth as a base by pipe laying and construction barges. The third phase, of production, has barely begun, and promises to be the most important for us. The handling of oil and gas from the Forties field at Grangemouth and export of the surplus through the new terminal at Hound Point is the first step. We are now hoping that the Shell/Esso plant to separate and process gas from the Brent field in Fife will be approved by the planning authorities and start construction within the next year, with large tonnages of refrigerated gas being exported from a new terminal at Braefoot. This will be a key investment for an expanded petrochemical industry in the east of Scotland.

The overwhelming importance of oil in our trade is shown by the fact that of 14 m tonnes of cargo handled in the ports in 1976, nearly 11 m tonnes were oil petroleum products.

In the two main ports some large items of investment will come to fruition in 1977. The new forest products terminal in Grangemouth will shortly be completed. It has been welcomed by Finnish and Swedish suppliers of pulp and paper to Scottish mills and we expect this trade to build up quite quickly. In Leith the new grain handling facilities at the Imperial Dock will be in operation by April. Their commissioning has coincided with a reduction in grain shipments through the port, mainly because of a drop in demand by Scottish distilleries. However I am confident that this investment will justify itself in the improvement of service which it provides. We have been fortunate in getting a European Regional Development Fund grant for part of the cost. The other big project in Leith is the instalment of new coal conveyors for use by the National Coal Board. We expect shipments to be low in the early years, but these should build up as the new coal fields in the Lothians are opened up.

We have a worry on the water depth approaching Grangemouth lock. It was expected when the lock was designed that after initial dredging the silt in the channel would scour away by natural river action to keep the necessary depth. This has not happened to the extent estimated and we may have to redirect the flow of the river to get the depth right. At present we are having a hydraulic model built to find the best solution.

The three Fife ports continue with their traditional activities. Methil No. 3 dock will close as planned when the Leith coal plant is ready for operation. We shall see over the next year whether there will be enough activity in the remaining docks to keep the port operating in the future.

With the increase of traffic expected in the estuary, we are investigating increased radar surveillance to monitor the inner part. This would be an extension of our Forth Navigation Service which from the lock head at Leith checks the movements of ships and provides information to minimise collision risk.

As oil shipments rise we and our customers have to be especially careful about pollution by negligence or accident. The Authority will, by arrangement with local authorities and government, co-ordinate measures to deal with any such pollution occurring in the estuary waters.

In recent years, there has been considerable political activity on the ports and docks front. With the passing of the amended Dock Bill this seems to have passed over for the present. I hope that we in the ports industry will be left for a time to devote our energies to improving our efficiency and strengthening industrial relations through the organisation which we already have.

During the year we have said goodbye to Mr. I.H. McDonald, who passed from being treasurer of Leith Dock Commission to a similar position with the Authority and had been a member of the Board since 1st September 1973. We welcome in his place Mr. C.T. Macnab as Finance Director.

I thank everyone in the Authority for their efforts during the year. Our reputation for prompt and capable service is the most important asset we have. This is maintained by the loyalty and experience of our staff.

I look forward to a year of high activity.

G.H. ELLIOT Chairman

Modern traffic guidance system to replace Rotterdam's old shore-based radar chain

rotterdam newsreel Rotterdam Europoort Delta 77/2

The die is cast: Rotterdam-leading the way as early as 20 years ago in promoting the safety of shipping with its then brand-new shorebased radar chain-is going to strengthen this position. A committee of 'wise men' has removed the last administrative obstacles to a project which is to replace the old radar chain by a completely new safety system.

Agreement between the Netherlands Government and the Municipality of Rotterdam has now cleared the way for a development project which will provide a direct link between the phenomenon of dense shipping traffic in a highly industrialised port area and the latest electronic techniques for traffic guidance.

No such link has ever existed so far because the possibilities offered by some other advanced transport techniques could not simply be applied to such a large port area as that of Rotterdam. The chief problem is posed by the enormous size of today's seagoing ships. They are moving about in an industrial area with many tower-like structures (factories, refineries, cranes, tanks, causing undesirable radar reflections).

Commissioned by the Municipality of Rotterdam, Philips-HSA (Hollandsche Signaal Apparaten, Netherlands) and Sperry Systems Management (U.S.) will jointly solve the problems. Actually, the Dutch partner has meanwhile carried out a series of experiments in one of Rotterdam's radar towers which has given promising results.

The main objective of this entirely new project envisaged by the experts of the Project Bureau set up by the Municipality and the Government, is to develop an integral traffic guidance system.

The project does not provide for a system which would keep all ships as it were on a string, nor for a poor-visibility system operating only during fog. On the contrary: it is to be a round-the-clock guarding system operating also when visibility is good. It will not interfere when everything proceeds smoothly, but it will give a warning when conflict situations are threatening.

The new system will in short be able to do far more than

the old shore-based radar chain dating from 1956, whose remuneration has undoubtedly declined somewhat in the course of years.

Therefore, the success of the plans is not only of great importance to shipping itself, but also to the population of the towns and villages on the mouth of the Rhine. For the number of ships with dangerous (explosive or harmful to the environment) cargoes has indeed increased sharply!

Step by step

Careful planning of this very complicated development project has resulted in a time table covering an initial period of five years. By 1982 the new installation should have been completed sufficiently to take over the tasks of the old shorebased radar chain. Its tasks will obviously still be limited then: the new system has far more potentialities, which are to be developed gradually after 1982. Round about 1985 but by 1987 at the latest the new installation will be operating at full capacity.

The short-term activities have been planned as follows: one year has been allotted for a preparatory stage to make various basic studies and to draw up a complete description of an experimental system, which will probably be built in the Maasvlakte area.

The construction of this experimental system will mark the start of the second stage of the project, which is sometimes called the 'system-development stage'. The experimental installation will be used for tests and experiments in permanent contact with the maritime world: pilots, radar observers, captains, shipowners, etc.

By the end of this experimental period preparations will be made for the third stage during which the definite system will be built. The time required for this cannot yet be estimated precisely but every effort will be made to take over the tasks of the old shore-based radar system by the middle of 1982.

More radar stations

The experiment in the Maasvlakte will be extremely interesting because it will show the potentialities of the

The drawing shows the distribution of the seven radar posts of the old shore radar system over the Rotterdam port region.



Provisional design for a 40-metre-high unmanned radar tower. Consideration is also being given to the construction of movable specimen. This would make it possible to carry out experiments in order to find the most suitable locations.

latest techniques. Assuming that the government and the municipal council will be prepared to keep up the pace also after the preparatory stage, two radar towers will be erected there, of which only one tower will be manned.

The introduction of unmanned radar towers is one of the novelties in the project. The new traffic guidance system will not be a typical river system such as the present shore-based radar chain. It will also cover various large and busy harbour basins.

Therefore, the new installation will comprise considerably more radar stations than the old one-but in this connection one should not think of the (seven) rather expensive buildings necessary for the old radar chain. An unmanned radar station may consist of a number of steel cylinders put on top of each other up to a height of between 20 and 40 metres, with a scanner on top of this construction. The draft plans have meanwhile been deposited with the Municipal Port Management's Nautical Affairs Department.

One of the most fascinating (and most difficult!) technical problems is transmitting the information from the unmanned radar stations to the manned radar rooms without using expensive wide-band connections or coaxial cables, as is sometimes being done elsewhere. For the new installation preference is being given to telephone cables, which are inexpensive and available everywhere. This is a technical tour de force because it necessitates (automatic) coding of the radar information. The designers hope to

Shore-based radar installation dating from 1956 still functions well but so much has changed

What exactly has prompted the Rotterdam Municipal Port Management to recommed the replacement of the old chain of shore-based radar stations? The installation was indeed put into use as far back as 1956, but it still operates reasonably well. Even the fact that vital components of it are no longer manufactured does not seriously hamper the operations.

Preventive maintenance has always been very good and moreover, a large stock of spare parts has been built up. Therefore, the Municipal Port Management's Nautical Affairs Department feels sure that the installation will continue to operate properly for many years. At least until 1985, fairly certainly beyond that date.

Why, indeed, this drastic renewal after all? The decisive factor is that the services provided by the old shore-based radar installation have become inadequate. This is not due to the installation itself. Circumstances have changed.

The shore-based radar chain was constructed at the time virtually only to assist ships on the river during periods of poor visibility. The installation has properly served this purpose. Many a time it has proved its great value in foggy weather.

However: the traffic scene has changed considerably since 1956. The number of seagoing ships increased year after year and rose in the 1970's to twice the 1956 number. The increase in the number of Rhine and inland ships was even larger—and this fact, in particular, had big consequences. Both on the river and in the large harbour basins an ever-greater intermingling of seagoing and inland vessels emerged. In both categories the average size of the ships grew rapidly, but the number of ships carrying dangerous (explosive or poisonous) cargoes also rose.

New means of navigation such as radar and VHF prompted more ships to continue sailing during fog with the assistance of the shore radar system. On several occasions this led to an overburdening of the people manning the installation: the radar observers.

Finally, to complete the list of problems: in the course of time it appeared that more favourable locations had become desirable for some of the radar stations. The growth of the harbour continued after 1956. New harbour basins were added to the scene, installations and factories were built—and in some places this inevitably led to dislocation and awkward blind spots on the screens.

The steep increase in activities in the harbours as well as the growth in the number of ships with dangerous cargoes necessitate the construction of a radar system which can do more than assisting ships when visibillity is poor. It should be available 24 hours a day in good and bad weather conditions and it should not only cover the river but also the major harbour basins. It should become the heart of a modern traffic guidance system which will not only serve the safety of shipping but also the safety of the population of the Rijnmond area.

achieve that only the most essential part of the electronic information picked up by the radar station will be transmitted to the manned centre.

Interference, i.e. unwanted reflections (which might

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even be caused by high waves) and less relevant information would thus be cut out. This technique, which has also been introduced in aviation and on the high seas under far more favourable conditions, is called video extraction.

Complete survey of Rotterdam's traffic at central post

Coding the most essential information into figures makes it possible to feed the data into a computer, which will then be able to produce an optimal final display. From the data received from various computers a complete survey of Rotterdam traffic may even by composed at a central post. This provides possibilities for a central traffic policy allowing for early (automatic!) warnings in case of dangerous situations. It facilitates efficient central action if serious accidents should still happen somewhere along the 40-kilometer-long field of operation.

The possibility to issue early warnings will appear from the following example: as soon as a large seagoing ship is about to leave one of the Botlek harbours, for instance, the pilot will be able to check whether the fairway will be free at the moment (say about ten minutes later) his ship is due to sail onto the river. And it may well be emphasised here that this does not apply only to periods of poor visibility.

A very provisional draft for the organisational set-up starts from the idea that central traffic control will be introduced for the area between East Rotterdam (Van Brienenoord Bridge) and the sea area off Hook of Holland.

The eastern area is dominated by (very busy) Rhine and inland shipping. As the river moves farther towards the west the number of seagoing ships intermingling with inland shipping increases. According to accident statistics potential danger areas are to be found at the confluence of the Oude Maas and Nieuwe Waterweg rivers and in general at locations where the large harbour basins are linked up with the river.

In addition to this central post some regional centres should be set up. Here the electronic information collected and coded by the unmanned radar station will be received. Shipping will be guarded and guided by these regional centres. The computers of the regional centres will constantly feed the main centre with information. Reversely the main centre will inform the regional centres of any extraordinary conditions in other areas whenever this is considered necessary; it will also issue warnings and make recommendations.

Broadly speaking the construction of four regional centres is being envisaged at present. One of these would cover the Hook of Holland roads and the mouth of the Nieuwe Waterweg and another one would operate in the Maasvlakte and Europoort harbour basins. The third centre would serve the Oude and Nieuwe Maas rivers where the busy Botlek harbour basins are also situated, and the fourth would cover the Waalhaven and Eemhaven area and the adjoining part of the river. The final number of regional centres will be determined at a later date.

Better equipment

In the same way as the pilots of incoming and outgoing ships are being provided with auxiliary equipment which is so much better that one may speak of an enhancement of their work, radar observers may also look forward to increased possibilities. New tasks comparable to those of the traffic controllers in aviation will make their work more interesting and create better opportunities for development. Moreover, the automation of the new system will make it possible to relieve the radar observers of activities contributing towards over-occupation during peak-hours.

The problem where the line should presently be drawn between the activities of men and equipment will be studied separately by the Institute for the Physiology of the Sense Organs at Soesterberg. This study will also cover the shape and fittings of the rooms in which the traffic controllers are to carry out their work, the shape of the consoles and the way in which the data will be projected on the screens. IWECO, a department of the TNO Delft research institute, will develop a traffic model which will make it possible to simulate all kinds of traffic situations in the experimental system for the Maasvlakte. This model will be able to simulate greater density in traffic than that actually prevailing at the time. In this way it is hoped to determine the possibilities and limitations of the videoextraction and computer systems.

Other studies of parts of the project will be carried out by the Raadgevend Bureau Berenschot consultancy (organisation and management), the Netherlands Maritime Institute (accident analyses), the State Waterways Board's Traffic Service and the Rotterdam Municipal Port Management itself (traffic census). All these studies are part of the preparatory stage for which one year has been allotted in principle.



