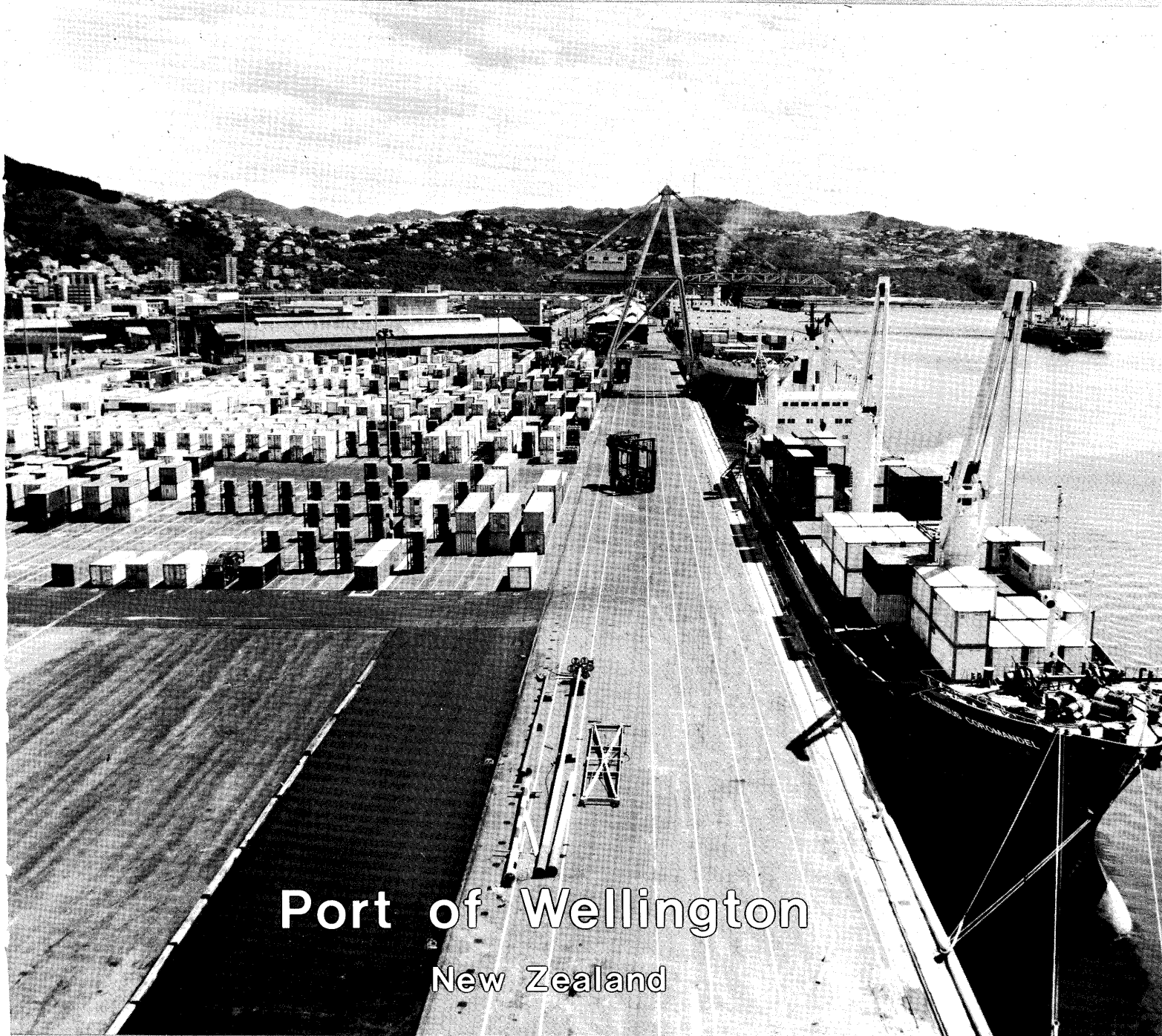


PORTS *and* HARBORS

March, 1977 Vol. 22, No. 3



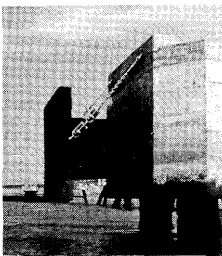
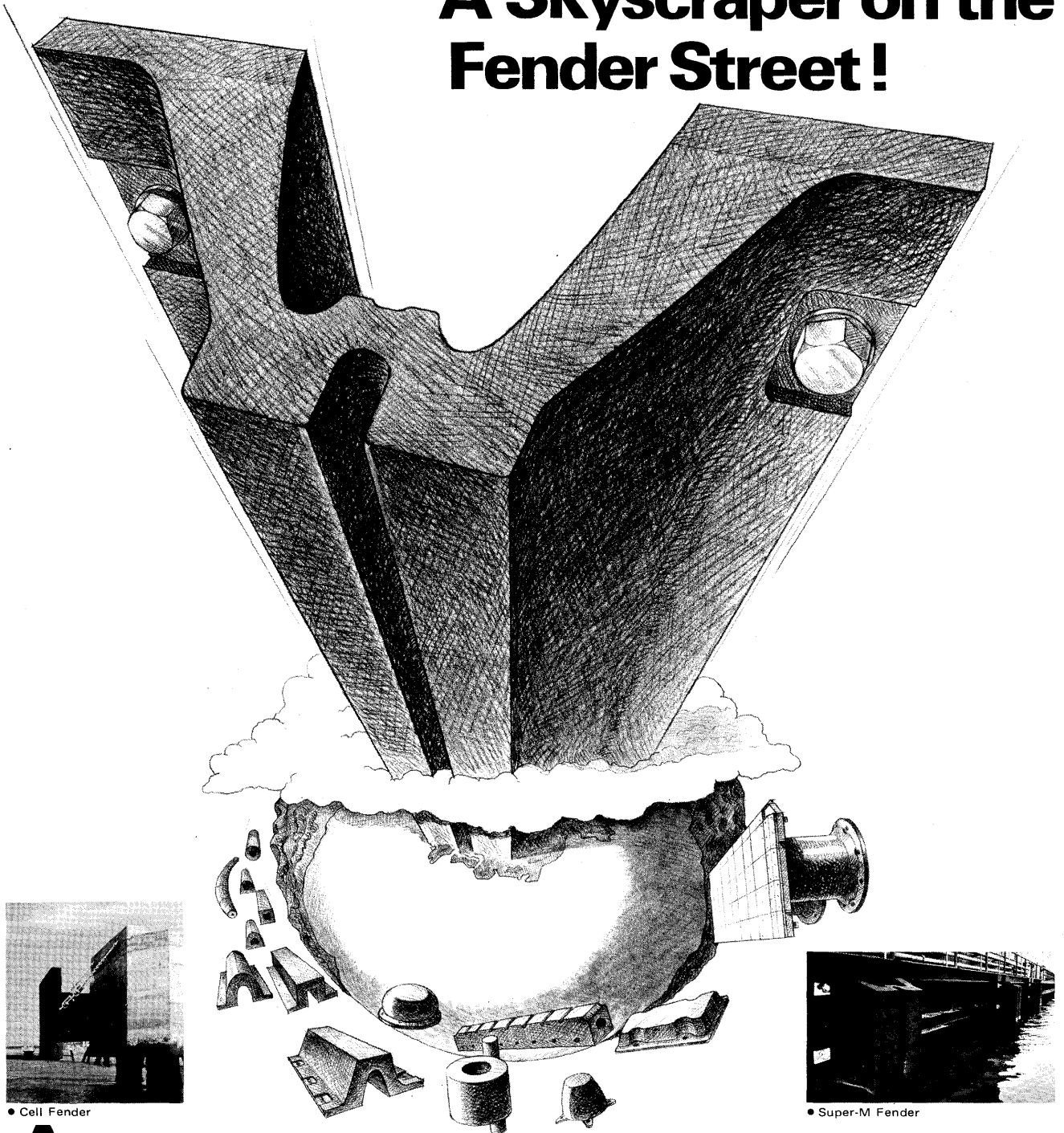
Port of Wellington
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Houston Conference April 24-30, 1977

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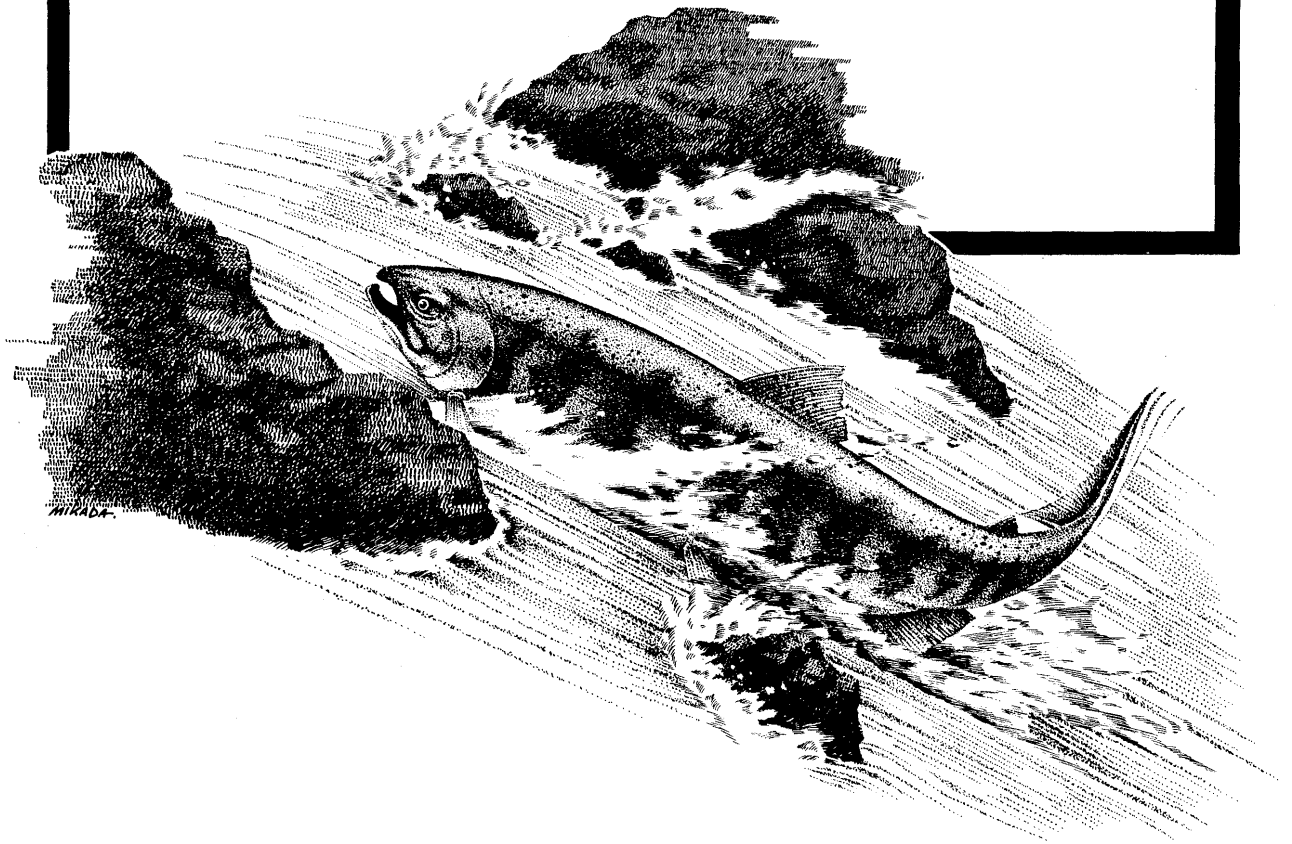
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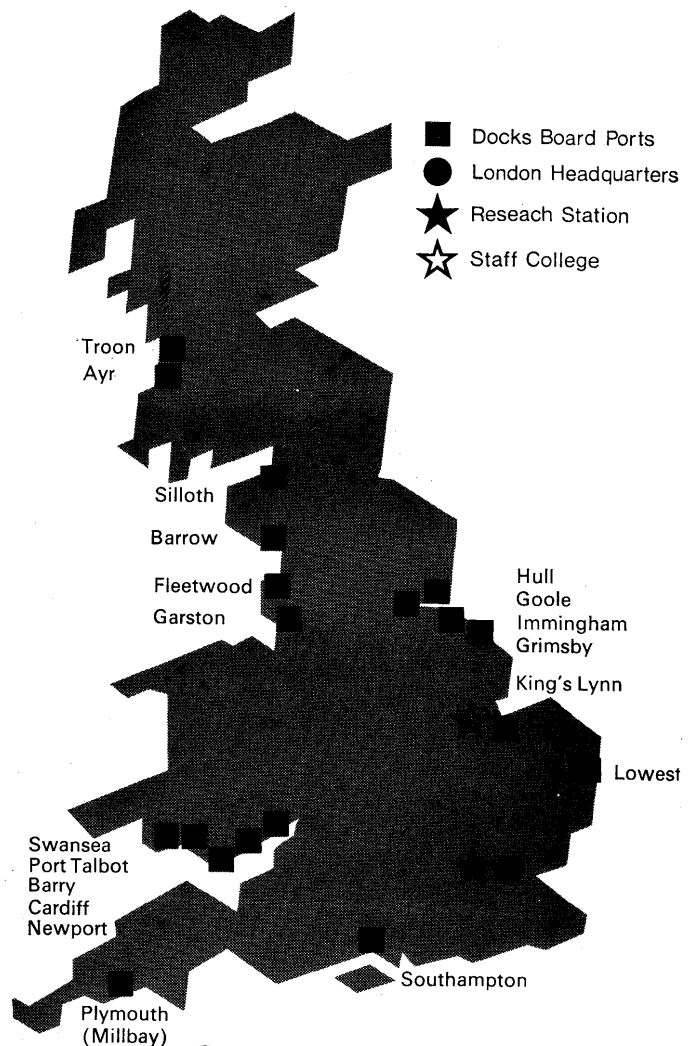
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Editor: Yoshio Hayashi

Published monthly by

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PORTS *and* HARBORS

IAPH Head Office Announcements: Pages 7 ~ 15

Open Symposium at the 10th Conference Chairmen's Messages

**Committee on Large Ships
(April 26, 1977, 1400-1545)**

**Chairman: Mr. Paul Bastard, Director
of the Bureau of Ports and
Harbors, Ministry of
Equipment, France**

In a few weeks, you will receive a lengthy report from the Secretary General of the IAPH which makes up the entire works of the Special Committee on Large Ships (COLS) since the 9th Conference held in SINGAPORE.

Reading a document of this type always poses a problem for those whose task it is and who are as busy as you are.

Please allow me to describe briefly the reasons behind our work and the objectives we hope to achieve. If I succeed in drawing your attention to the interesting features of our work I am sure that you will enter into the conversation at the Special Session reserved, at the HOUSTON Conference for open talks on the works of Special Committees on the 26th April 1977.

Our major concern is the research into the best solutions for the increase in safety in the ports as regards the presence of large ships: the safety of the men, the safety of the port equipment and of the port operations.

It is clear that if this research is centred on the particular aspects of the very large ships and of their effect on their ports of call, then naturally most of the principles stated applying to extreme cases, apply to most of the types of ships as well.

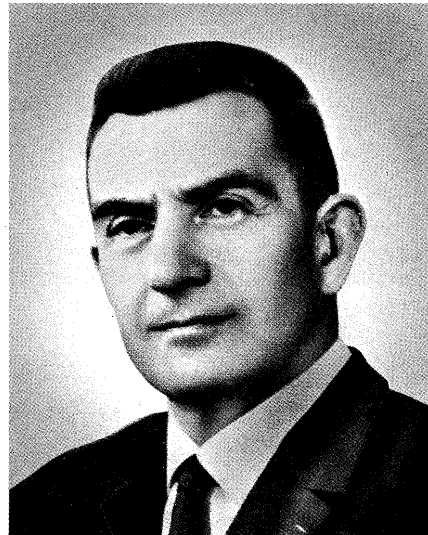
Our objective leads us to include experts in the composition of the COLS, non-members of the IAPH. As the responsible body, we must employ experts to carry out our task, as extensive as it is now, with the maximum efficiency. You will see, on reading the list of members, that the range is wide and that the experts who have agreed to give their assistance are highly esteemed in their respective specialised fields.

The COLS' works have been split up into 3 parts each designated to an "ad hoc" working group and I summarise now the subjects of their studies:

GROUP N° 1—(Chairman: Mr. M.J. COUNE—Directeur des Chantiers de l'Atlantique—France):

This group studies the change in the technical characteristics and the manoeuvring aspects of large ships in the approaches and in the ports.

GROUP N° 2—(Chairman: Mr. M.S. ULLMAN—Director



Mr. Paul Bastard

General of the Port of Gothenburg—Sweden).

This group studies the different safety problems regarding the operations of large ships (loading—ballasting—fire—pollution—gas—freeing—etc) in ports as well as the different aspects of the port authorities liabilities throughout the world.

GROUP N° 3—(Chairman: Captain P.F. MASON—Trinity House—Great Britain).

This group studies the existing practices in the ports for the regulation of large ships movements. A file on the works concerning the traffic regulation is in the process of being prepared.

We know that it is pointless to hope to solve all our problems straight away. We hope however that bringing to light certain basic principles and a consistent respect of the fundamental regulations are naturally going to decrease the number and the seriousness of some of the accidents recorded nowadays.

In order to gain a better knowledge of the actual accidents occurring in the ports, we have prepared a questionnaire which will be very widely distributed and you will certainly receive one shortly. I hope that your replies will allow us to propose to you during the 11th Conference the recommendations for the measures and practices to be put into force, if not to eliminate totally at least to greatly reduce the risk of accidents in the ports. I thank you in anticipation of your participation in replying to this questionnaire.

Along with all the members of the COLS to whom I now

express my sincere thanks for the considerable task they have accomplished I am at your disposal for all the particulars you may wish to amass and for all the information you may want to send me.

I hereby fix our rendez-vous for the 26th April 1977 at HOUSTON.



Mr. Ben E. Nutter

**Committee on Containerization,
Barge Carriers and Ro-Ro Vessels
(April 26, 1977, 1400—1545)**

**Chairman: Mr. Ben E. Nutter,
Executive Director, Port of
Oakland, Calif. U.S.A.**

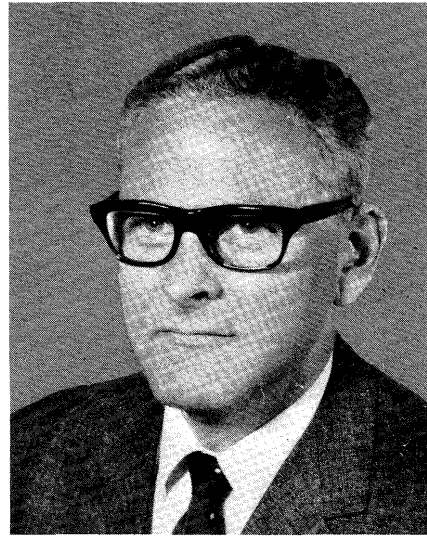
Since the time of the meeting in Curacao, April, 1976, the members of the Committee have undertaken the following activities:

Mr. Sven Ullman, General Manager of the Port of Gothenburg, will be presenting a report of the Subcommittee on Standardization of Ro-Ro Ramps.

A second activity resulting from our discussions was agreement to proceed with the continuing Survey of Container and Barge Carrier Facilities under the chairmanship of Mr. Stanley Mayne, Chairman of the Melbourne Harbor Trust Commissioners. There have been various comments with respect to the survey and, as a result, it will be on our agenda for further discussion and study at the Houston meeting.

A third activity we have undertaken with the agreement of Mr. Paul Bastard, Director of the Bureau of Ports and Harbors, Ministry of Equipment in Paris, was to request that the Special Committee on Large Ships report on the trends in container ship construction. This report will be presented by Mr. Bastard during the scheduled symposiums.

The fourth and final undertaking of this Committee has been to continue with the development of a standard glossary of maritime terms pertaining to LASH, Ro-Ro, and container operations. Based on comments I have received, there has been some discussion and suggestions made that this draft should be given further study by the Committee to determine if there are other terms to be included and refinements that could be made prior to its publication as a



Mr. Sven Ullman

**Committee on International Port
Development
(April 26, 1977, 1600—1745)**

**Chairman: Mr. Sven Ullman,
General Manager, Port of
Gothenburg, Sweden**

Technology has diminished the world. Development and improvement of all sorts of communication has made the contacts and relations between people from different parts of the world closer. In consequence also world trade has increased and an even more increasing trade favours and ameliorates world economy. In this context the role of the world ports is self-explanatory. It is also a necessity and an overall interest that the ports are well functioning links in the transport chain. Disturbances in the operation or bad function of the ports have ruining economical effects wherever they appear. Therefore, it is of utmost importance that these difficulties which arise and/or can arise in the ports are frankly and widely discussed.

To achieve this good functioning aim and to be able to live up to the heavy demand for efficiency which is laid upon the world ports it is also important that the persons involved in the management of the ports are well trained. The ordinary international transmittance and exchange of experience and knowledge between the ports is of basic significance but tends to be inadequate. Thus, it must be a matter of international interest to provide the educational means for a more complete training. The problem is who shall provide this training, and how. The IAPH and its Special Committee on International Port Development are now trying to find the right forms for this organization to contribute and give its engagements in this matter.

At the Open Symposium of the CIPD some attention is given these aspects of the world ports' role in economic

final report. With this in mind, we will be placing this item on the agenda of the Houston meeting for discussion.

I look forward to welcoming as many participants as possible at our Committee symposium in Houston.

development, forming an important integral part of the work of the committee. The symposium is scheduled to treat the following main questions now handled by the committee.

- a) The Bursary Scheme, realized through means out of the Technical Assistance Fund, which aim is to make it possible for port employees from some developing countries to attend courses within their field of working.
- b) The International Survey of Port Training, Advisory Facilities and Requirements, which survey has been made to be a remedy to the ports within the field of training.
- c) The Survey on port congestion, which survey has been carried out to find out to what extent the member ports of the IAPH have been hit by this problem.

It is my expectation that some members of the Association as well as the Committee members will have an interest in discussing the above mentioned question and other Committee questions. In addition I would be very pleased to receive any suggestions regarding issues suitable for treatment and examination by the Special Committee on International Port Development.



Mr. Andre Pages

Committee on Legal Protection of Navigable Waterways (April 26, 1977, 1600–1745)

**Chairman: Mr. Andre Pages,
Ingénieur General, Bureau
of Ports and Harbors,
Ministry of Equipment,
France**

At the present time, a number of matters, of legal nature, can be mentioned, as deserving examination and adoption of positions by the I.A.P.H. Some of them will be debated during the Committee Symposium.

1) Since the Singapore Conference, the activity of the Special Committee has focused on the review, at I.M.C.O., of the 1957 Convention on the limitation of liability of owners of sea going vessels.

Every Port Authority fully appreciates the bearing of this question, when navigation hazards and damage, are dramatically increasing.

The new 1976 Convention does not bear the stamp of the Ports' view point, to the extent we had hoped, but, affects improvements in the previous situation.

Any way, it is up to the Ports, now, to decide:

- whether they are to recommend its ratification, to their respective governments
- and whether they are to recommend making use of such reservation clauses, as those which enable State Parties to provide that harbour damage shall have priority over other property claims, and that claims for wreck removal are to be excluded from limitation.

2) I.M.C.O. work is proceeding on the review of the 1969 Convention, on the limitation of Civil Liability for oil pollution damage. Ports will have to adopt definitive positions:

- Is the scope of application of the 1969 Convention to be extended, in order to include noxious products other than oil carried as cargo, and hazards other than pollution (e.g. explosion, fire, intoxication)?

- And, at the same time, are the 1969 limitations to be made consistent with those of the 1976 Convention?

3) The International Maritime Committee (which is an International Association of maritime lawyers, of high account with I.M.C.O.), has suggested to I.A.P.H., that it cooperates on its study on the liability of sea terminal operators. Such studies, commonly, result in international Conventions, or in standard contracts. The subject is of interest to Port Authorities, whether, or not they run sea terminals.

4) Is the problem of acts of sabotage and terrorism of a common interest to ports, as some of them have suggested? Would a follow up of the Singapore Conference discussions, on the topic of prevention of crime in Ports, be desirable, at the same time?

5) Quite a lot of topics of the day, at the U.N. Agencies, and else where, are of a legal nature. I can mention:

- Work in progress at I.M.C.O. (Legal Committee), on:

- a) the regime of vessels in foreign Ports
- b) wreck removal and related issues

- The implementation, on a national basis, of the London 1969 International Convention on tonnage measurement.

- Definition of the role of pilots, when the movements of the ships are controlled from a land base . . . and of the responsibilities of the ship, the Pilot, and the Port Authority (e.g. traffic control by Port radar operators).

6) Other are more of a technical nature, but with legal and financial connotations. For example:

- The I.M.C.O. Committees on ship design and equipment, and on marine environment, may recommend the development of land base equipment (e.g. for collection of polluted waters, refuses, garbage . . .), which could be simpler (and cheaper), if some of them were installed on board ships (for ex. tanks, for segregated ballast).

Have not Ports their word to say in matters of this kind?

- All the same the new international agreements, dealing with the buoyage system and the anti-collision regulations, may result in disadvantages, difficulties, and expenses to ports.

- The British Ports have proposed a standard marine navigation vocabulary, which is now entering into common use. A useful development would be the working out of a standard VHF message format, for vessels approaching Ports.

All these questions, and may be, some others, are to be

(Continued on page 17)

10th Conference Program Finalized

With the efforts of the Conference Organizing Committee, Chairmen and Members of Special Committees and Panel Sessions, the 10th Conference Program has been finalized subject to the minor changes at the last minute time, as reproduced below.

Members are requested to note that there are some changes in the time schedule of the Panel Sessions and the "Open Symposium" for the 4 Special Committees.

If you have not yet sent out your application, please do it today to:

10th IAPH Conference

P.O. Box 2562, Houston, Texas, U.S.A. 77001
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PROGRAM of the 10th IAPH Conference

April 23 (Sat)

- 0900/1000 Constitution & By-Laws Special Review Committee
- 1000/1200 Joint Meeting of Finance Committee & Membership Committee
- 1500/1700 Committee on Large Ships
- 1800/2000 Secretary-General's Reception

April 24 (Sun)

- 0900/1030 Joint Meeting of Board of Directors & Executive Committee
- 1100/1200 Nominating Committee
- 1300/1400 Committee on Containerization and Barge Carriers
- 1400/1500 Committee on International Port Development
- 1500/1600 Credentials Committee
- 1500/1600 Bills and Resolutions Committee
- 1600/1700 Ways and Means Committee
- 1830/2100 "Welcome to Houston" Reception

April 25 (Mon)

- 0930/1030 Opening Ceremony
- 1100/1145 Official Courtesy Visit to Mayor's Office
- 1100/1145 Committee on Legal Protection of Navigable Waterways
- 1145/1330 Reception & Luncheon
- 1400/1530 First Plenary Session
- 1545/1630 Panel Chairmen & Panelists' Meeting
- 1815/2030 Reception & Dinner at River Oaks Country Club

April 26 (Tue)

- 0800/0845 Bills & Resolutions Committee
- 0800/0900 Finance Committee
- 0930/1130 Panel Session No. 1
 - Problems of Port Congestion
- 1145/1330 Reception & Luncheon
- 1400/1545 Open Symposium
 - Committee on Containerization and Barge Carriers
 - Committee on Large Ships
- 1600/1745 Open Symposium
 - Committee on International Port Development
 - Committee on Legal Protection of Navigable Waterways

- 1700/1800 Honorary Membership Committee
- Evening Free

April 27 (Wed)

- 0800/0845 Bills and Resolutions Committee
- 0845/1000 Second Plenary Session
- 1030/1145 Panel Session No. 2
 - The Port of Future-
- 1145/1330 Reception & Luncheon
- 1345/1500 Panel Session No. 3
 - Port Contribution to International Trade & Development
- 1530 Bus Leaves
- 1630/2100 Valley Lodge Berbecue, Rodeo, Arts & Crafts

April 28 (Thu)

- 0800/0845 Credentials Committee
- 0800/0845 Bills & Resolutions Committee
- 0900/1030 Third Plenary Session
- 1100 Bus Leaves
- 1145/1330 Barbours Terminal Dedication & Luncheon
- 1400/1630 Tour of NASA
- 1930/2200 Reception & Buffet at Petroleum Club

April 29 (Fri)

- 0800/0845 Bills & Resolutions Committee
- 0900/1030 Panel Session No. 4
 - Environmental Problems of Ports-
- 1045/1200 Closing Session
- 1215/1400 Reception & Luncheon for New Officers
- 1430/1700 Joint Meeting of Board of Directors and Executive Committee
- 1930/2300 IAPH Conference Reception & Dinner/Dance

April 30 (Sat)

- 0730/1000 Informal Farewell Breakfast
- 1000/1200 Meeting if scheduled

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(Continued on next page bottom)

Convention on Limitation of Liability for Maritime Claim, 1976

IAPH was represented at an International Conference on Limitation of Liability for Maritime Claims held in London during the period 1st to 19th November, 1976, by Mr. A. Pages, Chairman, Special Committee on the Legal Protection of Navigable Waterways and Mr. A.J. Smith, Liaison Officer for IAPH with IMCO. Here follows their report.

According to their information, 44 national delegations and representatives of 14 organizations having consultative status with IMCO took part in the Conference at which IAPH representatives were able to make a general contribution to discussions at the protection of the ports and the environment. (Deputy S.G.)

The Conference

Essentially, the division of opinion at the Conference lay between those delegations whose concerns and actions seemed to favour shipowning and insurance interests and those who tended to seek solutions acceptable to the international community as a whole. The former concentrated on technical and legal considerations in the main whilst the latter emphasized the pertinence of economic and political considerations in ensuring maximum State acceptance and ratification of the Convention.

Basically, and predictably, shipowning and insurance interests were looking towards limitation figures set well below those of commercial insurability. Others, and these included the representatives of port interests, took the view that there should be full payment to claimants in the majority of cases which requires that the capacity of the insurance market for liability coverage should be in excess of £100 million.

The outcome of the International Conference was the Convention on Limitation of Liability for Maritime Claims, 1976, a copy of which is enclosed for your information. For two thirds of the length of the Conference, however, the conflicting viewpoints were rigidly held and it was very evident that a compromise proposal would have to be put forward if a Convention were to ensue. Such a compromise

MEXICO—so near—yet centuries away in atmosphere—colorful—an exotic blend of three dynamic cultures—massive pyramids and sculptured temples, Baroque Cathedrals of Spanish Colonial days, bold towering skyscrapers, a perfect climate—miles of sunny beaches—exciting village fiestas, magnificent natural scenery, mariachi and marimba bands. Tour includes Mexico City, Taxco, and Acapulco.

ALTERNATIVE 4: Las Vegas-San Francisco 7 Days Estimated Cost—U.S.\$569

Las Vegas spells Entertainment—Casinos Chorus Lines—Celebrities—Good Food—Beautiful Ultra-Modern Hotels—Glitter Galore! San Francisco, considered “Everybody’s Favorite City.” Shop along Fisherman’s Wharf, take a ferry to Sausalito, have dinner in Chinatown, drive down flower banked Lombard Street, “the crookedest street in the world,” ride the BART subway, the Cable Car, visit famous museums, Ghirdelli Square and the Cannery.

did appear with proposals for the limitation based on the following assumptions:—

- (i) Article 4 of the Convention would provide for an unbreakable limit. No reference would be made to gross negligence.
- (ii) The system of liability to be followed would be on the 1957 Convention pattern which involved a spill-over of personal claims into the property claim “fund” and personal claims would rate equally with property claims in that fund.
- (iii) Claims in respect of harbour works and wreck removal should be included among claims subject to limitation. States should, however, be entitled to make a reservation in respect of wreck removal.
- (iv) States would be free to regulate by specific provisions of national law the system of liability to be applied to vessels of less than 300 tons.