San Francisco, Calif., 7/6/77 (Marine Exchange of the San Francisco Bay Region):-"COME, FILL THE CUP" suggested Paul A. O'Leary, retiring president of the Marine Exchange of the San Francisco Bay Region, to his just-elected successor. Arthur J. Haskell, (Left), senior vice president of Matson Navigation Co. O'Leary, executive vice president of Connell Bros. Co., Ltd., San Francisco-based, worldwide trading firm, in turn received the crystal pitcher and tray from fellow directors of the 128-year-old Golden Gate maritime service agency. Also elected were William D. Wagstaffe, traffic manager, Del Monte Corp., as 2nd vice president, and Walter Loughery, president, Williams, Dimond & Co., lst vice president. Not pictured are other new officers: Ted L. Rausch, president of Ted L. Rausch Co., 3rd vice president, and Fred J. Percy, United California Bank vice president, who was reelected treasurer. Also reelected was Robert H. Langner, as corporate secretary and executive director. New directors elected by the membership of the diversified service and promotional organization were Raymond H. Ballard, Farrell Lines, Inc.,; Herbert Bals, Bakke Steamship Corporation; Raymond C. Conroy, Bechtel Corp., Bengt Henriksen, Maersk Line Agency, and Melvin Shore, Port of Sacramento.

1977 Engineering Excellence

Soros Associates Consulting Engineers

New York, April 1, 1977:—Soros Associates received the ACEC 1977 Engineering Excellence Award for realizing a major advance in shiploading technology, with completion of the first Soros Linear Loader at Bunbury, Australia for Alcoa, Agent for Alcoa of Australia Limited.

The requirements of the shiploading installation were:

- load 2,200 TPH alumina into vessels up to 50,000 DWT.
- minimum overall capital cost.
- maximum environmental protection.
- maximum operational reliability.
- minimum number of operators.
- minimum labor for cleanup.
- maximum standardization.
- fast construction with local materials, labor and equipment.

The Linear Loader is double telescopic with a variable span pivoting bridge supporting a shuttling boom conveyor. The ship-side end of the Linear Loader bridge is mounted on a traveling turntable. At the pivot, the same type of turntable, turned upside down, allows the bridge to pivot as well as to slide, with the ship-side end of the bridge moving not in an arc, away from the side of the ship, but in a linear path next to the side of the ship.

The linear concept increases ship coverage to such an extent that one Linear Loader with simple marine foundations replaces two conventional pivoting loaders with arc rail foundations, and eliminates two cross conveyors and two transfer stations, at great saving in capital and operating costs.

The Linear Loader provides a similar capital and operating cost advantage over a traveling loader installation which requires a conveyor running the full length of the pier with a hard to seal moving transfer to the shiploader and a pier with approximately 80% more width, length, breasting dolphins and fendering than the Linear Loader pier.



Linear Loader under construction shows main bridge supported at both turntables in maximum retracted position, complete sealing of boom conveyor partially completed, dust collection units, and air conditioned operators' cab located at the end of the loading boom for maximum visibility.

The Linear Loader offers important advantages for maximum environmental protection. The material transfer to the loader is at a fixed point, thus all conveyors and transfers can be sealed and extensive dust control equipment can be conveniently and efficiently installed.

The Alcoa installation has an 1,800 mm. wide conveyor belt. The bridge span varies between 40 and 60 meters. The loading boom conveyor is 38 meters long, has a shuttling motion of 35 meters, and can support 25 tons in an extended position, as part of dust control requirements. The entire installation is completely sealed and equipped



Rear view of Linear Loader shows turntable at the pivot, fixed material transfer station completely enclosed and extensive dust collection including vacuum cleaning system.



50 ton 21 meter long prefabricated sections of the Linear Loader main bridge girders were welded and inspected at a single field welding station behind the rear turntable. As sections were added the bridge was rolled forward balancing over the rear turntable, until it reached the front turntable support.



Linear Loader with slewing bridge at maximum span and loading boom extended. Overall capital, operating and environmental costs were substantially reduced, compared to other types of loaders.

loading and trimming without boarding the vessel. The operator is protected by a dual hoist and dual brake system plus an independent boom limit support. Minimum labor is required for cleanup, as the entire installation is completely sealed and serviced by a vacuum cleaning system.

All components were purchased and fabricated with local labor in Australia and transported to the job site and erected using normal construction equipment.

The Linear Loader has met and at times exceeded the design criteria established by Alcoa. The shiploader and marine berth construction costs were approximately U.S. \$7.5 million. The capital, operating and environmental protection costs were far more favorable than other types of loading berths considered and evaluated.

Soros Associates provided complete detailed design of the Linear Loader and marine berth, and collaborated closely during all phases of the project with Alcoa, who carried out the purchasing, project and construction management.



Linear Loader in parked position. Loading boom nests inside the main bridge for maximum protection against cyclones and earthquakes. Loading spout is readily accessible for maintenance.

with three dust collecting systems, with a capacity of 15,000 cubic feet per minute. The machine was designed for cyclone and earthquake conditions and has a service weight of 1,650 tons and 910 connected horsepower. The marine foundations comprise four breasting dolphins and a 5.5 meter wide linear runway supported on steel pipe piles socketed into rock.

The Bunbury Linear Loader has backup and emergency equipment for all functions. Either mechanical or electrical failure of any shuttle, travel or hoist drive does not interrupt operations. Maximum standardization of mechanical and electrical components was achieved, with all main motors for travel, shuttle and hoist identical.

The location of the operator's cab permits complete



San Francisco, Calif., 7/19/77 (Marine Exchange of the San Francisco Bay Region):-SO FAR, SO GOOD, was the conclusion reached at a progress report session recently at U.S. Maritime Administration headquarters, Washington, D.C. Assistant Administrator for Commercial Development Marvin Pitkin received preliminary interim results from Bobert H. Langner (right), executive director of the Marine Exchange of the San Francisco Bay Region, on the joint industry-government study of merchant shipping intelligence availability at U.S. ports. The Exchange-contractors for the effort-and system engineering subcontractors, ARINC, Research Corp. of Annapolis, Md., jointly presented status report for the undertaking initiated in 1976. Following an examination of the need for and availability of ship traffic and related uniform reporting at U.S. ports, an "idealized" demand module was prepared by ARINC. Optimum response proposals were then developed, involving the best "mix" of telecommunications and EDP applications. Next step will be to translate such theoretical capabilities for improved information collection and distribution on anticipated and actual movements of vessels, into a marketable system for the maritime community. Final report is due in fall 1977.

Hawke's Bay Harbour Board, N. Z. Chairman's Review – 2 (Concluded)

Extracted from Annual Report 1975 (Port of Napier)

(Refer to the last issue p. 62.)

6. HARBOUR WORKS:

The normal maintenance programme was carried out along with a substantial capital works programme, which included the completion of:-

- 1. 244 metre extension to Higgins Wharf
- 2. 244 metre extension of the breakwater
- 3. 356 metre of wavewall on the breakwater
- Higgins Wharf building complex which includes: 11 705 m² wood pulp shed
 - 4 905 m² phosphate shed
- and workshop, amenities, offices and watchtower.
- 5. 27 900 m³ of filling for Higgins reclamation and approximately
 - 3 200 m² of sealing

6. Two rock groynes for Battery Road reclamation

and the acquisition of the plant to ensure the continued efficient handling of cargoes over our wharves, as well as plant required to enable the Board to expedite its major works programme.

With our \$1.6 m and \$3 m harbour development schemes nearing completion, application was made to the New Zealand Ports Authority for their consent to raise a loan of \$4.9 m to enable the Board to proceed with the second stage of its harbour development scheme.

- This approval is sought for the following works:-
- 1. Completion of \$3 m programme of works (\$950,000)
- 2. Completion of harbour protection programme
- 3. Dredging to provide deeper working draft
- 4. Extension to Kirkpatrick Wharf
- 5. Further reclamation and paving of reclaimed land
- 6. Additional cargo shed
- 7. Boat lift
- 8. Sewerage
- 9. New workshops, sundry plant, etc.

Higgins Wharf Extension: This 244 m extension was completed, though berth occupancy and material shortages have precluded completion of the electrical reticulation and water supply to the final requirements.

Breakwater Extension: The first extension of 244 m was completed in December 1974.

 $1,700 \text{ m}^3$ of shingle was placed by barge in the foundation mound in December 1974 to check the stability of the proposed design of the second extension of 230 m (755 ft.). Harbour model wave flume tests to prove the design were completed in August and the scheme submitted to the Marine Division of the Ministry of Transport immediately.

Breakwater Improvement: 356 m of wave wall was built and blocks for a further 44 m cast. Approximately 31,500 tonnes of rock was placed to strengthen the seaward apron of the breakwater east of Higgins shed. The combined effect of these two operations has been to greatly reduce the amount of spill during storms, allowing the breakwater drainage system to handle all spillage over the breakwater with complete safety.

Higgins Wharf Building Complex: This was completed and the workshop, amenities and offices occupied. Even though extensive sealing of the walls and roof of the phosphate shed have been done, dust is still a problem, particularly in the watchtower. Loading out of phosphate at the southern doorway of the shed also creates a nuisance when the wind is from the north and east. These problems are under investigation. A water spray system is being installed at the phosphate intake hopper to reduce dust in that area.

Container Cleaning Yard: This facility was little used, only 51 containers being cleaned during the year.

Whirinaki Beacon: The tower and equipment house for the new beacon were erected and installation of the beacon and associated equipment put in hand.

Floodlight Towers: Lighting equipment was installed on the towers erected at the steelyard and Higgins Wharf extension. Two towers are held in stock for erection on Higgins reclamation at a later date when utilisation of the area is planned in detail.

Car Parks: Additional car parks for 70 cars were formed and sealed at the steelyard (25) and adjacent to Higgins Wharf Road (45).

Higgins Reclamation: 27 900 m^3 of filling was placed to extend the reclamation northwards, about 7 500 m^3 being required for the site for the new Waterfront Industry Commission amenity building. Grading was carried out to make the area suitable for storage. 3 610 m^3 of basecourse was placed and consolidated.

Sealing carried out was approximately $1\ 000\ m^2$ adjacent to the phosphate intake and $2\ 200\ m^2$ of Higgins Road extension from the root of the wharf to the south end of the phosphate shed. A concrete block pavement was provided for phosphate lorries using a portable automatic water spray to reduce dust.

The six inch watermain was extended to the north end of the phosphate shed. The drain at the base of the breakwater was extended and strengthened.

Battery Road Reclamation: Approval was received from the Marine Division of the Ministry of Transport for the reclamation along Hardinge Road from the existing western reclamation to Battery Road to permit the shifting of the railway and oil pipe lines for widening of Hardinge Road, and also for cargo storage. The two rock groynes have been constructed using 14,500 tonnes of rock, but progress is held up pending approval of a suitable site for obtaining filling.

Kirkpatrick Reclamation: Authority was previously granted for the reclamation of 1.6 ha adjoining Kirkpatrick Wharf, but this work could not be started before 1974 as the whole of the Board's supplies of rock, shingle and fill were committed to the extension of Higgins Wharf and the reclamation behind it. Since then the project was delayed by an environmental impact report and audit for the revised major scheme for 8 ha of reclamation. Conditional approval has recently been received for the major project and work has commenced on the rock bund to enclose the fill.

Wharf Maintenance: Major fendering repairs have been carried out on Kirkpatrick, Herrick and Higgins Wharves and the fendering on Jull Wharf improved. Other repairs have been carried out as the work became necessary.

Cement Handling: With the introduction of larger ships for carrying cement, it was no longer possible for "A" Wharf to be used for discharging cement. The two cement companies constructed pipe lines under Geddis Wharf east with discharge points to suit the larger vessels.

Gatehouse, Gates and Fencing: The security fence was improved and extended, new gates provided at the main and Higgins Wharf Road entrances and a gatehouse built. The gates adjacent to the gatehouse are hydraulically operated.

New Tug "Maungatea": Subsequent to the Harbourmaster's trip overseas in late 1973 and some correspondence with other Boards, and with overseas consultants, Messrs. Eken & Doherty Pty. Ltd., Naval Architects of Sydney, Australia, were engaged to prepare documents for calling tenders for the main machinery for a tug with a bollard pull of 30 tonnes.

In February 1975 contracts were awarded to the Niigata Engineering Company Limited, Japan, for the supply of a set of two 1200 h.p. six cylinder diesel engines and z-pellar propulsion units, and to Messrs. R.A. Lister Ltd., for two 70 kw diesel generating sets. The landed cost of this equipment will owing to the recent change in the rate of exchange be approximately \$400,000.

Also in February the Bay of Plenty Harbour Board joined with this Board in engaging Messrs. Eken & Doherty Pty. Limited to design two similar tugs but with different engines. Tenders were invited from yards in the Pacific area, including New Zealand, closed on 1 September. The Minister of Trade and Industries notified that the tugs must be built in New Zealand. Therefore, on 29 September the Board resolved that a letter of intent be sent to Whangarei Engineering and Construction Limited accepting their offer in the sum of \$871,440 for the construction of the tug, such letter of intent being subject to the necessary approval being obtained with respect to the provision of the additional finance necessary.

In addition, tenders were invited for steel, ancilliary machinery, fittings and equipment to an approximate value of \$200,000 and purchase of a number of these was approved by the Board at a meeting on 28 July 1975. By ordering this and the main engines a considerable saving in time and consequent earlier delivery of the tug has been made possible.

Plant: The following additional and major items of plant have been received and put into service:—

Number	Description	Capacity	Make
1	Straddle carrier	30 tons	Clark
1	Forklift, diesel	8,000 lbs	Clark
3	Forklifts, diesel	8,000 lbs	Lees
4	Forklifts, electric	7,000 lbs	Lansing Bagnall
7	Tractors, diesel	47 H.P.	Leyland
1	Tractor, diesel	70 H.P.	Massey Ferguson
2	Tractors, diesel	50 H.P.	Fordson
2	Trucks, semi-trailer units plus 2 tipping trailer units	48 tons	Leyland
1	Truck, flat deck	1 ton	Bedford
1	Truck, flat deck	½ ton	Mazda
1	Truck, well side	½ ton	Mazda
1	Car, estate	6 cwt.	Vauxhall

Motor cycles	75 cc	Suzuki
Mobile welder	45-475 amps	Miller
Timber thicknesser	24 in.	Sicar

2 1

Soundings: Full soundings of the breakwater harbour were carried out in October 1974 and August 1975. These indicate a very minor decrease in fairway depth but some reduction in width due to build up at the sides. Portions of the inner harbour have been sounded as required.

Fairway Dredging: Negotiations are in hand for drilling, blasting and dredging the Wainui Rock which was too hard to be dredged by the "Geopotes V" in 1973–74.

Inner Harbour Dredging: Inner harbour dredging continued until April after which the Board's floating plant was employed on improvements to the fendering of Jull Wharf and repairs and extension of the slipway. Approximately $14\ 000\ m^3$ was dredged and placed by hopper barge in the Kirkpatrick and North Wharf reclamations.

In addition, $14\ 000\ m^3$ was obtained from the beach at the Sailing Club and dredged by a hired dragline from east of the slipway. This was used for extension of Higgins reclamation.

Slipway: Extension of the slipway by 15 m was put in hand to permit slipping of larger vessels and permitting its use by others at longer periods about high tide. It was found necessary to carry out extensive repairs to the lower 33 m of the existing structure. This work is still in hand.

Work for Clubs: The Nelson Quay breastwork for the Hawkes Bay Game Fishing Club was completed in October. This comprised a reinforced concrete walkway and landing spans supported on turpentine piles, and further fendering. The Club will restore the embankment. A scheme for building of a new clubhouse on Nelson Quay and general improvement of facilities was discussed and agreed to in principle.

Of the inner harbour dredging referred to above, approximately $10\ 000\ m^3$ was from the Scapa Flow area and will improve the sea access and mooring area. Also the 5 800 m³ removed from the beach will allow provision of better facilities for small craft.

7. ENDOWMENT LANDS:

a. Land Sales-Residential: The passing of the Napier Harbour Board Empowering Act 1974, which enables the Board to sell endowment lands leased for residential use under certain conditions, and to use the proceeds from such sale for purchase and development of other endowment lands, did not bring the response expected. other endowment lands, did not bring the response expected.

However, to 30 September 1975 the following position indicates the interest in freeholding residential leasehold lands of the Board:—

Applications			37
Proceeded with	•••••	•••••	14
Under Action	•••••	•••••	10
Total value		•••••	\$93,535

The Board has been discussing with the territorial local authorities in the area possible land development schemes which could be of mutual interest.

Land acquisitioned by the State. The Board continues with its negotiations in an effort to obtain a fair value for land acquired by the State for schools, motorway and housing.

b. Industrial Land Development: Plans for the develop-

ment of part of the farm area set aside for industrial use are progressing slowly.

During the year the following transactions in industrial and commercial leasehold land were completed:-

		Onekawa	Ahuriri
Transfers		17	12
Lease renewals	•••••	7	9 [·]
New leases	•••••	12	8
		2.3786 ha	11.7651 ha

c. Residential Land Development: Tenders have just been called for leasing sections in the final block of residential land developed by the Board in conjunction with the Napier City Council.

During the year the following transactions in residential leasehold lands were completed:—

Transfers		÷		 215
Lease renev	vals		•••••	 67
New leases	•••••		•••••	 114

d. Ahuriri Lagoon Farm: The area of the farm was still further reduced to permit the development of land for housing and industrial use. The Farm Committee, under its convenor Mr. R.A. Nimon, has been very active with several inspections made. The Farm Manager Mr. J.R. Arnold and his staff are to be congratulated on the high standard of farming achieved which is making a worthwhile contribution to the revenues of the Board.

8. NEW DIRECTION FOR NEW ZEALAND TRANSPORT:

During the year this consultative document was distributed and interested parties invited to make submissions on its contents to a special Government committee, which had been appointed to evaluate proposals put to it by interested parties. Mr. G.E. Isbey chaired this committee. The document was extremely contentious and one of the proposals was to establish a central maritime commission to administer ports.

The Board made submissions to the special Government committee opposing the proposals in the "Green Paper", as the consultative document became known. As a result of the general opposition to the changes proposed, the special Government committee in an interim report stated:

"The Government does not believe that a maritime commission should be established at this stage in the country's development. It favours the concept of strengthened Government planning and control over the development of New Zealand's port facilities rather than direct central Government administration of all ports".

9. CENTENARY OF THE BOARD'S CONSTITUTION:

To commemorate the centenary of the Board's constitution and its change in name, the Board was host to the 42nd annual conference of the Harbours Association of New Zealand. All members and their wives participated in making this a most successful conference socially, while on the business side, members who were able to attend the conference sessions were able to participate in the important business of the conference and to meet members of Harbour Boards from all ports in New Zealand and discuss problems arising from the growing complexity of port administration.

At the Harbours Association conference I was pleased to be elected a member of the Executive Committee of the

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Harbours Association of New Zealand, which I consider a tribute to the good standing of this Board.

10. OVERSEAS CONFERENCES:

During the year under review, along with our Chief Executive Officer, I was priviliged to attend the 24th biennial conference of the Australian Association of Ports and Marine Authorities at Perth and later to participate in the 9th conference of the International Association of Ports and Harbors at Singapore. Both conferences we found of immense value, as were the visits to other ports en route to and from these conferences. The important nature of the business conducted and the useful contacts made will be of lasting value to the Board in the future.

11. OBITUARY

Mr. Luther Stephenson, a member of the Board for $13\frac{1}{2}$ years from 1930 to 1944.

Mr. E.G.J. Rattray, served with the Board for 12 years as Waterman.

12. STAFF:

The total number of staff at 30 September 1975 was 191 compared with 187 at 1 October 1974. The total wages paid during the year was \$1,411,038. 17 left the Board's employment and 21 commenced work with the Board during the year.

Mr. T. Lavea of Western Samoa undertook a month's harbour pilot training at Napier through the auspices of the Ministry of Foreign Affairs.

13. BOARD MEMBERSHIP:

The triennial elections for the Board were held on 12 October 1974. The only change that took place resulted from Mr. E.M. Nelson, a member of the Board for 21 years and convenor of the Farm Committee for 9 years, not seeking re-election. He was replaced on the Board by Mr. F.N. Horrocks, a leading orchardist in the district.

For his services to the community, a member of the Board was awarded the K.B.E. Sir Peter Tait, we place on record our congratulation on such a high honour by Her Majesty the Queen.

14. APPRECIATION:

Besides discussions on a number of matters with the New Zealand Ports Authority, we had useful discussions with Government Departments and with other Local Authorities and received from them every co-operation.

I record on your behalf the Board's appreciation of the assistance relating to the welfare of the port given by our district Members of Parliament, the Napier City Council, the New Zealand Ports Authority, the Marine Division of the Ministry of Transport and the Harbours Association of New Zealand. In addition, I record appreciation for the services rendered by the Press, Radio and Television in their coverage of our meetings and of matters of public interest at the Port of Napier.

15. CONCLUSION

Once again I extend my sincere thanks to all Members of the Board for the time they have given to the Board's affairs, and for their full co-operation during a particularly busy year. In particular I thank the Deputy Chairman Mr. L.J.R. Tucker for his assistance and the Chairman of the Farm Committee Mr. R.A. Nimon, for the additional time he has given all matters pertaining to the operation and development of the farm property which is such an important part of our Ahuriri Lagoon endowment.

To the Chief Executive Officer, Chief Engineer, Harbourmaster and to the staff as a whole, I express my appreciation for the loyal and efficient manner in which they have carried out their various duties during a difficult and busy year.

Conditions are changing so rapidly in all our fields of activity and this adds pressure in no small degree on our officers.

That they have met these changes in a satisfactory manner is added proof that the Board is well served by its officers.

> E.R. SPRIGGS, Chairman

Centennial 1875–1975

A few notes on the history of the Port over the years are included to acknowledge Centennial Year.

1875

Following special legislation setting up endowments for a Harbour Board, an Act to constitute a Harbour Board for the Port of Napier was passed by Parliament, this being the "Napier Harbour Board Act 1875".

Prior to this date the Port of Napier had been in use from early in the nineteenth century with Whalers being prominent among the Port Traders.

The first amenities such as moorings and landing steps were provided by private enterprise but subsequently came under Government control.

Napier was made a Custom House Port of Entry in 1855 while on 1st November 1858 the administration of the Port became the responsibility of the Hawke's Bay Provincial Council. This continued until the Harbour Board was constituted.

At the time of the Harbour Board being constituted vessels of up to 1,200 tons called at the Port.

The trade of the Port totalled approximately 28,000 tons.

Coastwise, small steamers worked the Port, such as the locally owned "Fairy" which included visits to sheep stations along the East Coast with a manifest outward of such items as livestock, flour, sugar, spirits and farming necessities, while on return she carried skins, wool and timber.

Trans Tasman vessels were on the average 200–300 tons and brought hardwood and steel for discharge at Napier.

Overseas vessels included vessels from England with new settlers. These vessels ranged in size from 892 tons to 1,200 tons. In order of arriving these were the "Clarence" bringing 350 settlers, "Hudson" with 200, "Countess of Kintare" with 186, "John Norman" with 137, "Emily McLean" with 95 and "Helen Denny" with 200 settlers. Besides personal effects these vessels brought mail, agricultural and factory equipment and basic supplies such as flour, salt, sugar and livestock to stock new farms being established.

Outward cargoes of the period were naturally based around the farming output and consisted of wool, skins, hides and small quantities of timber. From such humble beginnings, during the Harbour Boards administration of the Port, facilities have been developed to serve all types of vessels such as:

Refrigerated vessels of two categories, the established liner type such as the "Iberic" of 11,248 tons gross and speedier but smaller "Reefer" such as "Nippon Reefer" of 6,010 tons gross.

Bulk cargo vessels such as the "Valetta" of 17,003 tons gross discharging Bulk Rock Phosphate and "Ogna" of 19,147 tons gross loading Woodpulp and Sawn Timber.

Tankers are mostly coastwise of the "Kuaka" type of 16,000 tons gross handling Petroleum Products down to the "Anyuy" type of 3,500 tons gross loading Bulk Tallow.

Nationalities: Vessels using the Port facilities are of many nationalities and so today we see ships flying the flags of over 33 Nations visiting the Port during the course of the year.



Los Angeles, 8/6/77 (California Marine Affairs and Navigation Conference, San Francisco):-Two veteran builders had yet another reunion recently, following mid-year retirements. Chief harbor engineers of the "twin ports" of Los Angeles and Long Beach, respectively, L.L. Whiteneck (left) and Bob Hoffmaster, were in turn commended by the California Marine Affairs and Navigation Conference for their distinguished careers and contributions to California's trade and shipping. And-since each also served earlier as C-MANC presidents-Hoffmaster received his commendation certificate from Whiteneck, followed by a reciprocal ceremony one month later, complete with an early photograph (left) of the Los Angeles port official.

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1975



port problems in developing countries

by Bohdan Nagorski

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-Assistant Secretary General, ICHCA

IAPH Publication-

ANNOUNCING !!

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Orbiter Probe

Port System Won't Change

Nanaimo, British Columbia, Canada (August 1977, Nanaimo Harbour News):—Although the newspaper headlines said, "Ottawa seeks port order out of chaos" the new ports legislation will not significantly affect the Port of Nanaimo.

Known as the Canada Ports Act the bill will establish a single national system of ports under the planning and policy direction of the Minister of Transport.

Transport Minister Otto Lang said the objective of the bill is to achieve a "ports system that is efficient, provides equitable treatment to users and is an effective instrument of support for the achievement of economic and social objectives of the Canadian people."

Nanaimo Harbour Commissioner Frank Crane pointed out that Nanaimo had been administered by a commission since its formation in 1961 and the bill would only cause minor housekeeping changes. "We will be running pretty well as before, but it will drastically affect those ports, such as Vancouver, under the National Harbours Board," he said.

In addition to major ports about 300 public harbours and 500 government wharfs will be administered by the Canadian Ports Commissioner through decentralized regional organizations.

Regional advisory councils may also be set up to provide a forum for consultation with provincial authorities on such matters as port development.

CPHA Port Week

Toronto, Ontario, Canada, August 4, 1977 (The Canadian Port and Harbour Association):-The Canadian Port and Harbour Association has announced that it will be holding this year's Port Week from September 25 to October 1.

The week will be launched officially in Victoria, B.C., during the association's annual meeting to be held in the Empress Hotel from September 18-21.