Results of the Conference

It is considered that the 1976 Convention is unsatisfactory from the stand point of port authorities having regard to the representations, both written and verbal, made on their behalf on the lead up to and during the International Conference. These representations were to the effect that:—

- (i) Salvors should be barred from limiting their liability. This is to be permitted under Article 1.
- (ii) “Harbour Works” should include harbour waterways, installations and plant and aids to navigation. The extension has been agreed in Article 2; a reservation to national legislation to cover damage to such property was not included.
- (iii) The “status quo” wherein the right of limitation can only be claimed where the shipowner establishes that there was not “fault or privity” on his part, should be maintained. This was not agreed. Article 4 now provides for the principle of unbreakability.
- (iv) The level of limitation should reflect a minimum tonnage figure of 3,000 g.r.t. and be set so as to provide a fund of at least \$2 million.

The package for Article 6, to which reference was made earlier provides for the limits of liability for property damage, of any nature, to be calculated as follows:

- US \$200,000 for vessels not exceeding 500 g.t.
- US \$200 for each g.t. from 501 to 30,000 g.t.
- US \$150 for each g.t. from 30,001 to 70,000 g.t.
- US \$100 for each g.t. in excess of 70,001 g.t.

These amounts have to be related to the fact that ships of less than 30,000 tons account for 51.5 per cent of world tonnage, 20 per cent lies between 30,001 tons and 70,000 tons and 28.5 per cent is over 70,000 tons.

On a more positive and satisfying note from the point of view of port authorities, the 1976 Convention provides that:—

- (i) in the case of passenger vessels, a special fund will

(Continued on next page bottom)

International Concern Drawn to Environmental Problems

The Reports on the meetings of the following four IMCO Committees were sent to the Head Office from Mr. A.J. Smith, IAPH Liaison Officer with IMCO, who had covered those sessions.

1. Maritime Safety (27 September to 1 October 1976)
2. Marine Environmental Protection (29 November to 3 December 1976)
3. Legal (6 to 13 September 1976)
4. Council (5 to 8 October 1976)

A unanimous interest in the environmental problems was demonstrated by the fact that 44 national delegations and observers from many intergovernmental and non-governmental organizations attended the Sixth Session of the Maritime Environmental Protection Committee.

The text of the reports are presented under in the sequence as above: (Deputy S.G.)

be constituted for the compensation of passenger claims as distinct from that which relates to other personal claims and property damage;

- (ii) limitation calculations will be carried out on the basis of gross tonnage as defined by the 1969 International Tonnage Measurement Convention. Anomalies which presently arise in tonnage measurement will be minimised;
- (iii) Article 6.3 states that provision may be made in national law for claims in respect of damage to harbour works to be given priority over other property claims.

Matters for Consideration by Port Authorities

The 1976 Convention will be open for signature and ratification from February, 1977. Port authorities of I.M.C.O. Member States should consider their position with regard to a number of matters arising from the Convention and advise their Governments accordingly. As follows:—

Article 6.3 permits national law to provide that claims in respect of damage to harbour works, basins and waterways and aids to navigation shall have priority over other property claims;

Article 10.1 permits a State to provide that the right of limitation is tied directly to the constitution of a limitation fund;

Article 18.1 gives a State the right to except from limitation claims in respect of wreck removal;

States, where they have not already done so, can also consider ratifying the 1969 International Convention on Tonnage Measurement in so far as that Convention provides a more satisfactory basis for calculating limitation amounts;

States can recommend a review of the limitation amounts of the 1969/1971 Conventions on Civil Liability for Oil Pollution Damage in order to make these amounts consistent with those fixed by the 1976 Convention for the compensation of any kind of damage.

1. Maritime Safety Committee

The 35th Session of the Committee was held in London from 27th September to 1st October, 1976.

The content of discussion at this session was only of general interest to the international port community.

Amongst other things, the Committee approved the Code for Existing Ships carrying Liquefied Gases in Bulk, and amendments to the International Maritime Dangerous Goods Code relating to packing, freight container traffic, storage and the carriage of dangerous goods in limited quantities.

The coming into force of the 1972 Collision Regulations in July, 1977, has led the Committee to consider the speeding up of the routing schemes adoption process. Agreement was reached on a procedure whereby the Committee would be authorized to approve and adopt new routing schemes and amend existing schemes.

I.A.P.H. members have, of course, a continuing interest in the progress made with regard to the coming into force of the 1969 Tonnage Measurement Convention. This is expected in the near future. The Committee, however, examined a number of matters relating to that Convention and, in particular, those aspects of it which determine tonnages in a way sufficiently different from those determined under tonnage regulations presently in force as to create difficulties in connection with the application of the 1974 International Convention for the Safety of Life at Sea.

2. Marine Environment Protection Committee

The extent of international interest in environmental matters is shown by the fact that 44 national delegations and observers from many inter-governmental, and non-governmental organisations attended the Sixth session of the Marine Environment Protection Committee from 29th November to 3rd December, 1976.

IAPH members will appreciate that in reporting on the session only passing reference can be made to the many topics discussed, the majority of which were of a very technical nature. If therefore, members require detailed information on any aspects of the discussions they are invited to contact the writer accordingly.
Status of Pollution Conventions.

It was noted that only two more acceptances were required to enable the 1969 Amendments to the 1954 Convention to enter into force. These are expected in the very near future.

Bulk Chemicals

The Committee considered aspects of the work of the Sub-Committee on Bulk Chemicals relating to marine pollution. Particular reference was made to a list of chemical substances known to be transported by sea and the need to clarify the marine pollution hazards to which they give rise. States were urged to give this matter their urgent attention.

The 1973 Convention

The Committee reviewed technical problems associated with the implementation of the 1973 Convention. These included pumping and piping arrangements for oil tankers; the provision of slop tanks for oily residues; treatment technology for dealing with chemical wastes in reception facilities.

Technical Assistance

Meetings of the Committee devote most time to this subject which evidently has a wide appeal. It was all the more gratifying therefore to note the development of joint programming between IMCO and UNEP. Respective roles have been defined whereas UNEP has a catalytic and coordinating role in defining environmental objectives and in formulating environment programmes, IMCO has substantive responsibility for the implementation of the programmes.

Developing countries have been invited to let IMCO have requests for technical assistance which might be pursued within the framework of the joint programmes.

Regional activities have been promoted and particular appreciation was accorded the Secretariat for its preparation of legal instruments for cooperation to combat marine pollution in cases of emergencies.

Evidence of the international expansion of training opportunities was given and IMCO is actively pursuing the introduction of pollution prevention and control into the curriculum of maritime academies.

Segregated Ballast on Existing Tankers

This provision continued to reveal a sharp decision of opinion. Some States take the view that such a scheme would achieve the objective of complete elimination of intentional pollution of the sea by oil. Others are not in favour of it on the grounds that resulting environmental benefits would be marginal and would not warrant high financial burdens which would entail higher prices of oil for importing countries. The Committee has therefore deferred decision on the matter to its next session.

Oily Water Separating Equipment and Oil Content Meters.

The Committee approved Recommendations on International Performance and Test Specifications for Oily Water Separating Equipment and Oil Content Meters for submission to the IMCO Assembly for adoption and subsequent issue as a separate IMCO publication. The Committee also agreed that existing devices should be accepted provided they met the Convention discharge requirements which are in force at the time.

Provision of Reception Facilities

IAPH members have a particular involvement with this matter. They will therefore be interested to note that the Committee has approved Guidelines on the Provision of Adequate Reception Facilities in Ports. It is proposed to issue a Circular letter and Questionnaire on Facilities in Ports for the Reception of Oily Wastes to Member States. Information will also be sought on proposals for the enlargement of existing facilities and planned new facilities.

The Committee was provided with lists of dry cargo loading ports where there is a regular demand by combination carriers for reception facilities and where such facilities may be needed. Delegations however expressed doubts as to the accuracy of the lists and IAPH members should make a particular point of discussing these with their respective Governments before the next Committee meeting to ensure that a correct presentation is made.

Preliminary draft guidelines on reception facilities for

sewage and garbage were circulated and will be further developed at the next session.

The Committee agreed that studies on reception facilities in special areas should be carried out by IMCO with possible financial support from UNEP. The study would cover requirements for selected ports in the Mediterranean, Red Sea and Gulfs areas.

Procedures for the Control of Ships

The Committee considered procedures for the control of ships under the Convention for the Prevention of Pollution of the Sea by Oil, 1954 as amended in 1962 and 1969. These procedures should not be confused with those in respect of sub-standard ships which related to structure and equipment of ships covered by the SOLAS and Load Lines Conventions.

It was pointed out that the purpose of the procedures was to provide a practical guide to Contracting Parties on the enforcement of the Convention as amended and there was no intention of going beyond that nor of implying any extension of jurisdiction. It was also felt that when the 1969 Amendments came into force, their enforcement would be eased by the procedures one element of which was a voluntary system of in-port inspection by terminal staff in loading ports.

Comprehensive Anti-Pollution Manual

Section 1 (Prevention) of the Manual will be published shortly.

Section 11 (Contingency Planning) is undergoing revision and it is hoped to have a final draft available at the next session.

Section 111 (Salvage) is being revised

A further section will be developed to deal with questions relating to liability and compensation for oil pollution damages.

3. Legal Committee

The 30th and 31st sessions of the Legal Committee took place during the weeks beginning 6th and 13th September, 1976 respectively.

The 30th session.

The main matter considered by this session was the extension of the 1969 International Convention on Civil Liability for Oil Pollution Damage and possible extension of the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage to non-persistent oils.

Some delegations criticised the level of the 1969 liability limits as being unrealistically low in 1976. Others wanted to open the existing compensation system with its strict liability feature to new polluting substances.

The Committee discussed the substances to which the extension might be made and expressed little support for the inclusion of non-mineral oils. It noted however, that pollution by such oil as light diesel oil could be very damaging to amenities and other valuable interests.

It was thought that hazards arising from non-persistent oils other than those now covered would include toxicity and gas pollution.

The Committee examined in general terms the possible extension of the geographical scope of the application of the 1969 Convention beyond the territorial sea and an indeterminate discussion also took place on the impact of extension of the 1969 Convention on the system of compulsory insurance created by that Convention.

It was perhaps to be expected that these discussions would be inconclusive. Delegations are now at least familiar with the views which were expressed and the proposals which were made and can more readily assess their implications.

The 31st session

The Committee considered future work on wreck removal and related issues.

The IMCO Secretariat had provided the Committee with a systematic analysis of existing or projected national legislation on wreck removal and related issues. The Committee was therefore able to form a view as to the significance of the topic in international maritime law as well as on how or whether to develop a conventional regime to deal with it.

It had been recognised at a previous session that a wreck removal convention must necessarily have a geographical scope not limited to the high seas to take account of the high incidence of risk from wrecks within coastal waters. The very fact, however, that national jurisdictional issues were involved gave rise to the generally held view that the time was not yet opportune for harmonisation of national laws on the grounds mainly that they continued to deal with the matter satisfactorily.

It was therefore decided that consideration of future work on wreck removal and related issues should be deferred until possibly, the biennium 1978/1979.

The Committee next considered future work on a convention on the regime of vessels in foreign ports.

IAPH members will recall that the USSR delegation have long expressed the view that an international instrument was needed to deal with an issue which in their view existing bilateral agreements had failed to deal with adequately. This view had been reinforced by an UNCTAD assessment that the 1923 Ports Convention was inadequate and did not serve the requirements of trade and shipping in regard to the treatment of foreign merchant vessels in ports.

In opposition to that view various delegations considered that the matter is adequately dealt with on the basis of customary law and bilateral agreements and, further, that it is right and proper for each country to set up its own laws and rules for safeguarding national security protecting the interests of the country and maintaining the public order of the ports according to its actual conditions.

After an exchange of views, the issue was deferred.

The Committee considered the status of ratification of the 1957 International Convention relating to Stowaways and noted that a tenth and final ratification was still needed to bring it into force. The Committee did not, however, deem it to be appropriate to urge ratification in view of the opinion, widely held, that the 1957 treaty might not be the solution to a problem which nonetheless has international ramifications. The Secretariat was therefore asked to gather factual information on the problems which exist in order to judge the necessity of a new international approach to the problem of stowaways.

The Committee agreed that its next session would be held from 18 to 29 April 1977 and that consideration would then be given to the Draft International Convention on Maritime Search and Rescue and also the extension of the 1969 Civil Liability Convention.

4. Council

The 37th Session of the Council of I.M.C.O. was held in

London from 5th to 8th October, 1976.

The Council noted that the membership of I.M.C.O. now stands at one hundred plus one Associate Member.

The discussion which took place in Council on the establishment of guidelines for consideration of applications for consultative status has particular importance to I.A.P.H.

The Federal Republic of Germany had introduced a
(Continued on page 21)

Questionnaire Returns Urged on Port Congestion

Mr. Sven Ullman, Chairman of Special Committee on International Port Development and concurrently IAPH Liaison with UNCTAD, wishes to thank you for your great cooperation in the Committee's survey on the port congestion, for which a questionnaire had been circulated among the members on September 30, 1976.

As of the end of November, 1976, as many as 59 ports responded.

While the original deadline of November, 1976, was over, Mr. Ullman encourages those who have not yet replied to turn in theirs despite the delay. (The questionnaire form, on request, is obtainable through the IAPH Tokyo Secretariat.)

Please mail your reply now to:

Mr. Sven Ullman, General Manager, Port of Gothenburg
P.O. Box 2553, S-403, 17 Gothenburg 2, Sweden (TKD)

Changes in Panelist at 10th Conf.

After our publication of the changes in the panelists in the February 1977 issue of this journal, Mr. Honoré Paelinck, former Head of Port Department of Office National des Transports, Zaire, who had been out of contact for several months due to his recent resignation, communicated with the IAPH Tokyo Head Office informing that he would be willing to take part as a member on the Panel Session "Port Congestion" and his revival was accepted by Mr. Tukur, the Panel Chairman.

Mr. Paelinck is now retired from Zaire assignment and residing in Belgium.

As reported in the previous issue, Mr. J. Raven of SITPRO is also participating. (rin)

Visitors:

Mr. E. Williamson of UNCTAD Visited S.E. Asia and Japan

Mr. Eric Williamson, Chief of UNCTAD's Port Section who is a member of the Panel Session on Port Congestion at the 10th Conference, visited Japan from January 16 to January 25, during his 6-week mission to S.E. Asia.

He was in Japan to observe the port development in this country as the first UNCTAD's mission from the Ports Section and to discuss the possibility of Japan's cooperation with the activities of his section with the pertinent governmental agencies and organizations.

He visited the IAPH Head Office in Tokyo on January 17 and was met by Dr. Hajime Sato, Secretary General and his staff. Mr. Williamson expressed at the meeting that the relationship between UNCTAD and IAPH has ever been

strengthened through the close liaison facilitated by Mr. Ullman, IAPH Liaison Officer with UNCTAD and that IAPH's role in disseminating the information on the activities of UNCTAD was greatly helpful to many of developing ports.

With the helps by the resident members of IAPH, he visited and observed Ports of Tokyo and Kobe, a container terminal complex at Ohi (Tokyo) and a shipbuilding yard of Mitsui Engineering and Shipbuilding Company at Chiba.

He left Japan on January 25th for Peking. After visiting Bangkok, Manila and ports in the Middle East, he is expected to be back to his office in Geneva by the latter part of February. (rin)

Engineers from Port of Genoa Visited Japan

On January 24, two experts of Port of Genoa visited the IAPH Head Office in Tokyo and was met by the Secretary General and his staff. They were Dr. Ing. Bruno Ballerini, Director of Operations, and Ing. Antonio Boaretto, Mechanical Division, of Consorzio Autonomo del Porto di Genoa. Dr. Sato pointed out in the course of the meeting that the participation of Port of Genoa in IAPH was much expected considering the position of the port in the world trade and he advised that they should contribute some articles introducing the present situation of their port or its development to the world ports and urged to consider the possibility of joining IAPH with progressive attitude. (rin)

Mr. Weldon Gibson, SRI, in Tokyo

Mr. Weldon Gibson Vice-President, Stanford Research Institute, Calif., USA was in Tokyo during the last week of January on business meetings.