The purpose of the week is to focus attention on Canada's ports. This year's theme is: Canada's Ports-Lifeline to Prosperity.

Unique Tug Built

Panama Canal, Balboa Heights, C.Z., June 24, 1977 (The Panama Canal Spillway):—A sleek, new, all-welded steel vessel—the first of its kind in the Western Hemisphere arrived in Cristobal harbor last week to take its place in the Marine Bureau's tug fleet.

The tug *Walker*, christened May 11 by Mrs. Patricia Parfitt, wife of the Governor, at Thunderbolt, Ga., sailed from the States on June 9, made a 1 day stopover in Port Everglades, Fla., and arrived in Canal waters on the 17th.

The tug, which is 96 feet long, has a 33-foot beam and draws 20 feet from the water line to the bottom of the propulsion unit, was specially designed for use in the Panama Canal.

The unique feature of the tug is a pair of propulsion units forward which can be rotated 360 degrees, enabling the propeller thrust to be directed in any horizontal direction. She can pull 67,000 pounds ahead and astern, and 56,000 pounds port or starboard.

On order for 2 years, the *Walker* and a sister tug, the *Burgess*, were named after the fourth and fifth governors of the Canal Zone. The *Burgess* is scheduled to be delivered to the Isthmus and placed in service in July of this year:

Built by Thunderbolt Marine Industries according to Panama Canal Company specifications, the *Walker* is an addition to the tug fleet and the *Burgess* is a replacement for an older boat. This will increase the number of tugs in the Canal inventory to 15.

The price of the two tugs was \$5 million. The purchase of this equipment is part of the Canal organization's continuing program of upgrading its watercraft to assist transiting vessels.

The design and construction of the tugs complies with the Coast Guard and the American Bureau of Shipping regulations for oceantowing service with features for heavy duty harbor service.

World Trade Center Baltimore

Baltimore, Md., August 31, 1977 (News From Maryland Port Administration):—The World Trade Center Baltimore, which opened its doors to tenants in March, will be officially dedicated on Sunday, September 25 at 1 p.m. The dedication will begin a series of Inner Harbor events revolving around Baltimore's place in world trade extending over the next eight days.

Coinciding with National Port Week, the dedication marks the grand opening of the 30-story \$22-million structure planned to serve as the focal point for world trade in Baltimore and the center of activities for the city's maritime industry. The ceremony will attract approximately 500 invited guests including top public officials and representatives of private industry.

The next event in the series of activities planned for the week will be a seminar sponsored jointly by The Johns Hopkins University and the Maryland Port Administration on "The Place of Baltimore in the World Economy." This program will be held on Monday, September 26 and is planned to attract another 500 public and private leaders throughout the state. An in-depth discussion of world trade and the role played by the port of Baltimore will highlight the meeting starting with a program at the World Trade Center Baltimore and concluding with a banquet at the Passenger Services Building at Dundalk Marine Terminal.

On Friday, September 30, the first International Port Ball will be held at the trade center. The black-tie event will celebrate National Port Week as well as the opening of the new building and is planned to become an annual event. The ball is being organized by a committee made up of members of Baltimore's business and maritime community. To top off the week's program there will be World Trade Weekend October 1 and 2. Co-sponsored by the Mayor's office and the Maryland Port Administration, the general public is invited to participate in activities in the new building and on the grounds along the shores of the Inner Harbor.

A public open-house at the trade center will extend throughout the festival, between 12 noon and 6 p.m. both Saturday and Sunday. A public art show from Odessa, Russia, Baltimore's sister city, will be on display in the building as well as a collection of photographs, "Entre Amis/Between Friends." The exhibit is a version of Canada's Bicentennial gift to the United States.

In addition, the designs of all 335 entrants in the World Trade Center Baltimore flag design contest will be exhibited along with the winning design. Another flag display featuring 26 new designs assembled as a Bicentennial display by the Smithsonian Institution will be exhibited in the lobby of the building.

Throughout the weekend observance the music of the Dunbar High School Band and the Peabody Big Band will fill the Inner Harbor. A Seafood Festival featuring a variety of famed Maryland seafood will be held in front of the trade center on both days. On Sunday at 2 p.m. there will be a World Trade Parade featuring working boats including tug boats, fire boats, launches and others sailing through the Inner Harbor.

World Trade Week will exhibit the joint efforts of the Maryland Port Administration, the Baltimore maritime industry and the city of Baltimore commemorating the opening of the World Trade Center Baltimore and the city's increasingly important role in world trade. The dedication culminates over four years of construction and many more years of planning for the World Trade Center Baltimore.

More trade in 1977

Charleston, South Carolina (South Carolina State Ports Authority):—The shipping world, in 1977, has continued beating a path to the door of better cargo-handling services at the Port of Charleston.

Through the dynamic seaport, which is gaining continually in all phases of its operations, the South Carolina State Ports Authority (SPA) today provides seaport service undreamed of a few years ago.

With steamship sailings between Charleston and ports in eight major geographic areas of world trade, SPA is constantly improving its existing services while simultaneously initiating new services requested by shippers.

Great strides are being made at Charleston in containerization, export packing of agricultural machinery and specialized heavy equipment, "major projects" shipping, heavy-lifts of up to 400 tons per unit, export grain elevator service, and handling of bulk and break-bulk cargoes.

Favorable shipper response to SPA's client-oriented service policy is evident in the latest Fiscal Year cargo tonnage figures. For example, during the 12 months ended June 30, 1977, the Ports Authority had a total cargo growth rate of 20.3 percent, handling 4,183,786 tons, as compared with 3,478,460 tons for the 1976 Fiscal Year.

Even more significant, in terms of tonnage gain, was the growth in container traffic, all of which moves through the

Port of Charleston. Container volume for the 1977 Fiscal Year totalled 1,456, 126 tons, an increase of 41.1 percent over the previous fiscal year total of 1,032,062 tons. The containerized freight movement amounts to 194,150 twenty-foot equivalent units (based upon an average of 7.5 tons per container) or 97,075 forty-foot equivalent units (based on a 15-ton standard).

SPA also had a record break-bulk tonnage gain in its cargo-handling activities of Fiscal 1977, totalling 1,526,024 tons, or 42.1 percent more than its year-earlier record of 1,073,872 tons.

The total tonnage recorded at the Port of Charleston alone, in the latest fiscal year, was 3,178,213; an increase of 26.5 percent over the previous fiscal year total of 2,512,846 tons.

The export grain elevator at North Charleston Terminal also had a record year of activity, moving 596,002 tons of grain for a 60 percent increase over its previous all-time record, in Fiscal 1976, of 372,358 tons.

Speaker at FIATA Congress

Los Angeles, Calif., August 26, 1977 (Port of Los Angeles News):-Keynote speaker before over 1,000 delegates of the 15th World Congress of FIATA on September 25 at the Los Angeles Bonaventure Hotel will be Daniel Minchew, chairman of the U.S. International Trade Commission.

The Congress, an International Federation of Freight Forwarders Associations, will draw representatives from over 100 countries to hear Mr. Minchew report on research and recommendations currently being made to the President of the United States regarding the effects of imported merchandise on the United States economy.

The International Trade Commission is interested in maintaining the the U.S. position in growing world trade and is currently engaged in studies of alleged "dumping" practices as they might affect U.S. industry.

Mr. Minchew's address will be preceded at the opening day session by an audio-visual presentation reviewing seaports, airports, and other elements of facilities for world commerce here in the United States.

The meeting runs from September 25 through 29. According to FIATA chairman Enrico Salvo in Los Angeles, this is only the second time in the history of the Congress that it has been held away from Europe. Recognition of the Southern California area as one of the great financial trade centers of the world, along with the area's great climate and scenic tourist attractions, will put the Congress registration well over the 1,000 mark, Salvo says.

Information pertaining to registration at the Los Angeles Bonaventure Hotel and for the Congress can be secured by contacting the office of the committee in Suite 550 at the World Trade Center, 350 S. Figueroa Street, Los Angeles, or by telephoning (213) 625-1977.

Chairman's Report Hamilton Harbour Commissioners

1976 Annual Report

Profile 1976 . . . Another highly successful year of operations

While tonnage was down very slightly from the 14,347,244 ton record established in 1975, it is quite possible that our record figure would have been exceeded had it not been for the unusually cold weather which plagued the Seaway system during December, creating severe navigation conditions.

The 1976 Financial Statements (Pages 4 and 5) indicate that a healthy position is being maintained—one which allows for continued Port progress and reflects the increased recognition of the Port of Hamilton as a regional port serving a very substantial segment of Southwestern Ontario and the Niagara Peninsula.

In 1976, the net excess of revenue over operating costs was \$51,343. Fixed assets stood at \$17,613,558 as of December 31st, 1976 *(\$17,973,256). Long term liabilities and loans were \$2,355,771 *(\$2,500,512). Total depreciation expense was \$779,503 *(\$733,880).

*(Bracketed figures-1975)

While the nucleus of the Port's cargo tonnage remains with the steel industries, the trend towards a greater use of our facilities by importers and exporters in general, is indeed a healthy augury of the Port's future development potential.

Environment/Pollution Control

The Commissioners recognize and accept, the broad environmental challenges and responsibilities a major port operation presents. Working actively with officials from the various government levels, every effort is now and will be made in the future to improve and protect the water quality in Hamilton Harbour and Cootes Paradise.

Numerous meetings were held throughout the year with the Ontario Ministry of the Environment relative to environmental experimentation as it pertained to Hamilton Harbour. Subjects such as disposal of dredging spoil, the Harbour Aeration Program, the Desjardins Canal, oil spills, and the clean-up of Windemere Basin were discussed. Quarterly meetings continue to be held to examine our progress. A number of significant improvements were achieved in 1976 and an accelerated program for 1977 is under consideration.

Last year the Port of Hamilton Spill Control Group took part in an oil spill clean-up training exercise "Operation Bay Run". This simulated oil spill in the Hamilton Harbour was fabricated by the Hamilton Harbour Commissioners and the Canadian Coast Guard. The "Non-Spill" was staged in order to compile a training module based on the activation of a joint response team, in the event a spill of great complexity should every occur. The Hamilton Spill Control Group has 18 members representing the firms associated with the Harbour's activities. This group is recognized as one of the best co-operative organizations of its kind in North America. All Spill Control Group projects are financed entirely by its member firms.

Throughout 1976 we also continued to work very closely with the Ontario Ministry of the Environment, Transport Canada, as well as federal, provincial and municipal government representatives along with other community agencies to relate the Port operations and to foster future growth in total community planning.

Marina Development

The growing popularity of recreational boating has made it necessary to undertake a study to provide for substantially more marina slips in the Harbour. A comprehensive engineering survey has been completed by the Department of Public Works along with our own staff, which contained several recommendations for additional marina facilities. Copies of this study have been presented to the City of Hamilton, City of Burlington, Hamilton-Wentworth Regional Conservation Authority and The Regional Municipality of Halton for their input and comments. Once locations have been determined satisfactory to all concerned parties, it is then proposed that a staged program be developed for the construction of additional marinas to accommodate the ever-expanding interest in recreational boating in the Harbour.

Harbour Activities

During 1976 over 4,200 students were taken on "Foot Tours" and over 2,000 people, mostly senior citizens and crippled or retarded children cruised the Harbour aboard the Commissioners' yacht, the "Seaport". These conducted tours continue to be an exciting way to tell the Port's story.

Our community Sailing School programmes have been enthusiastically received and have made the Harbour accessible and enjoyable to the general public. The Sailing School was founded in 1975 to offer everyone, especially young people, the opportunity to learn to sail. In 1977 the school is being expanded, and nearly 600 people in ages from 8 years to over 60 years will participate.

The School takes advantage of the pleasant waterfront setting of the Pier 8 Park, where people can relax and enjoy the pleasing blend of water, boats and land. The Sailing School serves as a resource centre for local sailing by hosting regattas, youth championships and instructors' seminars.

Encouragement of water and boating safety has always been a priority of the Commissioners, and our Safety Campaigns last year received enormous support from the communities.

Another first for the Harbour was the Sertoma Club "Victoria Day" celebration. Bay-A-Rama offered spectators lining the waterfront a dazzling display. All proceeds were donated to the Hamilton and District Crippled Children's Society. The Americas



Long Beach, Calif. (Port of Long Beach News):-MAIDEN ARRIVAL OF COLUMBUS VICTORIA The new 15,789 ton Columbus Victoria called at the Port of Long Beach recently on its maiden voyage from Germany. On hand to welcome the 529 foot German-flag containership of Columbus Lines was Port Director of Trade Development Dean Petersen, who presented the new vessel with a photograph of Southern California taken from 105 miles in space. Phil Pass, Assistant District Manager for Bakke Steamship Corporation, is shown at left with Captain Udo W. Spitz.

Management/Employee Relations

The Commissioners have been and are fortunate in having an excellent relationship with our Port's personnel. All employees have performed their duties with dedication and skill, and have become part time Public Relations experts in furthering the interests of the Port. Their efforts have made the operations of the Port successful in an area where competition is very severe.

Our Management Staff has attained a national reputation and recognition for their abilities in daily operations and planning the Port's future.

This being my final year as a Commissioner, I would like to express my sincere appreciation to Messrs. Peter Flaherty and Mowbray Alway for their valuable assistance given to me over the past three years.