Mr. Gibson being a member of the Panel Session on "Port Contribution to International Trade and Development" at the forthcoming 10th Conference of IAPH, Mr. Masatoshi Kinouchi, Deputy Secretary General, met him and explained the latest improvement of the program. Mr. Gibson expressed on the occasion that he was looking forward to take part in the IAPH Conference in Houston. (rin)

Educational tour by Hovercraft

On January 20, Secretary-General organized an educational tour to ship-yard in Chiba (50 km. S.E. of Tokyo) by a hovercraft for M. Williamson of UNCTAD, inviting officials of Ministry of Transport, diplomatic corps, port representatives and others. In order to minimize time for land transportation Mitsui Engineering and Shipbuilding Co., Ltd. (IAPH Associate Member) kindly offered their 155 seater hovercraft MV-PP 15 for the inspection of industrial port development and shipbuilding industry in Chiba area.

Mr. Williamson and invitees were taken to Chiba factory after 40 minutes' ride, nearly quarter of time by land transportation, and guided through the factory being conducted by Mr. Takeo Takayanagi, General Manager of Chiba Works.

Among the invitees, there were;

Mr. Michael S. Someck, Maritime Attaché, US Embassy
 Capt. R.N. Gonzalez, Defense Attaché, US Embassy
 Mr. Charles Darkwah, First Secretary, Ghana

Embassy

Mr. Jae Choon Kim, Counsellor, Korean Embassy
 Mr. Lee Chong Hui, Fishery Attaché, Korean Embassy

Mr. Charles Dickey, Delaware River Port Authority

Mr. Jean A. Monnin, Port of Le Havre

Mr. Katsuya Yokoyama, Port of Los Angeles

Mr. Kiyoshi Mikami, Technical Director, Port of Tokyo

Mr. Tsuneo Nakamura, Adviser, Sasebo Heavy Industries Co., Ltd. (IAPH Panelist)

Mr. Masahiro Yoshikawa, Ministry of Transport

Mr. Kenichi Kuroya, Japan Shipowners' Association

Mr. Tsuneo Matsushita, Japan Maritime Daily (rin)



Mr. Eric Williamson (A tall gentleman in white coat in the middle) and the party in front of MV-PP 15 at the slip way ramp of Chiba Works of Mitsui Engineering and Shipbuilding Co., Ltd.

Membership Notes

New Members

Regular Member

Port of Brisbane Authority
 G.P.O. Box 1818, Brisbane 4001
 Australia
 Office Phone: 224 0717
 Cable Address: PORTBRIS
 Telex No. AA40760
 (Mr. F.M. Wilson, General Manager)

Associate Members

Sea Containers Services Limited (Class D)
 5 rue Chante-Coq-92801 Puteaux, France
 Office Phone: 776-42-32
 Cable Address: OTEPIPE PUTAU
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 (Mr. D. Charritat, Technical Manager)

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 (Port Consultant-Research Economist
 Research & Programming Department, Port of
 Thessaloniki Authority)

Mr. Jayji J. Malik (Class E)
 P.O. Box No. 15625, Dar es Salaam, Tanzania
 Office Phone: 21212 Ext. 420
 (Port Operational Supervisor)

1977 Budget for Japanese Ports and Harbors

Following our publication of the "Outline of the New 5-year Investment Program for Ports and Harbors of Japan" in the December 1976 issue of this journal (Page 10-16), we received from the readers a number of requests, besides varying comments of interest, for more of the similar type of first hand information.

In response to these demands, we take the pleasure of introducing to you another paper prepared by the Japanese Government, which may give you to the follow-story, how the Investment Program is realized in the Budget of 1977. (Head Office)

On the 20th, January, 1977, Japanese Government decided General Budget Plan for 1977 fiscal year (from April 1st to March 31st of the next year) to be presented to the Diet for their approval. Its main feature is that stress being put on domestic economic recovery, allocating funds as much as possible to the public works and trying hard for tax reduction for individuals, resulting 8,000 billion yen deficit and issuance of national bond as much to make it up.

The first year portion of the 5-year investment program for ports and harbors (the article appeared on Page 10, Vol. 21, No. 12, "Ports and Harbors") is incorporated in it. The gist of proposed Budget for Japanese ports and harbors, 1977 is as follows;

I. The Whole Picture of 1977 Budget for Ports and Harbors

(Unit: 100 million yen)

| Items of Projects | Allocation at the beginning of 1976 (A) | Allocation decided for 1977 (B) | Ratio of Increase $\frac{(B)}{(A)}$ |
|--|---|---------------------------------|-------------------------------------|
| Fund from National Treasury | 1,756.0 | 2,049.4 | 1.167 |
| Improvement and Development of Ports and Harbors, per se | 1,561.0 | 1,802.6* | 1.155 |
| Shore Protection relating to Ports and Harbors | 171.8 | 199.1 | 1.159 |
| Recovery of Disaster Damage | 23.2 | 47.7 | 2.053 |
| Loans from National Investment Account to Local Port Management Bodies (Local Governments) | 1,547.8 | 1,601.4 | 1.035 |
| Improvement and Development of Ports and Harbors | 99.8 | 91.4 | 0.916 |
| Improvement and Development of Functional Superstructure and Facilities | 430.0 | 400.0 | 0.930 |
| Reclamation Works for Industrial Use and Urban Development | 1,018.0 | 1,110.0 | 1.090 |

II. Breakdown of the Investment for "Improvement and Development of Ports and Harbors"

1. Breakdown by Region

(Unit: 100 million yen)

| Names of Regions | Allocation at the beginning of 1976 (A) | Allocation decided for 1977 (B) | Ratio of Increase $\frac{(B)}{(A)}$ |
|---|---|---------------------------------|-------------------------------------|
| Main Island, Kyushu, Shikoku | 1,132.2 | 1,259.8 | 1.113 |
| Works by the Port Development Authority | 12.5 | 10.5 | 0.840 |
| Works other than above | 1,119.7 | 1,249.3 | 1.116 |
| Hokkaido | 266.6 | 332.8 | 1.248 |
| Small Islands | 99.5 | 121.7 | 1.223 |
| Amami District | 22.4 | 30.7 | 1.372 |
| Okinawa | 86.3 | 106.6 | 1.236 |
| Total: | 1,607.0 | 1,851.6* | 1.152 |

Note: 1) Expense from National Treasury only.

* The difference of the figures is due to the fact that above table is based on the Special Account while the first table on the General Account.

2. Main New Decisions

- (1) New works to be directly executed by the Central Government. (Port and Harbor Bureau, Ministry of Transport)

At the two ports of Major Port, namely Omaezaki, Shizuoka Pref., Tottori, Tottori Pref., commencement of direct execution of construction works by Port and Harbor Bureau is approved. And also, at Hitachi Port, starting of construction of a special pier for a special good (see IV (2), P. 11, Vol. 21, No. 12, "Ports and Harbors") is approved to be carried out in the same way.

- (2) Up-grading to Major Port

Up-grading of the Port of Mutsu Ogawara, Aomori Pref., which is located at the heart of the big scale regional development plan of the same name, to Major Port is approved on condition that it should be formally approved later by the Cabinet. (See IV, (4), P. 11, Vol. 21, No. 12, "Ports and Harbors".) Necessary fund to begin the research work for the completion of the execution design of the said port is allocated for the Bureau's direct work.

- (3) New Construction Works for Local Ports

Against the original request for 28 new construction projects, 19 were approved. (See IV (3), P. 11, Vol. 21, No. 12, "Ports and Harbors".) The breakdown of the 19 by region is as follows:

| | |
|--------------------------------------|---|
| Main Island, Kyushu and Shikoku..... | 9 |
| Small Islands..... | 7 |
| Amami District..... | 1 |
| Okinawa..... | 2 |

Specified names of ports are going to be formally decided and announced in April, this year.

- (4) **Refuge Port**
Construction of new refuge port facilities at Nezugaseki, Yamagata Pref. and Tajiri, Tottori Pref. is approved under specially high ratio of subsidy (75% from National Treasury). (See IV (6) 2), P. 12, Vol. 21, No. 12, "Ports and Harbors")
- (5) **A New Transport System**
Starting of construction of new mass transport systems which are now under study by the various groups, at Osaka (South Port District), and Kobe (Port Island District) is approved.
- (6) **Quality Improvement Works for Bottom Sediments**
Further research work for quality improvement works for bottom sediments at Tokyo, Osaka and Ise (Nagoya) Bays is approved, the expense for which being incorporated in the General Port Research Expense Account. (See IV (7) and 2), P. 12, Vol. 21, No. 12, ditto)
- (7) **Construction of Protection Walls for Waste Disposal**
The purpose of constructing protection walls for filling works, utilizing urban wastes in Tokyo and Osaka Bays by respective Port Development Authorities is turned down, instead carrying out researches concerning urban waste disposal at each district is approved with a fund being included in the General Port Research Expense Account. (See IV (7) 3), P. 12, ditto)
- (8) **Construction of Oil-spill Recovery Ship**
Construction of a spilled oil recovery ship is approved, which is to replace oil spills for protecting marine environment. (See IV (7) and 4) P. 12, ditto)

III. Breakdown of port related shore protection works

1. Breakdown by region

(Unit: 100 million yen)

| | Allocation at the beginning of 1976 (A) | Allocation decided for 1977 (B) | Ratio of Increase $\frac{(B)}{(A)}$ |
|-------------------------------|---|---------------------------------|-------------------------------------|
| Main Island, Kyushu & Shikoku | 152.8 | 174.9 | 1.144 |
| Hokkaido | 2.6 | 3.3 | 1.263 |
| Small Islands | 12.3 | 15.6 | 1.267 |
| Amami District | 0.7 | 1.0 | 1.422 |
| Okinawa | 3.4 | 4.3 | 1.280 |
| Total: | 171.8 | 199.1 | 1.159 |

Note: Expense from National Treasury only.

(Continued from page 9)

tackled during the Special Committee Symposium:

- Do they need examination on the International basis of the I.A.P.H., and the setting up of a policy for Association?
- And how are they to be dealt with:

Within the scope of the Special Committee on Legal protection of Navigable Waterways (which, more simply, could be called the Legal Committee)? or within the scope of other Committees? Should Sub-Committees be constituted?

Anyway, quite a lot of willing participants are needed . . . It is keenly hoped they will attend the symposium, and, if possible, accept to continue participating, even after the close of the Conference, with their own share of the job.

2. New Works

In the category of Shore Protection Works, against original request of 31 projects, new works for 21 projects are approved.

And in the category of Marine Environment Improvement works, against original request of 5 works, 2 are approved.

The breakdown by the works by region is as follows;

| | Shore Protection Works | Marine Environment Improving Works |
|---------------------------------|------------------------|------------------------------------|
| Main Island, Kyushu and Shikoku | 10 | 2 |
| Hokkaido | 2 | - |
| Small Islands | 8 | - |
| Amami District | - | - |
| Okinawa | 1 | - |
| Total: | 21 | 2 |

IV. Remarks

In the Budget for 1977 fiscal year, stress being put on the improvement and development of the living environmental facilities in general principle, the amount allocated for improvement and development of purely port and harbor facilities was held comparatively at a lower level. In view of this fact, the total budget is a little bit short to the amount anticipated in the 5-year Investment Program. (See Table-A and B)

While the actual amount budgeted is short in comparison with what was anticipated in the Program, the amount allocated for various local areas, aimed at realization of a geographically well-balanced land utilization of the nation, shows rather a higher percentage of progress than the plan. (See Table-C)

Table - A

Comparison between the 1977 Budget and the 5-year Program

(Unit: 100 million yen)

| Year | Annual Budget (A) Allocated | Amount to be invested in accordance with the 5-year program (B) | $\frac{(A)}{(B)}$ |
|------|-----------------------------|---|-------------------|
| 1976 | 2,908 | 2,908 | |
| 1977 | 3,230 | 3,568 | 90.6% |
| 1977 | 11.1% | 22.7% | |
| 1976 | | | |

Note: Amount to be invested in accordance with the 5-year program (B) was computed in the premises that the whole projects (2,280 billion yen) are to be completed in five years by the equal compound percentage of the growth (22.7%) starting with the budget for 1976.

Table – B The Rate of Progress of The Fifth 5-year Investment Program (1976-1980)

(Unit: 100 million yen)

| Items of Projects | Amount in the 5-year Program (1976-1980) (A) | 1976 Budget | 1977 Budget (Draft) | Total of 1976 & 1977 Budget (B) | Rate of Progress | Rate of Progress planned |
|--|--|-------------|---------------------|---------------------------------|------------------|--------------------------|
| Improvement and Development of Ports and Harbors | 2,280,000 | 290,848 | 323,041 | 613,889 | 26.9% | 30.8% |
| Disaster Recovery, Local Independent Projects | 340,000 | 50,600 | 58,300 | 108,900 | 32.0% | 32.0% |
| Sub-total: | 2,620,000 | 341,448 | 381,341 | 722,789 | 27.6% | 28.8% |
| Improvement and Development of Functional Super-structure and Facilities | 280,000 | 44,000 | 41,000 | 85,000 | 30.4% | 33.3% |
| Reserve | 200,000 | 0 | 0 | 0 | 0 | 0 |
| Grand Total: | 3,100,000 | 385,448 | 422,341 | 807,789 | 26.0% | 27.8% |

Table – C The rate of the progress of the 5-year Investment Program of Ports and Harbors

(Unit: 1 million yen)

| Region | Amount in the 5-year Program (1976-80) (A) | Annual Budget | | | Rate of Progress $\frac{(B)}{(A)}$ | Rate of Progress planned |
|------------------------------|--|---------------|------------------|------------------|------------------------------------|--------------------------|
| | | 1976 | 1977 (tentative) | Total of 76 & 77 | | |
| Main Island, Kyushu, Shikoku | 1,688,300 | 238,057 | 258,094 | 496,151 | 29.4% | 30.7% |
| Hokkaido | 197,700 | 29,897 | 36,533 | 66,429 | 33.6% | 32.4% |
| Small Islands | 96,500 | 14,023 | 17,593 | 31,616 | 32.8% | 31.4% |
| Amami District | 17,000 | 2,328 | 3,226 | 5,554 | 32.7% | 30.0% |
| Island other than Amami | 79,500 | 11,695 | 14,367 | 26,062 | 32.8% | 31.7% |
| Okinawa | 67,500 | 8,871 | 10,821 | 19,692 | 29.2% | 29.1% |
| Total: | 2,050,000 | 290,848 | 323,041 | 613,888 | 29.9 | 30.8 |

Note: The total amount in the 5-year Program, which is 2,050,000 million yen, is the total of the respective ports' project and does not include contingency reserve.

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

An Outline of Port Developments in Brazil — II

(Continued from February 1977
issue)

Reprinted from "Portos e Navios",
August 1976 with personal approval
from Mr. A. O. Markus who visited
IAPH in Japan in September, 1976.

New Horizons

Now in the hands of the Portobrás Planning Service, three new specialized terminals are being given priority within the II National Development Plan.

The Rio Grande wheat and soya terminal is described under the heading Terminals for Specific Cargoes, the Sepetiba bulk port is given separate treatment in this Outline due to its importance as part of the Rio de Janeiro ports scheme, while the new Praia Mole project is detailed below.

THE NEW PORT OF PRAIA MOLE—VITÓRIA

Close to the port of Vitória, the principal port of the State of Espírito Santo, the building of a new steel plant is under study which may involve several foreign interests. In addition, an expansion programme is planned for Usiminas.

The new mill is projected to make use of the vast supply of iron ore coming down the rail line from the interior of Minas Gerais to the present port of Tubarão, which was already shipping well over 50 million tons in 1975.

To service this new mill and others with coal, both imported and national coal arriving by sea, an entirely new port is planned to the north of Vitória, to be called the port of Praia Mole.

In addition to 4.384 million tons of coal per annum, Praia Mole will handle crude and refined petroleum products to the extent of 2.8 million tons per annum, and steel slabs and rolled steel products of 2.5 million tons per annum.

Dredging to a depth of 17 metres will enable bulk carriers of 120,000 dwt to lie alongside in the steel loading berths, while 80,000 dwt bulk coal carriers will be able to unload in 16 metres depth at the coal wharves. 60,000 dwt tankers will unload petroleum products at special berths with 13 metres depths.

The access channel will have a depth of 20 metres and will allow vessels up to 270 metres length and 44 metres beam to have easy clearance and manoeuvrability in a basin 580 metres across and 20 metres in depth. Portobrás and Siderbrás (the Brazilian Steel Industry Holding Company) are both involved in this Praia Mole project, on a 51%—49% investment basis. Construction is due to start early next year and be concluded in 1979, at a cost of US\$200 million for this initial stage of the plan.

Praia Mole is an artificial port to be protected by a 4,200 metre mole. Within the basin, a coal unloading pier is to be built, two berths for handling steel slabs and other steel products of up to 35 tons and a tanker jetty.

Dredging and rock preparation has been estimated at US\$62 million, construction US\$76 million, coal unloading equipment US\$44 million, and steel handling equipment US\$18 million. Of the total US\$62 million to cover equipment purchases, a maximum of 40% will be imported.

PERNAMBUCO

Among the new ports contemplated, one that is most urgently required is for Pernambuco, where the present port of Recife is fast becoming too small to handle the amount of traffic that is constantly increasing. During the previous administration of the State of Pernambuco, the choice of location for building a new port fell on Suape. President Ernesto Geisel recently ordered the setting up of a commission with representatives from the Ministries of Transport, Interior, Industry and Trade and the Office of the Pernambuco State Secretary of Planning, to report on the Suape complex which is to provide an outlet for Pernambuco products, in addition to the facilities available at the port of Recife.

Ecologists, environmentalists, tourism experts, keepers of historical monuments and others have been against the building of the Suape port complex fearing that it could destroy coconut-lined beaches of untold beauty, not to mention the historic fortresses and monuments built by the Dutch invaders, during their relatively short control of this part of Brazil.

Used as a harbour since it was originally discovered and endowed by the natural protection provided by the straight-as-a-die reefs that run along the Pernambuco coast, Recife languished port-less until 1918, when the port construction was finished by the French concessionaire with whom the original contract had been signed in 1909. The Recife layout, however, does not permit the expansion of the port in its present location and a new one is urgently required since, according to Admiral Paulo de Castro Moreira da Silva, head of the Institute of Sea Research, the present installations will not be able to handle the expansion of port traffic beyond 1980.

As now visualized, the Suape complex is to include the port itself, a repair yard for large ships and container ships, in addition to an industrial and export complex of which fertilizer plants, sulochemical plants and metal-mechanical engineering manufacture would form the basis.

The Sudene has already examined and approved the installation of a Cr\$500 million fertilizer project, a joint venture incorporating the Japanese groups Ataka and Sumitomo and the Brazilian UEB—the Union of Brazilian Enterprises.

Other suggested installations in the Suape complex are a diesel engine manufacturing plant a Cr\$600 million investment, and the Cr\$450 million Mavibrás steel foundry and forge works a joint Brazilian-French venture with Mavillor. The Cr\$1.6 billion marine repair yard is the largest installation of all and the names of Keith Ludwig or C.H. Bayley, of Britain, are mentioned as interested parties.

Additional projects totalling some Cr\$13 billion have been suggested for Suape, but could well be installed in

other parts of Brazil if timing of the viability studies is not hurried. They are: a steel plant for rolling flat steel sheets with British interests; a seamless tube extrusion plant with German capital; exploration of lime algae; an aluminium plant, and Rodoviário do Nordeste S/A.

To help get this project off the ground, the previous Governor of Pernambuco disappropriated an area of 32,000 hectares in the proposed port area of Suape.

The Commission, set up earlier in the year, was given 180 days to report on the matter, to the President.

AMAPÁ

Amapá, north of the Amazon delta, is to be provided with a new port for which engineering studies are now being undertaken by a commission set up this year by Portobrás and the Amapá Federal Territory Government. The first stage of construction of this new port is expected to be ready by 1980 estimated at a cost of Cr\$86 million, and is to include 430 metres of quay of which 210 metres will have a depth of 12 metres; one 5,200 square metre warehouse; workshops; administration building; in addition to the installation of electricity, water and communications. The new port is to integrate river and sea transport with the planned North Perimetre Highway, north of the Amazon basin.

ESPIRITO SANTO

As the result of an agreement signed last March between Portobrás, the National Bank of Economic Development (BNDE), Vale do Rio Doce S/A and Aracruz Celulose; the new port at Barra do Riacho, Capuaba, adjacent to Vitória, on the Atlantic seaboard, State of Espírito Santo, is already under way and expected to be at least partially finished by October next.

The Minister of Transport Dyrceu Nogueira, was able to inspect the work on the warehouses and silo, as also the 653 metre quay, of which 150 metres are to be reserved for loading cellulose from the Aracruz plant. Other facilities include a 10,000 ton refrigerated warehouse, to be built in two stages of 5,000 tons each, complete with the equipment necessary to operate them; a vertical cell 30,000 ton silo fitted with all the machinery required to receive and load cereals; total cost of which facilities is estimated at Cr\$337 million.

The docks will comprise general cargo warehouse, steel handling yards, workshops, administration buildings, foundations for the refrigerated warehouse, cargo handling equipment, a 3,200 metre roadway and a 670 metre railway spur, linking the port to the Companhia Vale do Rio Doce line; Cr\$227 million has been set aside for this part of the project.

The Vitória-Capuaba complex will cover the "corridor" formed by the States of Espírito Santo, Minas Gerais and Goiás and is surrounded by unoccupied land, allowing for future expansion. The port will handle, principally steel products, meat, solid bulk cargoes (cereals and minerals) and cellulose.

The BNDE is financing 60% of this project, while the remaining 40% is the responsibility of a company of which Portobrás will own 60%, Aracruz 30% and Vale do Rio Doce 10%.

As from 1978, the Aracruz exports of cellulose through this are expected to reach 400,000 tons, though the first shipments are expected to be made in December of this

year. Exports from Cenibra, a Vale do Rio Doce associated firm will also use this new outlet.

Another port is under consideration in Espírito Santo to be located at the mouth of the Rio Doce, 60 kilometres north of Vitória, the cost of which has been estimated at 110 million dollars. Construction has been authorized by Portobrás. This new facility is to be used as an iron ore terminal capable of loading 50 million tons per annum in ships of up to 100,000 dwt.

The necessary depth studies and project engineering is in hand to enable the port to be in operation by 1980. Meanwhile the Vale do Rio Doce S/A has applied to the Ministry of Transport for permission to construct a 60-kilometre railway line from the existing Vitória-Minas Gerais line to the new port.

The ports measure up

Cargo statistics from Brazil's principal ports can provide a number of interesting comparisons.

Taken geographically and from north to south, the first port of substance is Manaus which, in 1974, operated 1,320,288 tons total, down 21% in relation to 1973, of which 521,203 tons referred to coasted trade.

For Belém, another large port in Amazonia, the figure was 3,617,851 tons, up 8% over the previous year. Exports took care of 2,569,139 tons, the breakdown being 1,300,048 tons of solid bulk cargoes, 280,936 tons of liquid bulk cargoes and 988,255 of general cargoes.

The port for São Luís, Maranhão, is Itaquí, total tonnage handled at this port in 1974 amounted to 376,732 tons, an increase of 18% in the year. Exports to foreign countries totalled 87,949 tons.

Fortaleza ships through its own port of Mucuripe, under the responsibility of the Companhia Docas do Ceará. In 1974 and again in 1975 this port operated over one million tons. The principal business was coastal trade, and liquid bulk cargoes, mostly petroleum products account for much of the tonnage quoted. In 1974, for instance, 615,176 tons were unloaded here. Very impressive was the increase in the use of containers which went up from one container in 1974 to 643 containers in 1975.

In Natal, Rio Grande do Norte, an increase of 13% was shown in 1974 over 1973, equal to 200,946 total tonnage, foreign trade having been reduced by 45%. Cabedelo was another port with reduced foreign trade in 1974, down by 8% in relation to the previous year, represented by 129,993 tons handled, of a total of 358,814 tons going through the port.

WELL PLACED GEOGRAPHICALLY

Recife is the largest and most important port in Brazil's northeast, its geographical position, in relation to the rest of the world, having helped to make it so from early times. A new bulk sugar terminal has improved the facilities here and speeded up loading. Tonnage going through Recife in 1974 totalled 3,306,967, the same as in 1973. Coastal trade increased 3% and foreign trade went down 3%. On the positive side, it is interesting to note, from the Recife figures, that solid bulk cargoes imported and exported totalled 998,181 tons up 18% while the liquid bulk cargoes only increased 2%, although fuel is included in this figure.

Figures quoted for Maceió in 1974 showed a plus over the previous year in every instance. Total cargoes were

1,212,011 tons, up 15%, of which 903,740 tons was foreign trade, up 8%. In this case exports were 756,187 tons and imports 147,553 tons, a nice favourable balance. In the port of Aracaju, the figures, totalling 2,192,006 tons, break down into 2,153,021 tons of liquid bulk cargoes, shipped to other Brazilian coastal ports and 26,742 tons of solid bulk cargoes imported, also from Brazil. General cargoes amounted to 12,243 tons.

The State of Bahia has two principal ports, Salvador and Malhado, for Ilhéus. Salvador's total cargo handled for 1974 was 1,125,073 tons, up 10%, with the principal increase in business with other Brazilian ports. Salvador's foreign shipping was 781,386 tons, 426,432 tons were imports against 354,954 tons of exports. Malhado (Ilhéus) operated 364,689 tons of which 134,761 tons were foreign trade, and of this 106,489 tons were exports.

SOME FIGURES FOR 1975

Vitória, which is one of the export corridor ports, comprises also the Tubarão terminal, from which iron ore is loaded—a very heavy cargo. In this case figures are available for 1975 when 57.7 million tons were handled here, against 55.03 million in 1974, placing Vitória in first position of Brazil's ports by weight and volume.

It should perhaps be mentioned here that the export corridor ports of Rio de Janeiro, Santos, Paranaguá, Rio Grande and Vitória, took care of 80% of Brazil's total of 154 million tons of cargo operated in 1975.

Of these 154 million tons operated by the country's ports in 1975, liquid bulk cargoes accounted for 40 million tons (mostly fuel), while 71 million tons comprised mineral ores, coal, salt, wheat and soya.

MORE INCREASES

In respect of tonnage handled, Rio de Janeiro comes in second place as a result of the Minerações Brasileiras Reunidas—MBR iron ore loading terminal and the Petrobrás liquid terminal, both of which are officially connected with the Companhia Docas do Rio de Janeiro. Total figures for 1974 were 32,652,253 tons, an increase of 25% over 1973.

Angra dos Reis, also located in the State of Rio de Janeiro, handled 525,413 tons, up 43% and of which 193,990 tons were solid bulk cargoes, the remainder being general cargoes. No liquid cargoes are operated in this port.

The port of Santos is placed third by weight in the list of Brazilian ports, since much of the bulk cargo that goes through this port is made up of grain, that is light in weight—and not iron ore—which is, of course, heavy. Liquid fuel cargoes are no longer handled in Santos, since a terminal has been built in São Sebastião.

Shipments through the port of Santos in 1974 were 19,614,468 tons all told, an increase of 19% over 1973. Of this total 7,463,743 tons were solid bulk cargoes, 4,218,702 tons were liquid bulk cargoes and 7,932,023 tons were general cargoes, making Santos the largest port in Latin America for general cargo.

The liquid bulk terminal mentioned above, installed at São Sebastião, operated 31,197,918 tons in 1973, most of it petroleum. A small amount of 7,053 tons of general cargo can be subtracted from the total to indicate the tonnage for the liquid cargoes.

In 1974, Paranaguá tonnage was 4,908,713 up 5% and in 1975 this total had grown to 6 million tons. As in the case of Santos, cargoes going through Paranaguá are light in weight but often high in value. The 307,000 tons of coffee,

one million tons of soya and other products exported through Paranaguá in 1975, translated as sales of Cr\$10 billion in foreign exchange earnings, contributing 15% to the country's exports by value. Imports through this port, low in the past, are expected to increase on account of the machinery and equipment for the Itaipú hydroelectric project, arriving by sea.

Formerly known as Antonina, Barão de Teffé registered a decrease of 30% with a total figure of 21,051 tons in 1974 going through this port.

São Francisco do Sul was another port showing a decrease, in this case of only 4%, total tonnage adding up to 176,607.

A RECORD GROWTH

Two more ports in Santa Catarina are Itajaí and Imbituba. Itajaí showed the largest increase of any port in Brazil with 108%, operating 1,413,509 tons in 1974, of which 841,024 tons were exports, 823,787 tons being general cargo, largely consumer goods and, consequently, high in foreign exchange value. Imbituba, on the other hand, ships out coal from the area to other parts of Brazil. The total figure in 1974 was 1,063,793 tons, an increase of 19%.

Of the three ports in the State of Rio Grande do Sul, Rio Grande was in first place in 1974 with 6,235,368 tons, 32% over 1973, Porto Alegre second, with 5,214,295 tons, a plus of 4% and Pelotas third, with 279,447 tons, down 3%. The Rio Grande port figure will go on increasing as this important new port has additional facilities added and those already under construction terminated. Grain, processed food, meat and other bulk cargoes are already being shipped here, but will diversify too. Porto Alegre also operates large tonnages of solid bulk cargoes which in 1974 amounted to 4,293,525 tons, an increase of 15% over 1973.

(To be concluded in the next issue)

International Concern —

(Continued from page 14)

Note dealing with the extent to which non-governmental organizations such as I.A.P.H., contributed to the work of I.M.C.O. related to the expenditure incurred by I.M.C.O. on such bodies consequent on the granting of consultative status. The possibility that they could be called upon to make a financial contribution to I.M.C.O., perhaps as a tangible demonstration of their real interest, was also raised.

A lively debate ensued and Council decided to request the I.M.C.O. Secretariat to submit further information to it relating to expenditure and the question of reciprocity as between I.M.C.O. and the organizations enjoying consultative status.

The Council also took the opportunity to express its appreciation to Captain Alexander Saveliev, retiring Secretary of the Maritime Safety Committee for his notable services to the Organization.

The next session of the Council will take place from 23rd to 27th May, 1977.

Caldera—A New Port in Central America

By Shigeo Morimoto
Vice President
Japan Port Consultant Association

1. Introduction

In October 1972, the Japanese Government, at the request of the Government of the Republic of Costa Rica, sent a mission of eight experts headed by the writer to undertake a feasibility study for the improvement and expansion of the Pacific port of Puntarenas in that Central American country.

The feasibility study recognized the necessity of building a new modern and efficient port on the southern shore of the Bay of Nicoya, some 15 km southeast of Puntarenas and established the technical and economic viability of providing the necessary port facilities including, among others, three deep-sea berths.

Subsequently the Costa Rican Government decided to implement the new port plan recommended by the Japanese mission and entered into negotiations for Japanese financial aid for this purpose. This resulted in the conclusion in March 1974 of a loan agreement between both governments amounting to nearly US\$14 million to cover part of the cost of the new port construction. The Japanese loan was increased to some US\$23 million in 1976 to cope with the inflationary trend in construction costs accelerated by the worldwide oil crisis.

Late in 1976, Japan Port Consultants, Ltd., an independent consulting firm specialized in the port sector, completed the layout and design of the major waterfront structures for the new port of Caldera in the Bay of Nicoya, under a contract with the Costa Rican Government. The engineering services contracted by JPC included the evaluation and selection of the optimal construction method.

The Caldera Port Project involves the construction of port structures on a desolate site on the Bay of Nicoya communicating with the Pacific. The writer desires to give an outline of the project, including a brief description of the circumstances under which it came into existence. The motives are twofold that prompted him to contribute the present article to this distinguished publication of the International Association of Ports and Harbors. For one thing, Costa Rica is not represented on IAPH; for the other, the writer has been deeply involved in the Caldera Port Project from the very outset, having, as earlier mentioned, led the Japanese Government Mission that prepared the feasibility study for the project, and having later been responsible as Project Manager for the general coordination and supervision of the layout and design work for the proposed port structures.