Again, my special thanks to all Port employees and Port users.

Ed Tharen, Chairman Hamilton Harbour Commissioners

Election of Officers

Los Angeles, Calif., July 28, 1977 (Port of Los Angeles): —The Board of Harbor Commissioners of the City of Los Angeles, at its regular meeting of July 27, 1977, elected the following officers to serve for the ensuing term:

PRESIDENT:	Mr. Roy S. Ferkich
VICE PRESIDENT:	Mrs. Gene Kaplan

The other members of the Harbor Commission are:

Mr. Nate DiBiasi Mr. George Izumi Mr. Victor M. Carter

> Tsuyoko Ota Secretary



Long Beach, Calif., 081277 (Port of Long Beach News):-COAST GUARD COMMANDANT VISITS PORT OF LONG BEACH Admiral Owen W. Siler, Commandant of the United States Coast Guard, visited the Port of Long Beach recently, where he toured harbor facilities and was briefed on the proposed Sohio tanker terminal for North Slope Alaskan oil and other projects. The Admiral is pictured at center as he was presented with memento of the City of Long Beach by Mayor Thomas J. Clark, left, and Port plaque by Harbor Commission President Richard G. Wilson.



Long Beach, Calif., 081277 (Port of Long Beach News):-THOMAS J. THORLEY NAMED HONORARY PORT PILOT OF LONG BEACH Thomas J. Thorley, recently retired General Manager of the Port of Long Beach, has been named an Honorary Port Pilot by the Long Beach Board of Harbor Commissioners. Thorley, who had been in the top managerial post since 1969, is pictured second from left as he accepted the award from Commission President Richard G. Wilson. Newly-named General Manager James H. McJunkin and Lee Sellers, Assistant General Manager, are at right. The presentation was made during a reception for tenants and shippers held in the Grand Salon of the Queen Mary.


Long Beach, Calif., 081277 (Port of Long Beach News):-First call of the refrigerated ship Almeria Star in the Port of Long Beach to load 205,000 cartons of fresh Sunkist fruit for United Kingdom and Continental ports found Francis J. Pard, left, Executive Secretary to the Long Beach Harbor Commission, presenting aerial portrait of America's most modern port to Captain Austin Chivers, center. Ulf Edlund of Salen Shipping Agencies is at right. The Blue Star Line reefer is on long-term charter to Salen Reefer Service.



Los Angeles, Calif., 071277 (Port of Los Angeles):-This 1,000 gallon fire truck recently purchased by General American Transportation Corporation (GATX) will provide specialized extinguishing equipment immediately at the site of any fire at GATX or in Los Angeles Harbor.



Long Beach, Calif., 081277 (Port of Long Beach News):-MAIDEN ARRIVAL OF M.S. TENSHA MARU NO. 3 The 17,715 DWT M.S. Tensha Maru No. 3 entered the Port of Long Beach recently on its maiden voyage from Japan. The Japanese flag vessel unloaded approximately 15,000 short tons of steel products at the Fritz Maritime Agencies Berth 207. On hand for the welcoming ceremonies were: John Hyland, Jr. (left) representative of Toko Kaiun Kaisha, Ltd; Fritz Maritime Agency manager, Vincent Acuna; Director of Port Operations Harvey Harnagel; Captain T. Ando; Fritz Maritime, Agency representative, Mr. Katamine; Radio Operator, Mr. Suzuoki; Chief Engineer, Mr. Setoguchi, and the ship's Chief Operator, Mr. Sato.



Los Angeles, Calif., 072277 (Port of Los Angeles):-Traditional First Arrival plaque is presented by Nate DiBiasi, center, Los Angeles Harbor Commission President, to Capt. Go Jong Ryong, master of the M/S Sunny Wealth on its recent initial call at the Port of Los Angeles. Bob Ryan, right, represents General Steamship Co., agent for the Bankoku Kisen Kaisha, Ltd. vessel.

Harbor Contracts Authorized

Los Angeles, Calif., August 31, 1977 (Port of Los Angeles News):—Los Angeles Harbor construction contracts totalling \$2,642,644 were authorized today (Wed., 8/31) by the Los Angeles Board of Harbor Commissioners.

Largest of the four contracts approved by the Board, to be awarded to the Vernon Paving Co. of Cerritos, calls for the removal of certain older terminal improvements and the construction of backland improvements at Berths 231-232, Terminal Island. This project will be part of the overall, five-phase construction of the Seaside Container Complex, slated for completion by the end of 1983, and will cost \$2,471,050, with funds to be obtained from the federal



San Francisco, Calif., 7/28/77 (Marine Exchange of the San Francisco Bay Region):-DEMO DURING RED TAPE CUTTERS' 10TH BIRTHDAY-A decade of efforts devoted to reducing, simplifying and standardizing documents and procedures for world trade and shipping was observed at the recent Washington, D.C. annual meeting of the National Committee on International Trade Documentation. A highlight of the two-day event was demonstration of the Mark III network of General Electric at the company's Rockville, Md. international center. NCITD director K.H. Christiansen (right), GE vice president and international sales general manager, showed how the equipment could be applied to CARDIS (cargo data information system), long under study and development by the industry task force. Joining in presentation to over 100 annual meeting participants were R.J. Cavanaugh (left), manager of GE's information systems for international sales, NCITD CARDIS specialist Eugene Hemley, and reelected board chairman of the national committee, Robert E. Schellberg, Eastman Kodak Co. vice president. Elected to fill board vacancies were Leonard A. Back, Citibank, New York vice president; Peter J. Finnerty, vice president, Sea-Land Services, and Terrence C. McGaughev, facilitation director for Flying Tiger Line. Reelected vice chairman was Jack D. Robins, Caterpillar Tractor Co. director of traffic. James L. Van Demark, Westinghouse Electric Co. vice president and treasurer for international operations, will serve again as executive committee chairman.

government through the Public Works Employment Act of 1976.

Next largest contract will be awarded to the Buena Park firm of Huntmix, Inc. for \$152,787, to cover the cost of the Port's annual maintenance of paving in the Harbor's three districts: San Pedro, Wilmington and Terminal Island.

A 75,000 gallon water tank at the rear of Berth 155 will be removed by CCC Land Clearing and Wrecking of Los Angeles under a \$6,375 contract, while various buildings and other items will be removed from Reeves Field, Terminal Island, in a \$12,432 contract awarded to E & G Contractors, Inc. of Huntington Beach. This last project will convert a presently unused area into a revenueproducing site for storage of various cargo commodities.

Port Takes Cruise Initiative

New Orleans, La., July, 1977 (New Orleans Port Record):-New Orleans business and political leaders combined forces recently to encourage more cruise lines to

include the Port in their itineraries.

Using the Port's new passenger terminal, the International Rivercenter, as a focal point, local officials praised the city's attractions as a pre- or post-cruise port, at a briefing for cruise line representatives.

With its modern passenger facilities, planned shops, restaurants, tennis club and the new 1,200-room Hilton Hotel, the Rivercenter was described as one of the finer passenger terminals anywhere, with an already proven ability to handle vessels efficiently.

Local Officials also noted that the Rivercenter's location near the French Quarter, Rivergate exhibition center and Superdome give it an ideal location for passengers wishing to spend some time in New Orleans.

New Container Barge

New York, N.Y., June/July 1977 ("Via Port of New York-New Jeresey):--McAllister Brothers, Inc. doubled its feeder barge service between the New York-New Jersey Port and ports in New England by adding to its barge fleet a new 300-foot ocean deck barge. The barge, christened the *McAllister Transporter*, increases the coastal carrier's expanding lighterage service by 384 T.E.U.'s. According to McAllister Brothers, lighterage between the bistate port and other Atlantic coast ports is entering a new period of growth caused by the progress achieved in development of containerized shipments. The company pointed out that lighterage service of import and export containers up and down the coast effects considerable savings in port charges for the shipper.

Since the company inaugurated the once-a-week coastal feeder service for containers last year, it has experienced full bookings in handling containers from carriers in the North Atlantic trade. The additional capacity of the new barge will now enable it to offer improved service to lines participating in the Far Eastern trade.

McAllister Transporter was designed by McAllister Brothers personnel under the direction of their marine supervisor, Donald C. Hankin. The vessel, built to ABS classification A-1 Barge Ocean Service and U.S. Coast Guard requirements, is 300 feet in length and has a 72-foot beam. The 18-foot depth of its container hold can stow up to 7,358 short tons of cargo and, with a loaded draft of 14 feet, it can be easily maneuvered into the shallow berths of other East Coast ports. The vessel's strengthened deck is able to hold either a '2,000-pound-per-square foot uniformly distributed cargo or 384 T.E.U.'s.

Regular container service

Tampa, Florida, 8/77 (News from the Tampa Port Authority):—The arrival of the "COLUMBUS CANADA" on August 17 inaugurated Tampa's first regularly scheduled container service as well as the return of Tampa as a discharge port for frozen meat from Australia and New Zealand.

In 1972, Tampa was second only to the Port of New York for volume of meat imported from Australia, registering 70,000 tons for that year. Volumes have declined steadily since that time to a low of 3,400 tons in 1976. However, during 1976, 8,700 tons were received in Tampa on through bills of lading from other ports.

(Continued on next page bottom)

Barges on the Ways

Construction of unusual triple-deck barges for ARTUBAR Transport System designed, equipped and built at Port

"Via Port of New York-New Jersey" May, 1977

Design and construction of two ocean-going barges at the New York-New Jersey Port this year affirm that naval architecture and shipbuilding expertise continue to be assets of the nation's premier port as in generations past. Fitted with triple decks, the barges form the cargo-carrying half of a transport system bearing the acronym ARTUBAR (ARticulated-TUg-BARge). A design concept developed by naval architect Edwin H. Fletcher and Andul Engineering Company, ARTUBAR has been patented by Transway International Corporation, a New York-based firm that is engaged in many phases of transportation.

The design enables a barge and a tug to be coupled together by hydraulically extended pins from the hull of the tug into matching cylinder receptacles mounted in the wing wall extensions at the barge's stern. To work out the details of ARTUBAR for one of Transway's subsidiaries, Coordinated Caribbean Transport, Inc., Mr. Fletcher contracted with engineers of J.J. Henry Company, Inc., well-known naval architects with headquarters at Two World Trade Center in Lower Manhattan. J.J. Henry staff members in consultation with Mr. Fletcher, drew final designs for the first American-made ARTUBAR barge and its production was ordered.

Earlier, a protorype had completed rigorous testing in the Sea of Japan and Yellow Sea encouraging Transway to have the design refined at the New York-New Jersey Port. Construction of the barges is the responsibility of still another New York firm, Seatrain Lines, Inc., which expects the \$28.5 million project to add one million man hours to the work load at the Seatrain shipyard at the former Brooklyn Navy Yard. The building is taking place over a 16-month period, and is well along at present.

The barges will have an over-all length of 568 feet, a

Tampa's decline in this trade can be attributed in part to a 1975 ruling by the Australian Meat Board that the majority of meat exported from Australia must be shipped in containers.

The Columbus Line vessels utilized in this service are self-sustaining vessels with capacity of 400 TEUs. On this inaugural voyage, 35 containers were discharged in Tampa and 5 loaded with cargo for the return trip. New Orleans and Houston are also in the vessel's itinerary.

Columbus Line appointed Fillette, Green & Company as local agent and Lavino Shipping Company as stevedore. Stevens Shipping & Terminal Co. with offices in Jacksonville, Savannah, Charleston and Atlanta has been appointed sales agent for the Southeast and Gulf.

A reception was held onboard the "COLUMBUS CANADA" and William V. Simms, Vice Chairman of the Tampa Port Authority presented Captain H. Fischer with a plaque commemorating the inaugural voyage.

40-foot molded beam and a 24-foot maximum draught. Each barge's capacity of 165 forty-foot-long loading spaces will enable it to transport highway trailers on three continuous decks and one partial deck. Almost any other wheeled cargo including trailers with selfsustaining dieselreefer units and automobiles will also be stowable. In addition, specific areas in the bow on the main deck are designed for carrying heavy and high loads up to 100 tons on six axles and 22-feet in height.

A prime sub-contractor, also in the Port of New York and New Jersey District, is MacGregor-Comarain, Inc. Specialists of MacGregor-Comarain's design center in Cranford, New Jersey, have produced the drawings for totally automated ramps, elevators and hatch covers that will form the working parts of the ARTUBAR barges.

Especially striking is the MacGregor-operated bow visor which opens in a manner similar to the noseloading hatch of a Boeing 747 freighter. The visor is hinged to the forecastle deck and is raised by hydraulic cylinders. With bow up, a three-section, articulated bow ramp of 24 feet (clear-width) unfolds to allow access to the main deck. In its folded position, this hydraulically operated ramp houses itself within the bow of the barge and forms a water-tight bulkhead to her bow ramp.