2. Necessity for New Port and Project Planning

Costa Rica's central region consisting largely of highlands as well as the Pacific coastal region have a heavy concentration of her population, industrial activities and transport networks. Puntarenas, the nearest port to the capital of San Jose, has played the role of the gateway to the nation's economic center. Seaborne cargo in an annual volume of over 600,000 tons moves through this port



Mr. Shigeo Morimoto

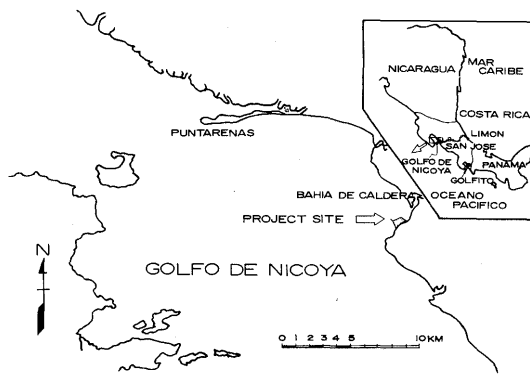
which is already in an extreme state of shipping congestion and where the berthing and cargo handling facilities need to be expanded in a large measure in order to meet the ever growing cargo traffic.

In addition to Puntarenas, Costa Rica has two other seaports of similar magnitude: Limon on the Caribbean coast and Golfito on the Pacific coast. These three ports account for almost 100% of the seaborne cargoes to and from overseas areas, in other words, nearly 90% of the nation's foreign trade cargoes. Costa Rican exports consist primarily of coffee, sugar, banana and beef, while crude oil, fertilizers, steel and other industrial products, and wheat are the principal imports of the country. Golfito is devoted almost exclusively to banana shipments, whereas this item is hardly handled in Puntarenas. Limon comes in between the two ports, in so far as the commodities handled are concerned.

The three Costa Rican ports have different characteristics which are defined primarily by the socio-economic conditions of their respective hinterlands. Golfito and Limon, backed by clusters of large banana plantations, handle banana shipments in greater quantities than any other outbound cargoes, while the major exports through Puntarenas are coffee, sugar, beef and other farm and livestock products from the central highlands and the Pacific coastal region. The chief imports through this Pacific port include steel and other industrial products, and wheat.

Limon, the Caribbean gateway to Costa Rica, is far more distant from the central region than Puntarenas. Besides, the road linking Limon with the central highlands is not very good. Nevertheless, in addition to banana shipments, this Caribbean port handles in a substantial volume other cargoes to and from South and North Americas and Europe, since its berthing and cargo handling facilities are somewhat better than those of Puntarenas.

It is to be noted that over 60% of the exports and imports moving through Puntarenas are via the Panama Canal. The greater share of the across-the-Canal traffic in the trade goods through Puntarenas is presumably ascriba-



Existing city and port of Puntarenas

ble to the fact that despite the additional distance and Canal toll involved, it is less costly to route shipments to and from Costa Rica via the Panama Canal than to discharge or load them at the Caribbean port of Limon for overland haulage to and from the central region of the country.

The Costa Rican Gross Domestic Product grew at a high rate of 8.4% per annum on the average during the 1965-1969 period. An even higher GDP growth rate may be achieved in future years, if the country seeks to foster industries demanding intensive use of its abundant supply of highly-educated labor and to keep up the national efforts toward higher labor productivity in the primary industries.

Accelerated economic growth of Costa Rica will entail a steady uptrend in her foreign trade. When it comes to the functional shares of Puntarenas, Golfito and Limon, these existing seaports will inevitably have to increase their respective seaport functions to a large extent. In view of the anticipated changes in the nation's socio-economic conditions and, in particular, the priority given to the development of the Pacific coastal region, it is logical to assume that top developmental priority will go to the Pacific port of Puntarenas.

As previously stated, the port facilities of Puntarenas are already incapable of accommodating any further increase of shipping traffic. If the port is to perform greater functions in the years to come, its installations and services must be expanded and improved accordingly. However, the problem is the lack of adequate space in areas adjacent to the port zone that is required for expansion of the existing facilities, because the urban areas in the back of the port are fully utilized. Enlargement of the port functions cannot be achieved unless additional space is made available for extension of the present facilities.

Founded on a large sand spit, the city and port of Puntarenas depend essentially on a very delicate equilibrium of all elements of nature. This equilibrium will be readily lost with resulting destruction of the sand spit, if the surrounding topographical features are altered recklessly and even in case of well-planned changes.

Besides being a seaport, Puntarenas is a resort center where fishing, manufacturing and commercial activities are also brisk. In this port city, the land utilization has already attained a saturation point, which seems to be urging its inhabitants to try a fresh start groping for such characteristics of their city as they consider most appropriate.

Various considerations led the writer and other members of the Japanese Government Mission to select other site in the Bay of Nicoya for deep-sea port development. One of



New port site—Caldera

the considerations was that Puntarenas is expected to be increasingly oriented toward a center of resort, fishing, manufacturing and commercial activities in coming years, and that it seems practically difficult and even inadvisable for these industries to be relocated in other Costa Rican cities. Another consideration was that Puntarenas, obviously destined to be the pivotal point for the development of the Pacific coastal region, will be required to perform the added function as the vital link in the nation's network of domestic waterborne and overland freight and passenger transport services. Exhaustive analysis of these considerations led to the conclusion that it was not advisable from the standpoint of efficient land utilization to expand the existing facilities of Puntarenas as Costa Rica's leading trade port. From this conclusion Caldera south of Puntarenas was finally picked out as the site for another trade port on the Pacific coast. The selected site, located in an underdeveloped area, is ideal for deep-sea port development with ample space available for future extension.

Over the last 20 years, a number of port development plans for the country's Pacific coast have been suggested by leading port specialists and consultants from different parts of the world, but none of them have been translated into action for some reasons or other.

The Japanese mission proposed the construction of a new deep-sea port on the southern shore of the Bay of

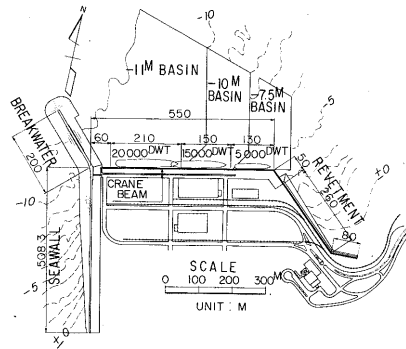


Fig. 1

Nicoya—a site which had never been conceived. The totally new plan was compared from the socio-economic and harbor engineering points of view with over ten different previous plans which had seemed feasible. In consequence, the mission adopted the Caldera Port plan as the best workable solution.

In contrast to the preceding port development plans, the Caldera Port plan stressed that the new port has the advantages of easy access to the central region and high adaptability to the function as the physical distribution center on the Pacific coast. The port can be developed as a port city while maintaining close relations with Puntarenas and other existing cities in the coastal region. In addition, the proposed port has ample space in its surrounding areas for future extension, and the port-oriented industries there will likely offer little competition with other industrial activities. Under the Japanese-proposed plan, the construction works can be expected to be executed with less time and cost. The Japanese mission saw little possibility that the construction operations will produce harmful effects on the neighboring areas, such as, for example, erosion damages on the adjoining shores.

Fortunately the Caldera Port Project has got underway with the sanction and blessing of the competent Costa Rican authorities and all others concerned.

3. Outline of Caldera Port Project and Its Future Development

The plan put forward by the Japanese Government Mission called for the provision of port structures and installations with three deep-sea berths as the nucleus. It was based on the assumption that the Stage I of the project would permit the new port to achieve an annual throughput of 500,000 tons out of the cargo traffic which the existing ports of Puntarenas, Golfito and Limon would be unable to handle as a result of future growth of Costa Rican foreign trade.

The project originally comprised the following port structures and installations:

| Type of Works | Length or Area |
|----------------------|----------------|
| Breakwater | 200 m |
| Sea Wall | 480 m |
| Quay Wall -10 m | 180 m |
| Quay Wall -7.5 m | 260 m |
| Revetment | 240 m |
| Land reclamation | 200,000 sq.m. |
| Mooring basin | 250,000 sq.m. |
| Transit sheds | |
| Dock road | |
| Dock railway sidings | |
| Other facilities | |

TYPICAL CROSS SECTION OF BREAKWATER

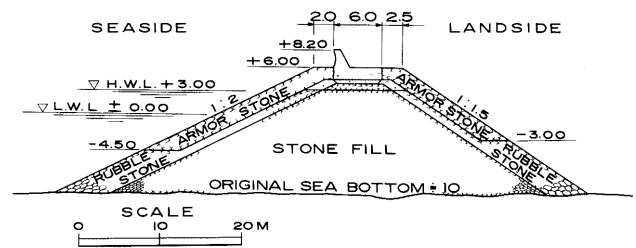


Fig. 2

TYPICAL CROSS SECTION OF -11M QUAY WALL

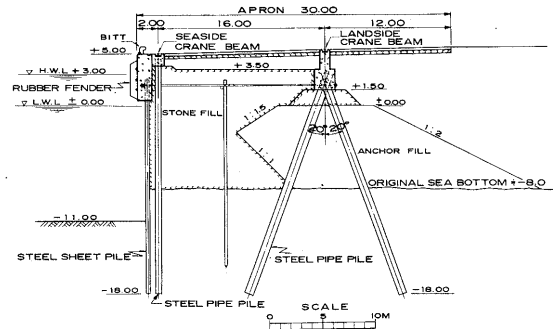


Fig. 3

The -10 m quay wall with a length of 180 m was to provide a berth for 15,000 DWT vessels and the -7.5 m quay wall having a length of 260 m two berths for 5,000 DWT ships. Later, however, the Costa Rican authorities concerned changed the original quay wall requirements at the detail design stage, taking into consideration the tendency toward larger sizes seen among ships calling at Puntarenas. The alteration involved the addition of a -11 m quay wall with a length of 210 m and reduction of the length of the -10 m and -7.5 m quay walls to 150 m and 130 m, respectively.

The -11 m quay wall will provide a berth for 20,000 DWT ships, the -10 m quay wall a berth for 15,000 DWT ships and the -7.5 m quay wall a berth for 5,000 DWT ships. The length of 150 m for the -10 m berth is rather insufficient. However, it was determined since the probability is very negligible that a 20,000-tonner and a 15,000-tonner will call at the new port at a time.

Fig. 1 shows the layout of the proposed port facilities. The layout was selected as a result of an overall analysis of the direction of waves affecting the new port, existing topographical features of the site, water depth, characteristics of the foundation soil, routes followed by calling ships, ease of cargo handling provision for future expansion of the port, urbanization planning for the areas behind and other relevant factors.

Though not shown in Fig. 1, provision is made for the installation of dolphins or pier and a conveyor system on the harbor side of the breakwater to permit the berthing of a large grain carrier to load or unload sugar, wheat and other bulk cargoes. A movable bridge can be provided between the -11 m berth and the breakwater to serve roll-on/roll-off vessels. Foundations are to be laid under-

(Continued on next page bottom)

Management Accounting & Reporting in a Multiple Ports Authority— I

**Mr. John Rippin F.A.S.A.
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The Papua New Guinea Harbours Board was formed as a Statutory Authority of the then Administration of Papua and New Guinea in 1976, and in the terms of the Ordinance under which it was formed the Board is responsible for the regulation, management, operation and control of ports declared under the Ordinance. The Ordinance defines numerous other minor responsibilities, but in general terms the operation of ports is the Boards' primary concern. The first six ports to be declared under the Ordinance (now the Harbours Board Act) were Port Moresby, Lae, Madang, Rabaul, Kavieng & Samarai, and the control of these ports was assumed on 1 May 1967.

For the first few months of its existence the Board's port operations were funded in the same manner as other government departments by the Administration, and in

John Rippin, F.A.S.A., is the Secretary of the Papua New Guinea Harbours Board, which is the national ports authority controlling a present total of sixteen ports spread throughout that country. In this article Mr. Rippin describes briefly some of the problems involved in accounting and reporting in an organisation having a wide geographical spread and yet requiring centralised control. The methods adopted to meet the Board's management reporting requirements are also discussed. A few of the problems met with may be peculiar to the industry, but the general principles involved in their solution are no doubt capable of wider application.

turn its revenue went to the Administration. On 1 January 1968 the Board was granted financial autonomy, and since that date it has operated as a commercial and self-financing body. In common with most port authorities the Board derives most of its revenue from two sources, firstly wharfage, i.e., charges on cargo, and secondly berthage, being charges on vessels. In 1968 wharfage contributed

(Continued from page 24)

neath over the entire length of the -11 m and -10 m berths to permit the installation of container cranes capable of handling 8' x 8' x 40' containers. The second and third stages of the project may provide additional facilities immediately to the north and the west of the Stage I installations.

Fig. 2 and Fig. 3 give a typical cross-section of the breakwater and the -11 m berth, respectively. The riprap type of structure has been adopted for the breakwater, sea wall and the revetment for reasons that an abundant supply of stone is obtainable from sources in the vicinity of the project site, and that it is essential to complete the whole construction works in the shortest practicable period using rather simple construction equipment. For the same reasons, all the quay walls will be supported on steel sheet piling. Because of greater corrosion hazards involved in the use of steel products in the harbor works, every discretion has been exercised to minimize the exposed area of the sheet piles where practical. In addition, the cathodic protection system has been introduced for the piles so that it may suffice to replace them at a 20-year interval. The Costa Rican engineers were strongly in favor of the use of reinforced concrete caissons instead of steel sheet piling for the quay wall mainly for anti-corrosion considerations. However, the steel sheet pile was adopted eventually to meet the need for shorter construction period.

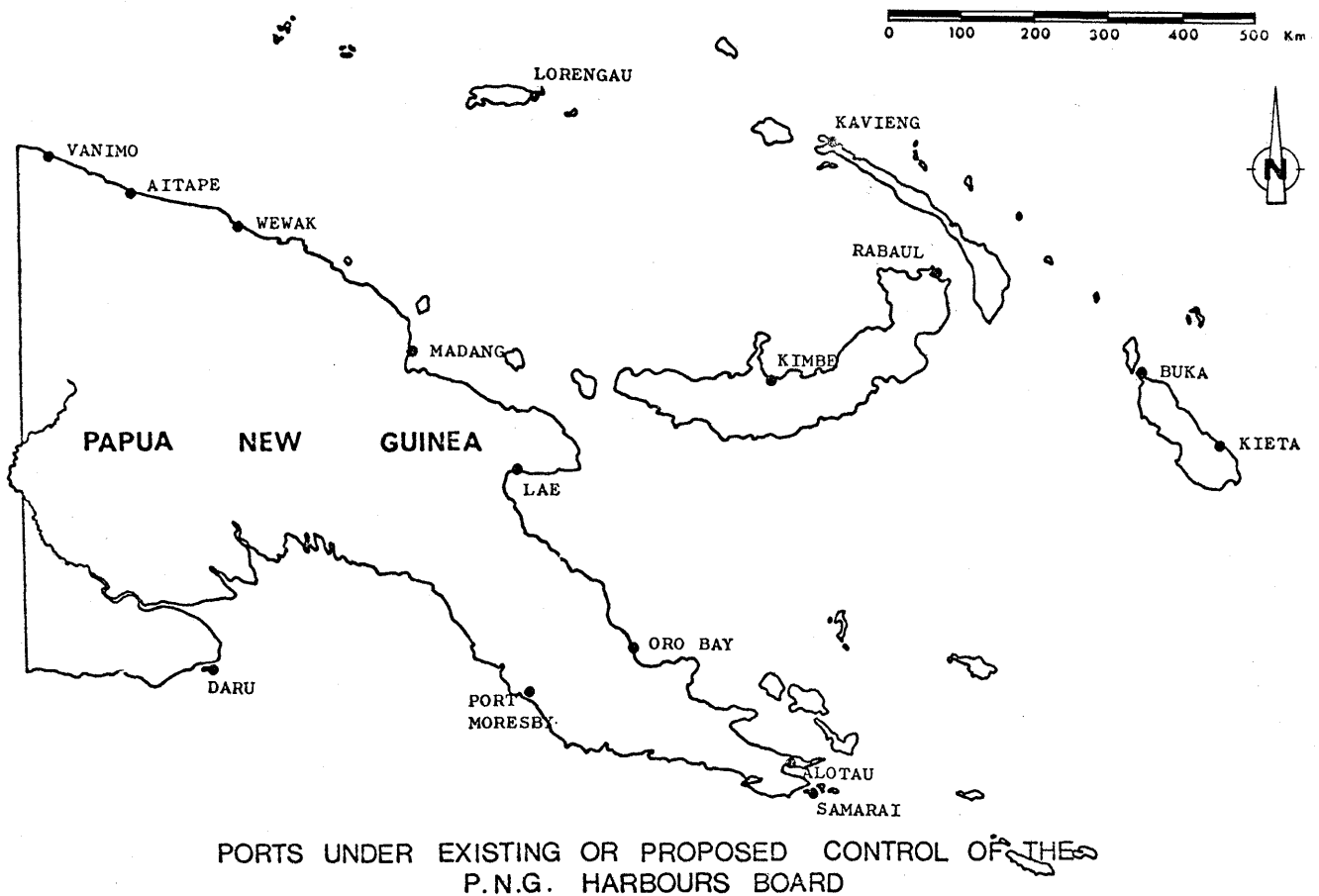
Situated on the southern shore of the Bay of Nicoya, the project site is sheltered doubly from the surging waves of the Pacific. Although the design wave height is 3 m, waves over 1 m in height are generated with a very limited frequency and winds with a velocity of over 10 m/sec seldom occur in the site area. In this sense, the new port promises to be a "natural good harbor".