In addition to the bow ramp, access for the loading or unloading of cargo will be provided by side hatches, two portside and one starboard. Depending on the facilities available at the port, bow and side openings can be operated simultaneously. Internal ramps and an elevator link the main deck with the other decks of the ARTUBAR barge. The hold is served by a hydraulic elevator of 45 tons capacity and a raising or lowering time of one minute. The elevator stows in the hold and its opening in the main deck is fitted with a flush, hydraulically operated cover resulting in no loss of cargo volume at either level. The car/truck flat below the main deck and outboard of the hold is served by two fixed ramps, back-to-back, providing a circular vehicular flow around the vessel's hold. Each of these ramps is fitted with a hydraulically operated cover so that no cargo volume will be lost on the main deck level. Both levels above the main deck, the upper deck and the partial spar deck, are served by fixed ramps tiered above each other. Finished with a studded surface, these ramps will have provisions for stowing additional cargo.

According to Transway, ARTUBAR is one of the safest and most economical push-barge systems designed for full-ocean operation and is a significant advancement in the efficiency and speed of tug/barge operations. The choice of the Port of New York and New Jersey as the home for final design and construction of ARTUBAR is not mere happenstance; it is indicative of the in-depth maritime services that characterizes America's foremost port. In other words, for the New York-New Jersey Port, the development and production of the ARTUBAR barges is just one more example of how shipping innovations and coordinated efforts thrive at the port recognized the world over for both its maritime know-how and leadership.

ABF's Assure Perfect Berthing & Mooring



ABF's (Air Block Fenders) are epoch-making pneumatic rubber fenders, featuring bolt installation on the quay wall, developed by Yokohama Rubber.

The low reaction force of ABF's assures less stress to quay wall and vessel, inclined berthing can be enlarged, while contact pressure performance is outstanding.

ABF's are excellent against rolling, swaying, yawing and all other forceful movements of wind and waves.

This means maximum safety and shockprotection whether berthing or mooring —with no possibility of damage to the ship hull nor berthing structure.

Several years of severe testing in Japan under adverse conditions have proven the quality and performance of this important harbor equipment.

An additional advantage is that problems inherent in solid type fenders are solved by the new ABF design.

Recommendable for following installations:

- * Wharves subject to high waves and strong wind conditions.
- * Pier-type wharves where reaction force should be lessened.
- * Wharves where usually the curved face of a ship's bow or stern is subject to contact.
- * All wharves that must provide special protection to ship hull.

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- 4/8 October 1977.
- Parc des Expositions, Bordeaux, France.
- Organised by: TECHNOEXPO, 8 rue de la Michodiére, 75002 Paris/France.

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Management Changes at the Humber Ports

London, 5 September (British Transport Docks Board): -The British Transport Docks Board have appointed Mr. John Hughes, the present Docks Manager of the port of Hull, to be Docks Manager of the South Humberside ports of Grimsby and Immingham, from 1 January 1978. Mr. Geoffrey Cullington, Managing Director of Hull & Humber Cargo Handling Company, the Docks Board stevedoring subsidiary, becomes Docks Manager at Hull from the same date.

These latest Docks Board management changes result from the vacancy created at Grimsby by the departure of Mr. Ronald Bury to become Port Director of the South Wales ports at the end of the year.

Mr. John Hughes has served the ports industry for 30 years. He became Docks Manager at Hull in January 1976 after five years as Assistant Docks Manager at the port. He began his career with the L.M.S. Railway Company in 1940, and became a port apprentice in 1957. Mr. Hughes held various posts at Garston until in 1963 he was appointed Docks Manager, Barrow and Silloth, and in 1966 he returned to Garston as Docks Manager.

Mr. Geoffrey Arthur Cullington, MC, has been Managing Director of Hull & Humber Cargo Handling Company Limited since January 1969. His career in the port of Hull began in 1937 when he started work in a local shipbrokers' office. In 1946, after war service, he entered the family stevedoring business of Hull & East Coast Stevedoring Company Limited and remained with the company until it was purchased by the Docks Board and merged into the Hull & Humber Cargo Handling Company.

Mr. Cullington is a prominent figure in port affairs and has served on various committees over the years. He is currently an Executive Committee Member of the National Association of Port Employers and of the National Joint Council for the Port Transport Industry, and Chairman of the National Joint Accident Prevention Committee. He is Chairman of the Hull and Goole Dock Labour Board; Chairman of the Hull Association of Port Labour Employers; and Joint Chairman of the Hull Joint Port Working Committee.

2nd container crane at Rouen-Quevilly

Rouen, France, 24th May 1977 ("Rouen Port" International Issue):—The second of the two container-gantries that the Port of Rouen Authority acquired for about a total 14 million francs (charged to the P.A.R. the full 100%) from the Irish firm of Liebherr Container Cranes Ltd., came into operation on Saturday the 12th March.

It was used for loading and unloading the French container-ship POITIERS belonging to the Société Navale Chargeurs Delmas-Vieljeux on the West African run. Only this second gantry was in use, the first (that came into use on the 15th September 1976) being out of use for a technical survey. The two container-gantries came into service simultaneously for the first time on the 21st April when the S.N.C.D.V. container-ship CALVADOS called.

The two P.A.R. gantries are to all intents and purposes identical, except for the second one having a longer reach (up to 32 metres) as compared to the 30-metre reach of the first.

The span of this second gantry has been slightly extended to allow, when the need arises, to deal with ships with very wide beam. This second gantry can deal with 35 tonnes at 29 metres, 29 tonnes at 30 m. 26.5 t. at 31 m. and 24 t. at 32 m. These reaches, it should be pointed out, are for beyond the quayside. And we must remind that the practical handling potential is in the order of 25 containers per hour, a figure naturally varying more or less according to whether the containers being dealt with are easily accessible in the hold of the ship or not.



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Port of Le Havre Flashes

MAY, 1977

Tahiti service

The Hamburg Sudamerikanische Dempfschiffahrts Gesellschaft, whose container vessels run monthly from Hamburg to Noumea (New Caledonia) via Bremen, Rotterdam, Antwerp, Dunkirk, Le Havre and La Pallice, has extended the service to Papeete (Tahiti). The first sailing was made by the Columbus Canada on March 1st. The agents here are the Agence Maritime Nordique.

• Bellamya calls at Havre-Antifer

The Bellamya called at the Havre-Antifer oil terminal on March 16th. She is a sister-ship of the Batillus and was the second 554,000 dwt tanker to be built for Shell Française by the Chantiers de l'Atlantique at Saint Nazaire. She carries a crew of 38 and is 414 m/1,358 ft long and 63 m/207 ft in beam, with a draught of 28.60 m/94 ft. The Bellamya called at Antifer to part-discharge 140,000 tonnes of crude for reloading onto the British tanker Lauderdale.

• The Trans-Havre container service

The Compagnie Nouvelle de Cadres is a French Railways subsidiary that was formed to promote the transport of containers by rail along the most commonly used routes. In collaboration with French Railways it has set up a special forwarding service on more than 30 different main lines, known as the Trans-Havre Container Service, the basis of which is a guarantee that large containers will be delivered ready for collection to specialist terminals within a stated time, on the following terms:

1) containers must be delivered to the departure terminus with their accompanying documents at or before a specified time.

2) at the arrival terminus, they are made available on rail at the specialist depot not later than the agreed time.

In collaboration with French Railways, the Havre branch of the CNC arranges for the grouping of export containers not only at the three big container terminals but at any point in the port. The Havre office is headed by Mr. Dehaene and is ideally sited at the Quai de l'Europe (Phone: 48.27.10/11/12 and 48.16.41/42–Telex 190.209) with sub-offices at the three container terminals (Atlantique, Europe and Bougainville quays). The Compagnie Nouvelle de Cadres welcomes enquiries about any kind of container shifting problem.

• Jean Datin becomes our U.S. representative

Jean Datin was born in Le Havre and spent nearly 30 years with a major French shipping company, holding numerous posts in Paris, San Francisco, Montreal, Martinique, Central America, New Orleans and New York, before joining the Port of Le Havre Authority in 1976.

Mr. Datin is a graduate of the University of Paris Law School and School of Political Science.

He is married and is particularly fond of sports, especially golf, swimming and jogging.

As U.S. Representative of the Port of Le Havre, he has two major tasks. The first is to make contact with shipping companies, freight forwarders and shippers in North America and act as a link between them and the port. The second is to promote the Port's 25,000 acre industrial estate and advise American companies on the prospects for potential investment there.

Mr. Datin welcomes enquiries from anyone seeking further information about the Port of Le Havre.

• Ro-Ro terminal in maximum use

On March 9th the ro-ro terminal on the Havre Ship Canal was bursting at the seams. The three berths were occupied by the Montlhéry, the Monaco and the Arnage and two barges from the Renault works at Flins were being unloaded. Another ro-ro vessel, the Tertre Rouge, was waiting in the bay for one of the berths to be vacated. Proof, if any was needed, that the terminal is doing the job it was designed for, i.e. the reception, stocking and dispatching of new cars.

JUNE, 1977

• New stuffing and stripping facilities



Though over a million tonnes of merchandise passed through the Quai de l'Atlantique container terminal in 1977, the stacking area is not large (16 ha/40 ac) and there is insufficient room for the special sheds required for the stuffing and stripping of containers. One such shed, with a surface area of $7,700 \text{ m}^2/83,000 \text{ sq}$ ft, does exist just behind the terminal, but new facilities are now needed to cope with the increase in traffic and it has been found that the most suitable site is to the north-west of the François I Lock. There will be a stacking area extending over some $20,000 \text{ m}^2/215,000 \text{ sq}$ ft and a shed with a surface of $10,000 \text{ m}^2/108,000 \text{ sq}$ ft, backed up by an office block on the quay itself. Work on the offices started in April and it is expected that the entire project will be completed before the end of the year.

(Continued on page 44)



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(Continued from page 42)

• New services



- To Nigeria

Wacro Lines regular roll-on/roll-off service between North Europe and Nigeria has been extended to Le Havre. Vessels are scheduled to call here once a fortnight, the first to arrive being the Wacro Express, which docked on April 27th. The run from Le Havre to Apapa and Lagos takes 12 days, with unloading scheduled to be completed within 48 hours at the most. The line is represented here by Worms Services Maritimes and can accept both ro-ro traffic and containers on trailers.

- To the Arabian Gulf

The United Arab Shipping Company, whose general agents in France are Herpin & Co, has inaugurated a new monthly service between Eurpoe and the Arabian Gulf. The first vessel to call at Le Havre was the Novia, which arrived in February, and the second was the Ibn-Al-Nafes, flying the Kuwaiti flag, on April 7th. The United Arab Shipping Company was set up on July 1st 1976 by the combined governments of the United Arab Emirates, Bahrein, Irak, Qatar, Kuwait and Saudi Arabia.

• 3rd container terminal in service



The spectacular increase in container traffic passing through Le Havre made it essential to open a third terminal, and 350 m/1,150 ft of quayage is now operational in the

new Ocean Dock, where 700 m/2,300 ft of quay has been built on the eastern side. The first vessel to tie up there was the Belgian containership Mercator, which docked on April 24th, just two days after the berth was opened. The agents were the Cie Maritime des Chargeurs Réunis.



It was an event of very real importance, as it marked the opening to traffic of a new facility that is crucial for the future of the port. The Mercator was built by the Constructions Navales et Industrielles de la Méditerranée jointly for the Compagnie Maritime Belge and Ahlers, grouped together into the Belgian Far Eastern Line, which in conjunction with the Compagnie Maritime des Chargeurs Réunis is part of the Services Franco-Belges, one of the partners in the ACE group, whose vessels operate a container service between North Europe and the Far East.

The construction of the back-up area at the Ocean Dock required no less than 180,000 tonnes of road building materials, for a total surface area of 32 ha/79 ac, of which 20 ha/49 ac form the stacking area. This is roughly equivalent to 40 km, or 25 miles, of major two-lane highway.

The new terminal, with its 32 ha/79 ac of back-up area, 3 gantry cranes capable of lifting 40 tonne loads, and a 15,000 m²/161,000 sq ft shed, will add considerably to the port's reception facilities and reinforce its already privileged position among European ports for this type of traffic.

Giant Cranes at Cape Town

Alameda, Calif., August 26, 1977 (Paceco News):-Two of three new 35 Metric Ton Transtainer cranes for South Africa Railways are pictured at Port Elizabeth, Cape Town, South Africa. The giant rail mounted container handling cranes were built by Dorman Long Vanderbijl Corp., Ltd., a licensee of Paceco, Inc., A subsidiary of Fruehauf Corporation, Alameda, California, U.S.A.

The Paceco Transtainers have a span of 258 ft. including cantilever outreach of 44 ft. 3 in. Container stacking capability is one over five high. 200° rotation of the trolley and operator's cab permits fast and easy spotting of containers in any direction.

These Paceco Transtainers will be a major factor in the integrated handling system—coordinating railway service and ocean traffic. The Cape Town public container handling facility will be operated by South African Rail-

multi-purpose and permanent

The multi-purpose and "round the clock and year" activities are some of the assets symbolized by the new P.R.-emblem, stressing the fact that the Antwerp service to port users **at all times** meets all requirements of international trade and transport.



Information: General Management of the Port, Town Hall, Antwerp, Belgium.

ways. The Transtainer cranes were fabricated at the Dorman Long facility in Durban.

5



Paceco Transtainers at Cape Town, Africa-built by license, Dorman Long.