Deposite of fine sand about 10 m or more thick underlying the seabed provide a good foundation for the proposed port facilities. However, a sensitive clay layer intervening between the fine sand stratum and the bedrock is prone to soften under a very slight disturbance. Since the clay layer has a substantial thickness in places, a circular failure may well develop before the clay gains in strength when a considerable time has elapsed after the completion of the reclamation works. For this reason, it was arranged that the dredging of the area in front of the -11 m quay wall at the Stage I will be up to -10 m. The clay layer might give rise to a serious accident during the construction works, and it is highly desirable to execute the works with meticulous care throughout.

The competent Costa Rican authorities have recently decided to supervise the construction of the Caldera Port at their own responsibility. In this conjunction, the writer is anxious to direct the special attention of the Costa Rican authorities to the clay problem.

In the wake of the completion of the detail design of the various component facilities of the Caldera Port Project in October 1976, bids have been invited for the execution of the whole works. In connection with the project, there have already been under way the construction of new roads including a San Jose-Caldera direct link, and improvement of existing roadways and railway lines. On the other hand, an overall development plan for the Greater Puntarenas Area which presupposes the completion of the new Caldera Port is currently in the process of preparation with the technical cooperation of the Japanese Government.

The writer wants to conclude this article with the expression of his earnest wish that the Caldera Port Project will help accelerate Costa Rica's economic growth and promote the welfare of her people.



about 65% of the Board's total revenue and berthage about 15%, the remainder of revenue being made up of sundry items such as port dues, storage, space rental etc.

In 1971 preliminary negotiations were commenced with the World Bank by the Administration with a view to obtaining finance from that source for several development projects for the Harbours Board. One of the World Bank's requirements was that the Board's charging system should be overhauled, and accordingly a small team of consultants, of which the author was one, was assembled in Port Moresby to carry out a thorough review of the Board's charging system and make recommendations as to its future form. Prior to this study the Board's wharfage rate schedules (in common with those of many other port authorities) provided for a multiplicity of classes of cargo, with, in this case, a separate schedule of rates for each of 5 groups, i.e. overseas inwards, overseas outwards, coastal inwards, coastal outwards and transshipment cargo. Berthage rates, the charges on vessels, were raised on the basis of the vessel's gross registered tonnage regardless of the length of time it was alongside. With regard to the latter item it will be seen quite readily that berthage charges based on gross or net registered tonnages of vessels bear little relationship to the costs of providing berthing facilities. Strangely enough this system of charging still persists in many quarters, but as many port authorities have learnt to their cost the gross or net registered tonnages of vessels are variable, often downwards.

As a result of the port pricing study, to give it its correct technical terminology, the wharfage schedules used by the PNG Harbours Board were vastly simplified, cargo being broken down into six classes only, with four scales of rates,

i.e., overseas inwards & outwards and coastal inwards & outwards. Transshipment cargo was deleted. With regard to berthage a system based on the length overall (L.O.A.) of the vessel and time spent at the berth was instituted.

The significance of this simplified port pricing system will become evident later; without it the reporting system which subsequently has been developed would have been vastly more complicated.

Accounting Systems

It is not necessary to dwell on the accounting system which was in use in the early years of the Board's existence. As a source of information it was quite inadequate. Collection of revenue was on a cash basis, with Port Offices being little more than collection agencies. Generally, the concept of billing port users for charges incurred did not exist, and apparently the general practice in respect of wharfage (and bear in mind that this constituted over 60% of total revenue) was for the ship's agent to calculate the amount payable based upon the manifest and simply to pay this amount, which was accepted as being correct, to the Port Office. The problems inherent in this system were compounded by the fact that manifests were often either late or subject to amendment, and in either case payment of wharfage was usually delayed until the manifest had been finalised once and for all. All expense transactions were handled at the Board's Head Office in Port Moresby, also effectively on a cash basis. With the exception of asset accounts, there was no differentiation as between ports in the accounting system, and thus it was impossible to allocate costs to the respective ports.

At this stage the sum total of the financial information

available to management & the Board was a list of cheques drawn since the last Board Meeting, & this was presented mainly for the purpose of retrospective approval.

Negotiations with the World Bank for development finance progressed favourably, and development works commenced at Port Moresby and Lae in about mid 1973. Not surprisingly one of the World Bank's requirements was that an adequate accounting system and an efficient budget and management reporting system should be installed at an early date. Consultants were engaged by the Board to assist with this work, and in the meantime, in the second half of the 1973/74 financial year, an interim system of accounting was set up which would enable costs to be segregated between ports, thereby providing at least the basic information for a more suitable accounting and reporting system.

Viewed simply as an accounting exercise the design of a new system did not pose any special problems, even given the fact that the Board's several ports were spread widely over the south and east coastal areas of Papua, the north coast of New Guinea, New Britain, New Ireland & Bougainville. Communications within the country are good by any standards, and had the only requirement been to provide an accurate historical record of revenue & expenditure related to the Board's activities the solution would have been simple. However more was needed. In addition to covering the accounting functions, any system to be adopted had to be adaptable to the control of all ports, large or small, and this meant that revenue reporting had to be simple enough for small "one man" operations & at the same time provide information sufficiently useful to monitor the performance of the largest ports. There was a need for detail, especially with regard to the precise composition of cargo traffic, and above all there was a need for fast and accurate reporting to Head Office.

Investigations showed that accounting for expense would present no problems. There existed already a satisfactory system for authorization of expenditure and certification of payments, and with minor modifications to the coding system all expense could be classified accurately. It seemed likely that revenue reporting would be the problem area, since almost all revenue transactions originated at the ports, i.e., at the greatest distance from Head Office, and furthermore, as has already been described many of the functions of revenue raising depended more on the actions of others than on any deliberate billing action by the Board.

Work on the new accounting system progressed during the second half of 1973/74 financial year, the system adopted being based on the principles of responsibility accounting. A comprehensive chart of accounts was evolved, and the ledger structure was based upon budget centres which corresponded with the organisation structure of the Board and served to classify items of income and expenditure for which each budget centre Manager was responsible.

By this time the number of ports under the Board's control had grown to twelve and initially sixteen budget centres were identified in the accounting system, four being within the Head Office organisation—General Management, Finance & Administration, Engineering and Training, the remaining twelve budget centres being the twelve individual ports. For administration purposes the Board's ports are divided into four regions, with minor or "satellite" ports being responsible to regional ports, but this does

not affect the accounting or reporting systems. It is unnecessary to go into detail here on the matter of coding, since the system adopted contains nothing revolutionary. The accounts code is structured on the basis of "levels" which are

- a) Level 1—classification, i.e., asset, liability, income and expense
- b) Level 2—budget centre
- c) Level 3—Account heading
- d) Level 4—Location suffix (where appropriate)

All assets and liabilities fall under the General Management budget centre, and it is mainly in this context that the location suffix is used. In general this arises only with assets and depreciation provisions.

The new accounting system commenced operation at the beginning of the 1974/75 financial year, albeit a little late, since the preparation of budgets for sixteen individual budget centres (with barely adequate information) took some time. Apart from the introduction of a totally new ledger system, two other changes were made with the commencement of the new system. The first of these was an obvious one, in that the basis of accounting was changed from a cash basis to an accrual basis. The other change was not so obvious. It was decided to adopt an accounting year consisting of 13 four weekly periods rather than the usual one of 12 calendar months.

There were several reasons for adopting the 13 period system not the least of which was the simplification of budgeting and reporting in that all accounting periods were of exactly the same length and therefore strictly comparable. Also, the largest single item of expense consisted of wages, salaries and overtime and these were paid on a fortnightly basis. Therefore it seemed logical to adopt an accounting period which matched the pay periods, thus doing away with the need for accruals of salaries, wages and related payments at period ends. Subsequently this move proved to be most beneficial when a change was made to weekly processing, as will be described later.

As anticipated, accounting for expenditure presented no problems under the new system since there was already in operation an efficient system of purchase orders and certification. In this area the only change was the addition of the new account code system, and provision for constant checks on the codes during the processing of accounts payable. The accounts payable system required the introduction of a creditors ledger, which had not existed before, and in all respects it involved standard procedures.

Accounting for revenue involved some rather drastic changes. It will be recalled that the previous system had operated on a cash basis, revenue being segregated into the various income accounts on the basis of returns submitted by ports showing the source of all income, and balancing with their banking returns. Under the new system of accrual accounting some method of reporting periodical revenue by each port was required and this involved the introduction of a periodical return entitled "Revenue Report", which was of quite formidable dimensions and contained details of all vessel-related charges raised during the period, i.e., wharfage, berthage, and sundry other charges for services such as electricity, water, wharf cleaning and so on. The revenue report form also made provision for statistical data in each case, that is to say for wharfage the tonnage for each rotation* and similarly for berthage the length overall of the vessel, the time spent at

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Port of Baltimore's foreign trade declines slightly in 1976

News From Maryland Port Administration

Baltimore, Maryland, January 2:—The port of Baltimore's total foreign tonnage for 1976 declined slightly from the previous year, but the drop is not considered significant in light of worldwide economic factors.

Despite the slight decline in overall foreign commerce, the port's Dundalk Marine Terminal registered a record year in container volume and tonnage during the year.

In a year-end report, Maryland Port Administrator Joseph L. Stanton said that import-export trade moving through Baltimore during 1976 totaled a significant 35,361,128 tons, a decline of about 1.7 million tons from the figure registered for 1975. The MPA figures for the year are based on firm statistics for the first 11 months of 1976 and the best tonnage projections available for the closing month of the year.

This 1976 foreign tonnage had an estimated economic impact of \$2.1 billion on the State of Maryland, based on the parameters of a 1973 University of Maryland economic impact study.

"The decline of only four percent in a year that has seen general recession or slow recovery in worldwide commerce is not considered ominous," said Mr. Stanton. In fact, the Port Administrator noted that while overall foreign commerce for Baltimore was down, the port's exports actually increased by 9.4 percent to a figure of 15,173,000 tons for 1976. Import tonnage registered 20,188,128 tons, a drop of 13 percent.

"The principle reasons for the impressive export tonnage were high totals for grain and coal," Mr. Stanton noted. Grain registered 5.7 million tons in exports, a jump of 28.3 percent over 1975. Although coal exports dropped slightly over four percent from last year, they still reach an impressive 6,477,750 tons.

The Port Administration executive explained that the reason for the decrease in imports at Baltimore were drops in two bulk commodities: ores (mostly consisting of iron ore) and petroleum.

Ores, the largest single commodity handled in the port, registered 10,120,000 tons in 1976, a drop of 23.1 percent from last year. Petroleum hit a mark of 5.9 million tons, a decline of 6.5 percent.

(Continued from page 27)

berth, and consequently the length/hours charged. In theory this was a perfectly adequate system, but in practice there were some problems.

* Rotation is the technical term used by the Board for one visit by one vessel to a single port. Rotations are numbered consecutively for each port throughout each year commencing with No. 1.

(To be concluded in the next issue)

"The drop in Baltimore iron ore imports reflects the significant decrease in U.S. steel production, a persistent trend in recent years," Mr. Stanton pointed out. He also emphasized that for the past three years, U.S. ports that previously handled record volumes of petroleum have been experiencing large declines in this commodity. "This is the result of an increased awareness of fuel conservation and alternative energy programs in this country today," he said.

Total bulk cargo shipments for the year registered over 30.9 million tons, a decline of some 3.6 percent from 1975's total. Total general cargo was approximately 4.4 million tons, a drop of 11.2 percent from last year.

Baltimore, traditionally the second ranking container port in the U.S. Atlantic and Gulf coasts, again enjoyed a successful year in handling this valuable type of freight during 1976, according to Mr. Stanton. He reported that Dundalk Marine Terminal, which generally accommodates about three-fourths of Baltimore's annual container tonnage, registered some 2.36 million tons of containerized freight for the year, an increase of about four percent over the previous record total handled there in 1975. The terminal also recorded 199,750 containers for the year, a jump of two percent over last year.

According to Mr. Stanton, the port's ocean ship traffic for the past year totaled 4,042, a slight increase of 0.2 percent over 1975. The trend in the shipping business in recent years has been towards fewer but larger ships in oceanborne trade.

Mr. Stanton reviewed several 1976 events that he feels will have long-lasting effect on the future of the port of Baltimore.

"The first, of course, is the fact that the World Trade Center is nearly complete," he said. "Despite the fact that it is behind schedule, the entire maritime community is eagerly awaiting the opening of this keystone building for the Inner Harbor sometime during the first hand of 1977." The MPA will occupy the 16-20th floors in the 30-story, five-sided building.

The Port Administrator also noted the continuing progress made towards readying the MPA's new South Locust Point Marine Terminal for an expected opening in about one year. "The dredging of a new access channel, turning basin and slips now underway is a major step forward in making possible these badly-needed facilities at South Locust Point," he said. This new 40-acre terminal will feature two container cranes, one gantry crane and the port's first shore-based heavy-lift derrick.

In addition Mr. Stanton noted that two container cranes completely destroyed last March in a hurricane-force windstorm at Dundalk had been replaced by December. The two new cranes restored the terminal to a total of seven 40-ton capacity container cranes.

"Of course, of major importance during the past year was the long-awaited Corps of Engineers permit to build a dredge spoil disposal dike at the Hart and Miller Islands," Mr. Stanton underscored. "We believe this facility will accommodate our dredging needs for the next two decades. But just as important, it will also serve the recreational

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Port of Oakland Regains Growth Pattern in 1976

Oakland, Calif., January 24, (Port of Oakland Public Relations Department):—A return to the imposing growth pattern that has marked its past 15 years was recorded in 1976 by the Port of Oakland, where new ships, new lines and new services lifted total cargo handled to an anticipated record of over 7.7 million revenue tons.

Although fourth quarter tonnage figures are not yet complete for the year, reliable estimates project an annual revenue total at Oakland's marine terminals of about 7.715 million tons, reported Ben E. Nutter, executive director of the Port of Oakland.

Over 6.1 million tons of these cargoes will have been containerized, he noted, preserving Oakland's claim to be the most specialized containerport in the world.

From 67 percent in 1971, container traffic now accounts for more than 80 percent of the Port of Oakland's overall yearly cargo tonnage.

Hit by the worldwide recession felt throughout the shipping and port industries, Oakland's total revenue tonnage fell to 6.92 million tons in 1975, off from the previous year's record of 7.375 million tons.

Even so, container traffic held fairly steady—5.65 million tons in 1975 compared to 5.67 million in 1974.

Expansion and fleet modernization by steamship lines calling at Oakland, and acquisition of several new services accounted in large measure for the Port of Oakland's renewed advance in 1976, said Nutter.

New full-container ships were introduced by Euro-Pacific Service, Orient Overseas Container Line and the Soviet Fesco Line.

U.S.-flag Seatrain Lines rebounded strongly in 1976 from business reverses suffered earlier, and Denmark's Maersk Line put in its first full year of Pacific Coast-Far East container service since moving to the Port of Oakland in September, 1975.