Bremen News

Bremen International

• World's First Port Information and Documentation System

Bremen, 27.6.77 (BremIn). The Bremen/Bremerhaven port-group is known for its lead position in modern transportation systems (containers, lash, ro-ro), in the direction and organisation of just as fast, as frictionless, port operations and in superlative personnel-training (portspecialist school). Not for nothing do ever more port managements and maritime-traffic economic undertakings collect their necessary know-how in Bremen. This Atlantic European coast-located port-group has, now, put into operation the world's first port information and documentation system. On June 3rd Hans Matthöfer, the West-German Federal Minister for Research and Technology started the first phased Export I/II program which already encompasses an extensive proficiency-package for the forwarding and cargo-handling spheres, whereby approx 30 forwarding and 19 cargo-handling firms, as well as the customs and harbour authorities, have been initiated during 1977. By the end of this year some 120 screens and 70 printers will have direct post-office links to the individual computers. In 1978 system-solutions will be available also for the induction spheres of import, ship-unit integration, and service-schedule programs etc. Incisive advantages are: the unique tabulation of all data at the point of origin (signifying the end of bumf in the ports), less time and

money expenditure, fewer errors, continual accessibility for supplementing and updating data, instant data duplication and distribution, augmentation of quality in portadministration efficiency and, above all, steadfast transparency of port proceedings. Minister Matthöfer: "Maximum use of port facilities can only be assured by installing modern systems of information-processing". Bremen Lagerhaus-Gesellschaft (port operating company) boardchairman, Gerhard Beier: "Thereby the seaport economy achieves the so fundamental transparency". Senator Oswald Brinkmann: "Bremen always acts and reacts just a shade quicker in the market than does the competition"; whilst Dr. Preisl, chairman of Messrs. Siemens AG declared, during the handling-over of the Siemens 7,738 data-processing plant: "Data-processing will not only infiltrate into the whole of the economy, but will also positively concern all phases of life". Also not least, it contributes to the humanizing of the work sphere. Incidentally Siemens also installed the Integrated Transport-Control System of the Federal German Railways. That system stores, among other matters, information for train-personnel employment and for the administration of the parks, with their 375,000 waggons and 8,000 locomotives; all of which information is being constantly adapted and being made available for directing operations. The pioneer spirit shown by over 100 undertakings in the Bremen port economy was praised by Preisl, for participating in this joint-project which, it is hoped, will be 'constructively emulated'. Siemens are prepared to cooperate everywhere. The total cost of the Bremen port data-bank is given as some DM 14 millions, with the annual operational costs as being DM 2.5 millions.

• General-Cargo Handling Increased 50 Percent in 10 Years

Bremen/Bremerhaven, 27.6.77 (BremIn). According to Bremen Senator for Ports, Oswald Brinkmann, generalcargo handling increased in the Bremen/Bremerhaven portgroup by 50% over the past 10 years; in Rotterdam by 36%; and in Hamburg by 22%. According to Brinkmann, the high increase rates of the other ports are due "primarily to bulk commodities, with oil-handling being again a case in point. In this field the Bremen ports neither could nor would participate". In the last 10 years Bremen's bulk-commodity handling increased by 20%. Latest developments confirmed this trend. In the period January/April of 1977 generalcargo increased over January/April 1976 by 20.3%, bulk commodities by only 0.2%. Against this is the marked container-handling increase-in the 1st quarter of 1977 it was 49.1% over that of the 1st quarter of 1976. The degree of containerisation, compared with the total general-cargo is now 31.5%.

• First-Half 1977: New Container Record

Bremerhaven, 29.8.77 (BremIn). Even though 1976 produced new record results for the Bremerhaven/Bremen port-group (with 466,360 containers/3.7 million tons cargo), there are even better indications for the first-half of 1977; for 1976's first-half was somewhat 'weak',—having an increase-rate, for 2.232 mill. tons, of 33.8%. Furthermore the current strong tendency has continued into the first two months of this 2nd half-year at around the same strength—although no official figures have as yet been published. The Bremen ports, the large container-terminal on the Outer-Weser of which has already undergone a third

extension, whilst its fourth is in the planning stage, continues to retain the position taken at the beginning of the container—wave in the middle '60 ies, as Germany's greatest container port.

World's Container-Capacity Increasing Still in 1977 and 1978

Bremen, 29.8.77 (BremIn). There were 68 new ocean vessels operating w.e.f. 1977, with a total container capacity (on 20' basis) of 70,224 cargo containers—according to the recently published '1977 Annual' of the Bremen Institute of Maritime Economics. This is the highest annual container increase-rate since 1976. The sum total of silver 'tin-boxes' has thereby increased to 446,554 and the number of container ships to 482. The Bremen "Jahrbuch 1977" continues with the advice than an additional 30 container-freighters will go into service in 1978, with a total of 42,880 container-units.

Second-hand Containers in Great Demand

Bremerhaven, 29.8.77 (BremIn). Containers, originally scheduled for 8 years of service, sell well on the secondhand market as tin-huts for storage purposes, constructionsite huts, potato-bunkers etc.

65 Percent of Total Goods handled was General Cargo

Bremen/Bremerhaven, 29.8.77 (BremIn). For the first half of 1977 the total cargo handled by the Bremen/ Bremerhaven port-group, with 11.4 million tons, was 8.3% up on that for the first half of 1976. The port-group anticipates the 1977 result to be some 23 million tons. Thereby, says port-senator, Oswald Brinkmann, it is quite possible that the 1974 boom-year general-cargo record of 14.6 mill. tons will be broken. Meantime the proportion of general, to the total, cargo handled has again risen. In the first half of 1977 it attained 65%. Senator Brinkmann: "A proportional share which is only dreamed of by other ports—and which should make the Bremen ports even more attractive to international liner shipping".

• From Captains' Day, to Port Celebration for All

Bremen, 29.8.77 (BremIn). The 'Captains Day' which was started in Bremen in 1965 as an event in the Thousandth Year Celebrations of the Great Bremen Market Rights Charter of 965-and which has been held annually, with lively participation and success each August-is, according to the words of the Senator for Ports, Shipping and Traffic, Oswald Brinkmann, to be gradually extended to become a port-festival, with diverse programs for all crew members and for the population of Bremen. The Free Hanseatic City of Bremen will demonstrate its particular maritime bonds, its international open-mindedness and its hospitality to all the seafarers and fliers, in their respective dry and wet ports, present on that particular day-as the representatives of the approx. 250,000 crew members of the 12,000 ships and 8,000 aircraft visiting Bremen annually.



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Container share of general cargo transhipment reaches 25 per cent

Presse-Dienst Hafen Hamburg

Hamburg, July 20th, 1977:-Last year's lively upsurge in container handling in the Port of Hamburg, which followed the 1975 recession year, continued in 1977. Transshipment figures in the container sector for the first half of 1977 at over two million tons were 21% above the comparable period of the preceding year. The share of container cargo in total general cargo handling in the biggest German seaport has thus reached 25%.

The development was particularly fast moving in traffic with Scandinavia, Africa and Israel. Container volume in each of these sectors rose by some 50%.

In traffic directions the relationship of incoming to outgoing cargoes has shifted by 2% to the disadvantage of exports. Dispatched cargo had a share of 48% of total cargo in the first six months of 1977. This development is mainly due to the disproportionate increase in exports to Africa and East Asia. While exports to East Asia showed a rise of over 30%, Africa-bound rose almost threefold.

East Asia again in top place

Now, as before, East Asian traffic holds first place in container transshipment, still way ahead of the North American east coast and Great Britain/Ireland. In absolute figures this leading position will scarcely change in the near future.

However, the fact cannot be ignored that the rapid development of various other trading areas has clearly reduced the share of East Asian containers in overall container volume. In the first half of 1976 this shipping area was still responsible for 46% of all containers in the Port of Hamburg, while by this year's "half time" it was only 39%.

In terms of figures, container handling rose by just under 14% to 233,619 units (TEU basis), so that by the end of this year the 500,000 mark will most likely have been exceeded.

Future-oriented facilities in the Port of Hamburg

In the near future container traffic will also receive fresh impetus from newly established services. In this connection one could mention South Africa, the Middle East, Australia/New Zealand, Caribbean/Central America and West Africa. A wide palette of fully and semi-containerised services offers forwarders shipping possibilities to all countries via Hamburg. Far-reaching equipment is available for handling operations.

For instance the Waltershof Container Centre-from the point of view of quay length, berths, container bridges, and the area for storing and traffic surfaces, as well as halls and sheds-is the biggest terminal of its kind in the Federal Republic of Germany. Altogether, the container facilities of the port on the Elbe (Waltershof Container Centre, Tollerort Terminal, Unikai) comprise 14 berths with 16



Container Centre Hamburg

Container handling has at its service in Hamburg 14 berths with 16 container bridges. Highly modern transshipment facilities, motorway connections, port freight railway stations-starting and terminus station of the well-known container express "Delphin" is the Container Centre Hamburg-guarantee rapid transshipment and smooth container arrival and departure. Our photograph shows the Container Terminal of the EURO-KAI KG a.A. Photo: HIB/Breuer

container bridges, transshipment plant with some 1.5 million square metres of built-up surface, and packing sheds which cover an area of 186,000 square metres provide the necessary weather protection to general cargo loading of port-port-containers.

While the already existing facilities were built far ahead for the future, both as regards technique and capacity, preparations have nevertheless already started for construction of a second container centre. This early planning was necessary since containerisation of general cargo traffic is progressing more rapidly than had generally been assumed. Among experts a containerisation degree of 50% already by the beginning of the 1980's is no longer regarded as Utopian. The new terminal, whose infrastructure investments alone will call for about 190 million DM, is intended to be capable of starting container transshipment by the middle of the next decade.

Gray Mackenzie Monthly Bulletin

JULY 1977

• Bahrain

79 vessels called at Bahrain during July, 1977 to discharge 81,688 tons and load 144 tons. In the same month last year 63 vessels discharged 71,397 tons and loaded 400 tons. Vessels were not subjected to any berthing delay throughout the month.

The port of Mina Sulman handled a total of 500 containers during the month. The Authorities have now taken delivery of a new container lifting fork lift truck with a maximum capacity of 35 tons.

All cargo not cleared from the Mina Sulman port area within two months of it being landed will be removed to a new port storage area at Sitra at the consignee's expense.

Most of the cargo which has been in the port for long periods has now been auctioned.

Port working hours during Ramadhan will be from Saturday to Thursday 0700–1400 hours and 1930–0230 hours and Friday 0700–1400 hours. As usually, by special arrangement, ships can work to finish after 0230 hours if there is only a small balance of cargo.

The Korean Labour Contractors have new contracts to handle all air cargo at Bahrain International Airport and also the washing of aircraft.

76 tankers called at Sitra during the month as compared with 69 in June, 1976.

Dubai

During July, 1977 188 ocean vessels called at this port to discharge approximately 418,438 deadweight tons of cargo at Port Rashid which included 24,069 tons bulk cement.

Berthing delays averaged between 12 and 14 days which was attributed mainly to a change over from conventional vessels to container and Ro-Ro vessels which now carry a higher proportion of the cargo.

A second Tango 80 container crane is being erected in Port Rashid and will be fully operational by mid-August.

• Abu Dhabi

79 vessels called at Mina Zayed during the month of July, 1977 and discharged 122,847 deadweight tons of cargo. Imports consisted of 55,035 deadweight tons of general cargo, 3,081 tons of steel, 49,400 deadweight tons of cement, 2,331 deadweight tons of pipes and 3,000 tons of bitumen plus 1,925 cubic meters of timber, 1,297 numbers vehicles and 59 containers.

Additionally, 2 tankers called for the purpose of discharge 50,700 tons of gas oil.

Delays during the month varied between 25 to 28 days.

• Khorramshahr

During July, 1977 95 vessels discharged 299,584 tons of import cargo.

Berthing delays ranged from Nil to four days.

• Kuwait

During the month of July 162 vessels called at Kuwait

port discharging 335,472 tons cargo inclusive of 82,350 tons of cement and 335,472 tons general cargo.

Berthing delays ranged from 40 to 45 days for Conference vessels and from 50 to 55 days for non-Conference vessels.

General

A team of Korean labour (a force of 150 people) have commenced their operations from late July at Berth No. 5, 6 and 7 (Conference berths). This labour is working in two shifts on 24 hours basis: first shift 0600 to 1800 hours and second shift 1800 hours to 0600 hours. If this operation proves successful, further Korean labour is expected towards end-August/Mid-September.

Holy Ramadhan month is expected to begin from 15th August, 1977 which will last till about 20th September including Idd-al-Fitr holidays which are followed after end of Ramadhan month. The port congestion which has recently been improved from 40/45 days to 30/35 days, may deteriorate again in view of short working hours during Ramadhan month but with the assistance of Korean labour it is hoped that this will be kept to minimum.

Port of Weipa dredging

Brisbane, Queensland, Australia, 3.8.76 (Press Statement by The Honourable T.G. Newbury, M.L.A., Minister for Tourism and Marine Services):-State Cabinet today approved a \$1.25 million dredging programme to improve shipping access to the Port of Weipa.

The Marine Services Minister, Mr. Newbery, said the work would involve deepening and truncating of the existing channel to improve navigational safety and to enable larger vessels to proceed to the bauxite export wharves up to six hours earlier than at present.

Mr. Newbery said the Department of Harbours and Marine dredge, Sir Thomas Hiley, would carry out the programme.

The work would be financed from the Weipa Harbour Trust Fund.



The Port of Singapore Authority (PSA) presented special gifts to Capt K.S. Nielsen, Master of M.V. "Songkhla" when she called at the PSA's Keppel Wharves on her maiden voyage on 2 Sept 77. The 16,126 GRT vessel, belonging to EAC Lines plies between South East Asia and West Coast of Northern America. The 17 knots vessel has a total capacity of 500 TEUs. Picture shows Mr. V. Thirupathy, Zone A Manager (Keppel Wharves) handing over a pewter salver to Capt Neilsen. In the centre is the agent's representative Mr. C.A. Shorter.

Third Management Course for Senior Port Executives Completed in Melbourne

The Association of Australian Port and Marine Authorities

Melbourne, Australia, 26 August 1977 (R. Brokenshire, Secretary, Association of Australian Port and Marine Authorities):-Mr. A.J. Peel (President, The Association of Australian Port and Marine Authorities) announced today the successful completion of the third management course for senior port executives to be conducted by the Association. The first course was held in July 1974 and the second in May 1975. The aim of each course is to provide an opportunity for senior port executives to broaden their appreciation of problems, which port executives are likely to encounter. Although similar courses in other countries have been attended by Australian port executives, and there are many management courses of a general nature in Australia, the Association of Australian Port and Marine Authorities recognises that there is a requirement for specialised advance courses to be held in Australia, oriented directly to the needs of port management in this region.

The third course of nine days duration was fully residential at the Halls of Residence, Monash University, Melbourne; the twenty five participants were from port authorities of all States and from the Commonwealth Department of Transport. In addition, the course was fortunate in having participants from New Zealand harbour boards, Papua New Guinea, Solomon Islands and Fiji. The directing staff of four was provided by member-authorities.

The course was organised by a special co-ordinating committee of the Council of the A.A.P.M.A., consisting of Mr. A.J. Peel, (Association President and Director, Department of Harbours and Marine, Queensland), Mr. A.S. Mayne, (Vice-President of the Association and Chairman, Melbourne Harbor Trust Commissioners) and Captain B.L. Noble (General Manager, Fremantle Port Authority).

Experienced speakers for the course were obtained from a representative cross-section of commerce and government, closely associated in a practical way with the transport industry and in particular port and shipping activities. A considerable part of the course was devoted to discussions and syndicate work on port planning.

Mr. Peel in summing up at the closing session said that the functions of the Association of Port and Marine Authorities were simple but comprehensive:—

- To facilitate the solution of Port and Marine Problems.
- To promote greater uniformity of Port and Marine Practice.
- To foster a closer relationship and exchange of knowledge between members.

It is not an authoratative organisation, but one devoted to consultation and deliberation, making recommendations only to its members.

The objectives are clearly aimed at improving the efficiency of the Association's members and he believed that the third Management Course for Senior Port Executives assisted greatly in achieving each of the three aims of the Association. Mr. Peel noted that there were changing attitudes on the part of Port Authorities. Probably the most interesting was the concept that a Port Authority should involve itself positively in the management of all facets of harbour services. This concept recognises that the port authority has provided a very extensive infra-structure within its port and its viability will be affected by the efficiency of all or any of the port services. It is also recognised that the port authority is the only authority capable of co-ordinating all port services. It accepts that capital investment by a private enterprise in port facilities must be placed under a fair and unified control of port management; that port management should exercise a measure of control over all movements of goods from the ship to the port terminal gates and vice versa, that port management must have a direct say in industrial arrangements within its port; and to this end the Association and its individual members are taking an active part in the new arrangements for the stevedoring industry expected to be introduced later in 1977. Port Authorities throughout the world are shrugging off the some-what restricted role that they have played in the past and are taking on a new positive role in the overall transport scene, to the benefit of all port users and the community in general.

It was management courses such as those conducted by the A.A.P.M.A. which would broaden the view of the current and future senior port executives, impress upon all of them the vital importance to port management of continual planning in this everchanging world, and help them in the new positive approach that ports are adopting. The port manager of today is responsible for a very complex undertaking and needs to be the complete business-man.

The course attempted to show the value of computers as data banks and that a well designed management information system can assist greatly in the decision making process of management. It can predict trends in the main items of concern; indicate where changes are occurring and can prompt necessary investigations into those changes; and show future projection of changing trends. Naturally no-one can be certain about the future, but management is obliged to make the most intelligent assessment of it possible.

Mr. Peel said that he hoped course participants on return to their own authorities would arrange for checks on their planning systems, management information systems, costing systems, assessment of objectives, standards and performance and involvement in the total transport concept, particularly in their own region.

In conclusion, Mr. Peel said that whether further A.A.P.M.A. Management Courses were held (their type, content and level of particiapnts) would depend upon the demand from Port Authorities, together with the role which will be undertaken by the new Australian Maritime College to be established in Tasmania. He spoke of the great value received from international contacts and of the

(Continued on next page bottom)

Townsville Harbour Board Press Release

Townsville, North Queensland Australia 25th July, 1977

1. Trade of the Port

Record tonnages for the Port of Townsville were not confined to individual shipments but were also reflected in the trade of the Port for the year ended 30th June, 1977.

During the year, 2 551 289 tonnes of cargo passed through the Port, an increase of 310 721 tonnes or 13.87% on last year. Imports totalled 974 589, an increase of 1.4% and exports 1 576 700 tonnes, an increase of 23.23%.

Mr. A.G. Field, Chairman of the Board, in releasing these figures today, said that although the year's trading had not been quite up to budget expectations he was very pleased with the result. The Board had budgeted for a throughput of 2 675 900 tonnes and had achieved 95% of this target.

Mr. Field said that the difficulties encountered in completing the rock phosphate drying plant had resulted in an export shortfall of 158 620 tonnes of this product. Other cargoes which had not been up to budget expectations were General cargo 50 459 tonnes; Molasses 11 165 tonnes; Hides 999 tonnes; Nickel 1 133 tonnes; Bulk Oils 29 179 tonnes; Fertilizer 5 130 tonnes and Timber 1 109 tonnes. There had, however, been offsetting increases in Steel 2 001 tonnes; Raw Sugar 29 071 tonnes; Frozen meat 2 211 tonnes; Cattle 5 309 tonnes; Meat By-products 5 148 tonnes; Cattle 5 309 tonnes; Dross 1 959 tonnes; Zinc Concentrates 47 039 tonnes; Gypsum 5 538 tonnes; and Transhipments 1 338 tonnes.

Principal items of cargo handled during the year were:-

Imports:	General	59 412 tonnes
	Bulk Oils	870 821 tonnes
	Steel	6 719 tonnes
	Timber	891 tonnes
	Fertilizer	19 870 tonnes
	Gypsum	15 538 tonnes

2. Board appoints new chief executive

Mr. I.G. Malpas was today appointed to the position of Chief Executive Officer of the Townsville Harbour Board, the vacancy having been created by the retirement on 30th June of the Board's Manager, Mr. H.J. Taylor.

Mr. Malpas joined the Board in 1967 as its Accountant and was promoted to the position of Secretary in 1973.

Mr. A.G. Field, Chairman of the Board, in announcing the appointment today, said that Mr. Malpas was well qualified to fill the position. During his 10 years of service with the Board, he had gained a wealth of experience in port administration techniques and is a qualified Account-

valuable liaison with New Zealand harbour authorities and with the ports in the South West Pacific Area. He invited comment from Port Authorities, so that the individual and collective needs of ports might be met as far as practicable in any future specialised management courses.



Mr. I.G. Malpas

ant and Secretary and holds a Bachelor of Commerce Degree.

Mr. Malpas is 49 years of age and is married with four children.

Mr. Field said that the Board had also appointed its Accountant, Mr. B.W. Cox to the position of Assistant to the Secretary and was presently seeking a replacement Accountant.

Mr. Cox joined the Board in 1965 and became its Accountant in 1973. He is a qualified Accountant and is currently studying for his Bachelor of Commerce Degree.

Exports:	General	15 129 tonnes
-	Steel	2 720 tonnes
	Raw Sugar	539 071 tonnes
	Molasses	108 835 tonnes
	Meat & By-Products	30 669 tonnes
	Cattle	7 309 tonnes
	Refined Copper	141 453 tonnes
	Crude Lead	158 005 tonnes
	Dross	4 959 tonnes
	Zinc Concentrates	247 039 tonnes
	Copper Concentrates	29 991 tonnes
	Phosphate Rock	265 980 tonnes
	Nickle	23 867 tonnes

On a revenue basis, oil industry contributed 37% whilst the mining industry (including phosphate rock) contributed 29%, the sugar industry 23% and other industries 11% of the Board's trade.

During June, 34 cargo vessels, with an aggregate gross registered tonnage of 289,922 entered the Port, with an average stay of 1.86 days. Seven other vessels were also accommodated during the month.

Maximum berth usage occurred on 21st June when 6 vessels were in port. The Berths most used were No.'s 7 and 8 which were each occupied for 14 days.

Large tonnages scheduled for handling during July include:-Raw Sugar 68 000 tonnes; Minerals 48 000

tonnes; Rock Phosphate 41 000 tonnes; and Bulk Oils 40 000 tonnes.

3. Harbour Board finance

Revenue received by the Townsville Harbour Board for the year ended 30th June, 1977, soared to record heights when 3,567,412 was recorded. This represents an increase of $7\frac{14}{3}$ on last year's figures and was 572,557 in excess of the budget estimate.

Operating expenditure of \$3,174,398 also constituted a new record and was \$198,974 under budget.

The net result for the year was a gain in funds of \$272,531. At the end of June there was a carryover in Harbour Dues and Tonnage Rates of \$131,729 which will give an excellent start to the current year's trading.

Mr. A.G. Field, Chairman of the Board, said that he was well satisfied with the Board's financial position. The Fund Account was in overdraft to the extent of \$41,269.96, whereas an overdraft of \$525,159 had been budgeted for at the end of June.

2 Container Cranes Ordered

Brisbane, Australia, September 2, 1977 (Port of Brisbane Authority News Bulletin):—A Brisbane engineering firm, Evans Deakin Industries Pty Ltd., has won the contract to supply two container cranes as part Fisherman Islands.

The total contract, including the spare parts, is worth about \$5 million.

The cranes will be built to the single-lift principle, and will incorporate very sophisticated safety and control equipment.

General Manager of the Port of Brisbane Authority (Mr. F.M. Wilson) said the Authority's board believed that two single lift cranes would give the planned container terminal on the Fisherman Islands the necessary flexibility to achieve maximum efficiency, and the speedy handling of cargo and ships.

"It is encouraging to see that a well-known Queensland firm has been successful in winning this valuable contract," he added.

"Evans Deakin will sub-let the mechanical and electrical part of the work to a Japanese firm, Mitsubishi Heavy Industries.

"Japan—as a trading nation—is very important to Brisbane and we are pleased to see that Mitsubishi also will be part of our development."

Mr. Wilson said the cranes were scheduled to be installed and operational within 77 weeks of the acceptance of the contract.

Port Engineers' Conference

Fremantle, Western Australia, 1st September, 1977 (Fremantle Port Authority):-The 13th Conference of Engineers held under the auspices of the Association of Australian Port and Marine Authorities will be held in Western Australia between the 3rd and the 7th of October next.

The first two day's meetings will take place in the Port of Fremantle on Monday 3rd and Tuesday 4th October.

After an inspection tour of the Port of Fremantle on Wednesday 5th October, the Conference will move to the Port of Bunbury for the remaining two day's activities.

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Fortytwo delegates consisting of representatives from all Australian States and Territories, together with seven New Zelanders and one Papua New Guinean, will be attending.

Matters scheduled for discussion cover the following five areas of port engineering:—

Historical, Civil, Mechanical, Environmental and Computer Simulation.

Altogether a total of 21 papers, including one on the design and construction of the Kwinana Grain Jetty, will be presented.



MAIDEN VOYAGE: 14 July 77: Mr. Lim Kok Sai, Operations Development Officer, PSA, presented commemorative gifts to the Master of the 10,010 DWT Panamanian Bulk Carrier Ms. FORTUNER when she arrived in Singapore recently on her Maiden Voyage from Tokyo. The chartered vessel loaded some 1,800 tonnes of timber at the Eastern Anchorage for her voyage to the Middle East. Picture shows Capt Lo Yu-Kwok (right) receiving a PSA pewter tray from the PSA representative Mr. Lim at a ceremony to mark the occasion.

Cargo throughput steady

July 1977, Christchurch, New Zealand ("Portside" The Port of Canterbury News, A Lyttelton Harbour Board Publication):—The cargo tonnage for the last monthly period showed a small but satisfactory increase of 4759 tonnes over the figure for the same time last year, the Lyttelton Harbour Board was told at its July meeting.

Throughput for the month of 161,914 tonnes included increases in agricultural and primary produce (beans and peas up 1320 tonnes, dairy products including milk powder 1245 tonnes, grain 3295 tonnes, meat 1942 tonnes and seeds up 3099 tonnes) although wool shipments were down slightly on last year's totals.

The tonnage handled through the Port for the year to date is only 34,531 tonnes less than that for the previous year, even though motor vehicle tonnage is down 188,073 due to the withdrawal of the "Rangatira", the Board was told. This is reflected in lower figures for coastal trade, but overseas imports remain steady, with overseas exports (aided by the shipment of logs) showing a large increase.

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