Korea Shipping Corporation introduced new container

needs of the community by eventually being developed into parkland."

Looking forward to 1977, Mr. Stanton tied the foreign commerce fortunes of the port of Baltimore to the state of the worldwide economy. "If the major trading nations of the world can alleviate the current stagnant economic conditions that are restricting trade, then we can expect a banner year in 1977," he said.

Taking into consideration current trends, Mr. Stanton predicted continued high levels of container cargo, project shipments, coal and grain for the port during the next year.

In addition, Mr. Stanton indicated that he would like to see consideration by the Corps of Engineers of a plan to dredge the badly silted Chesapeake and Delaware Canal, which has been greatly affected by major wind and rainstorms over the past five years. Nearly 60 percent of Baltimore's annual ship traffic passes through the Canal.

"This major ship route connecting the Chesapeake Bay and Delaware River is of vital importance in assuring Baltimore its rightful share of future waterborne commerce," the MPA executive emphasized.

service and Hanseatic-Vaasa Line ships called regularly at Oakland for the first time in several years, while newcomer Evergreen Line chose the Port of Oakland to inaugurate its Far East service from the Bay Area using three newly-built containerships.

At the same time, Port of Oakland long-time users such as American President Lines, Sea-Land Services, Matson Navigation Co., United States Lines, Johnson Scan-Star Service, Pacific-Australia Direct Line, N.Y.K. and Showa Lines maintained healthy tonnage tallies.

In terms of actual containers handled, some 571,972 20-foot equivalent units are expected on the bottom line for 1976. This is almost 50,000 above the 522,355 figure recorded in 1975.

For 1977, Nutter predicts, the 20-foot breakdown for the Port of Oakland will probably exceed 585,000 containers.

Port of Oakland marine terminal revenues are expected to reach or exceed \$10 million for fiscal 1976-77, Nutter reported, after solid but disappointing earnings of \$8.8 million for the 12 months ending last June 30 (off from the \$9.36 million income shown the year before).

The healthy increase seen in the Port of Oakland's revenue tonnage for 1976 returns the Port's growth curve to the substantial upward climb which had become its hallmark from 1962 to 1975.

Over that period, container tonnage had multiplied from 54,000 tons annually to 5.65 million tons—a 1,000 percent jump—while total port tonnage had expanded from just over 2.5 million tons a year to almost 7.4 million annually.

On the tide of these phenomenal gains, Oakland rose almost immediately to second-place ranking as a containerport in the United States, led only by the mammoth New York/New Jersey Port Authority complex. Oakland has tenaciously preserved this position as the Pacific Coast's largest containerport for more than a decade.

Some 1,100 ships call annually at the Port of Oakland's 350 acres of container terminals—twice the capacity of its nearest U.S. rival, except New York.

Only this month, Nutter pointed out, the Port of Oakland opened the first 32-acre portion of its eighth container terminal, a \$32-million, 51-acre facility in the Oakland Outer Harbor on San Francisco Bay, serving ships of the Four Line Japanese consortium of Japan Line, "K" Line, Mitsui-O.S.K. Lines and Y.S. Line.

The second section of the three-berth facility, served by two \$2.5 million, 40-ton Paccoco gantry cranes—bringing Oakland's arsenal of these giant container-lifters to 16, the most of any Pacific port—will open in Spring, 1977, as the new home of Maersk Lines' container service.

Elsewhere on the waterfront, the Port of Oakland is pressing forward its negotiations with the U.S. Defense Department to assume operation of underutilized docks and warehousing at the big Oakland Army Base—some 50 acres originally developed by the Port of Oakland prior to World War II.

Meanwhile, Oakland International Airport and major business properties along the 19 miles of waterfront under

(Continued on next page bottom)

New Seven-man Board is Elected under New Laws at Port of New Orleans

New Orleans, Louisiana, January 7 (News Release from Board of Commissioners of the Port of New Orleans):—The Board of Commissioners of the Port of New Orleans (Dock Board) has a brand new look.

The Dock Board is the legally constituted group with the authority for setting all policies and making all major decisions affecting the administration and construction programs of the Port of New Orleans.

Until very recently, the board consisted of five members, who were nominated by business organizations and appointed by the governor. For many generations, the Dock Board's jurisdiction has included the three contiguous parishes (counties) of Orleans, Jefferson and St. Bernard. There was no legal mandate, however, requiring that all three parishes affected directly by port operations be represented on the board. And, as a matter of fact, most board members over the years were Orleanians.

The Dock Board had been on record for many years favoring such regional representation and, in its last regular session, the Louisiana Legislature changed the laws regard-

ing Dock Board composition to achieve metropolitan representation.

The new laws call for a seven-man board with four representatives from the central city parish, Orleans; two from Jefferson and one from St. Bernard.

The system of nomination by business and civic groups and appointment by the governor was retained but the list of nominating organizations was expanded to include groups from St. Bernard and additional groups from Jefferson and to give the nominating process a broader case. Groups like farmers and labor now have input in the nominating process.

The first seven-man board came into being recently with the appointment of Joseph J. Krebs, Jr., representing Jefferson, and Roy Joseph Gross, representing St. Bernard. (One Jefferson-based businessman, Louis H. Marrero IV, had been serving on the board prior to the change in the

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the Port of Oakland's jurisdiction exhibited similar signs of vigor during the year just ended.

Almost 2.4 million passengers traveled aboard Oakland International's scheduled and charter air lines—some 300,000 more than in 1975.

Although struck by a flash fire in December that destroyed its terminal mezzanine restaurant, Oakland International experienced no disruption in normal daily operations.

Indeed, Oakland International expects to increase its passenger and service capabilities significantly during the coming year with major terminal expansion projects, including construction of a second level in the boarding finger building and improvements in baggage claim capacity and passenger transportation to planes.

At the North Airport, Oakland's general and corporate aviation field, blueprints are being prepared for a new guest terminal building, while an attractively remodeled interim guest terminal was opened in mid-year.

Under the North Field Improvement Program for 1977, Nutter added, general aviation hangars will benefit from extensive maintenance, refurbishment and repainting, two new plane service shelters will be built and \$125,000 will be spend on landscaping along the main North Airport access road.

Nearby, at the Oakland Airport Business Park, assessed valuation of its 250 developed acres has risen to over \$60 million, Nutter reported. Some 275 firms with about 7,000 employees now operate from office buildings and light industrial plants on architecturally attractive, carefully landscaped sites.

Jack London Square, the shopping and dining center on the shore of the Oakland Estuary, expects gross receipts at its restaurants and retail stores to top \$20 million when 1976 cash register slips are totaled. Excellent first year

earnings of the Square's new Cost Plus Imports store and the popular Jack London Village complex—both completed in late 1975—added luster to the Port of Oakland's business performance in this area last year.

Further up the Oakland Inner Harbor channel, restaurant and marina-related activities at Estuary Cove will show \$6 million in 1976 gross receipts, Nutter declared.

There, where whalers once laid up for the off-season and the San Francisco Bay commercial fishing fleet still clusters, the Port of Oakland will spend \$1 million this year to remove dilapidated buildings and marina facilities in order to install 140 new small boat berths.

Financed by a loan from the State of California, the first \$1 million phase of the Estuary Cove improvement project will include upgrading of this historic but neglected waterfront area to create needed yachting piers and floats and additional concessions in keeping with the picturesque Victorian structures already flourishing as restaurants and offices.

A second phase of the project will expand marina berths to as many as 575—if an additional \$1.45 million loan is authorized by the State. The Port will repay these loans exclusively from earnings generated by the improvements planned for Estuary Cove.

"Although we retained our confidence that the slackening was a temporary economic condition, 1975 had us a bit worried," Nutter admitted.

"I think the excellent performance last year by all Port of Oakland departments assuaged those anxieties considerably and vindicated our confidence. The next 12 months bid well to continue the upward trend," he suggested, "particularly if we don't relax in our ongoing program of development.

"The Port of Oakland's soundness," Nutter declared, "has always hinged on our ability to stay one step ahead of demand in the shipping, real estate and aviation industries."

Bremen News

Bremen International

• Maritime Economic 1977: Markedly Varying Progression

Bremen, 20.12.76 (BremIn). Whilst world shipping can count on a continuance in 1977 of a light upwards trend (as in 1976), world shipbuilding will, at the close of 1977 and in 1978, be facing its biggest crisis since decades. This was gathered from an interview at the end of 1976 with Dr. Hans Ludwig Beth, the director of the internationally renowned Institute of Shipping Economics, Bremen. Beth explained in detail:

The, at the beginning of 1976 generally-predicted upswing, did not fully materialise; furthermore there were very dissimilar rates of development in the individual maritime economic fields. This will continue through 1977. **Shipbuilding** has still to face a serious order crisis. Whilst continuing tolerably busy in 1977, a low stage will be experienced from the end of '77, through 1978 and into 1979, which has not been known for decades in the shipyards. Shipbuilders and maritime economic experts are contentious as to when matters will improve there-after. Western shipyards anticipate the crisis having existential

effects until 1982/3 and, partly, through to 1985. The Bremen Institute—on the basis of the 1976 general economic upswing continuing into 1977/8—estimates new orders and the beginning of shipbuilding development normalcy being on the cards already for 1980, if not perhaps at the end of 1979. The equilibrium in the shipping markets should be attained around 1980, affecting the tanker market (particularly influenceable on shipbuilding) about the beginning of 1980, so that new tanker orders can be expected end 1979/beginning 1980 for delivery end 80/81. However, the 80'ies are hardly likely to see such a large growthrate in international ship-construction as was evidenced between 1965 and 1973.

In general the **shipping-market** appears somewhat better: but again here there are considerable variances in progression. The excess tonnage in the **tanker-market** (which was still 65 million tdw at the end of 1976), including both the additional launchings and the ship-breaking rate, which was extraordinarily high in 1976, will not be disposed of for at least 2-3 years. The very pleasing fact of 35 million tdw more tanker tonnage being employed in Oct/Nov. 1976 than at the start of the year is attributable, for 4-5 million tdw., to pending crude-oil price increases. The tanker market has undoubtedly also been affected positively by the storage of considerable quantities of crude-oil since August 1977 by the US-government.

(Continued from page 30)

laws and continues as a member.) Like other members of the board, the new commissioners will serve five year terms. Commissioners serve without remuneration.

Krebs and Gross bring valuable engineering and contracting experience to the Dock Board at a time when it is embarking on a \$91 million capital expansion program.

Krebs, a civil engineering graduate of Tulane University; is president of J.J. Krebs and Sons Inc., civil engineers and land surveyors. He also is secretary of Construction Management Associates Inc., a firm involved in the administration and management of construction projects. He is treasurer of Technical Inspection and Control Corporation, a similar operation. A registered professional engineer in Louisiana and Mississippi and a licensed land surveyor in Louisiana, Krebs takes an active role in all of the professional organizations in his field and in the business organizations of the community. He also is a member of the Jefferson Parish Advisory Board on Environmental Development. Krebs is 46 years old. He is married to the former Elizabeth Prillmayer. They have two children.

Gross has been a respected and successful contractor for the last 20 years and is president and chief executive officer of his own firm, Roy J. Gross Contractor Inc. He has been engaged in all types of contracting—including residential, commercial, industrial and marine. He has constructed custom homes, churches, service stations, banks, gymnasiums, shopping centers, schools and marine and offshore facilities. He takes an active role in professional and community organizations. Gross is 44 years old. He is married to the former Wilva Jones. They have three children.

Krebs and Gross both are Louisiana natives.

At the same time the board took on its new regional appearance, there also was a change in the leadership of the board.

The new president of the Dock Board is John P. Laborde, who is president and chairman of the board of an international offshore oil service firm, Tidewater Marine.

Laborde's business acumen is highly respected not only in Louisiana but in international circles. Tidewater Marine, under his direction, has become one of the most energetic and profitable firms in the field of offshore oil operations.

A native of Marksville, La., Laborde holds bachelor degrees in arts and law from Louisiana State University as well as a juris doctor degree from LSU. He served in the U.S. Army for four years during World War II, attaining the rank of captain. He has served on numerous professional, civic and governmental boards—including the Southern Growth Policies Board, the Mayor's International Trade and Relations Committee, the Chamber of Commerce's Committee of 50 and the Public Affairs Research Council.

Laborde succeeds John Meghrian, general manager of Todd Shipyards, New Orleans Division, as president of the board. Meghrian, who led the effort to achieve legislation for regional board representation and for funding the new \$91 million capital facilities program, will serve as secretary of the board during the current year.

Louis Marrero, and attorney and president of the Marrero Land and Improvement Assn., Ltd, is the new first vice-president. Michael J. Molony, an attorney with experience with the Maritime law field is second vice-president. Gross will service as treasurer and Krebs is chairman of the budget committee. Frank G. Strachan, chairman of the board of Strachan Shipping Company, is chairman of the finance committee.

The new seven-man board represents not only a regional cross-section but an excellent cross-section of the business experience that is of special value in dealing with the important decisions of a demanding and highly competitive industry, the port.

The **dry bulk-cargo market** in shipping was below expectations for 1976. The very small increases in freight rates would hardly compensate for the cost-increases. The laid-up tonnage reserve of 2 million tdw remains constant. Strong pressure continues to be exercised by the large grain/ore combi-carriers, to which must also be added a very large new-building order volume. There should be an additional 16 to 17 million tdw in service in 1977. This could only be absorbed with an 8 to 10 percent increase in the demand for transportation. According to the most recent information from the industrial nations, however, this is not to be reckoned with.

Employment in the **general-cargo** field is adequate. There was a slight increase in rates at the year's end. Against very good volumes of ocean carryings to the OPEC in the Near and Middle East and West-Africa, 1976 also saw increasing competition from flags of the developing countries. This is a serious problem. Moreover an adjustment is still outstanding with the East-block countries. The Shipping Pact between the USA and USSR is, as far as the practical effects are concerned, initially meeting with some dubiousness everywhere. Attention is drawn to the quite considerable East-block order volume, particularly of the USSR, placed with shipyards for 1977 and 1978 delivery. The growth-rate for the general-cargo trade, internationally, should be around 4 or 5 percent. Here too, the Bremen Institute is lying somewhat higher than the average for other publicised predictions.

● Possibilities in Ocean Technique Field

Bremen, 20.12.76 (BremIn). Even prior to the launching of the, for the time being, last 'Europa' tanker (393,000 tdw) intended assistance was announced by the Senator for Economics, Tiedemann, for shipyard readaption. Growth-rates of up to 11 percent are expected in the interrelated spheres of ocean techniques, ocean research and construction of great receptacles.

● Deepsea Passenger Shipping: Boom to follow Stagnation?

Bremerhaven, 20.12.76 (BremIn). Currently the European passenger trade is again well on the upsurge. In 1975 a total of 37 passenger liners sailed from the Bremerhaven Columbus Quay (Germany's Railway Terminal at the Sea); in 1976 there were 47 (+25%) and in 1977 there will be 61 (+30%). In recent years passenger shipping has undergone considerable structural changes, both as regards flag and voyage purpose. High wage costs and enormously increased running costs have forced western passenger lines to retire, allowing the eastern, particularly the Russian, lines to fill the constantly increasing gaps. Furthermore the swift penetration of air travel has forced repositioning. In 1966 the Columbus Quay still dispatched 70 passenger liners. Then cheap charter flights, above all, were responsible for a slump in the field, from which passenger shipping did not recover. Happily passenger cruises led the shipping companies out of the doldrums. In 1973 already 5 out of every ten passenger ships commenced their cruises from Bremerhaven, in 1977 this will be 9 out of every 10. However this development in Bremerhaven is by no means to be regarded as an end. The passage-takings and the on-board financial turnover of the 53 shipping companies of 16 countries which are members of the German Ocean Passenger Committee (Seepassage-Komitees Deutschland) will, in 1976, be considerably more than for 1975 (DM 250 millions) and will again rise steeply

in 1977. Whereby the whole enormous cruise-business market has not been fully developed yet, let alone taken in hand. According to Uwe Struck, the committee chairman, investigation has shown that in Germany alone there are a potential one million cruise-passengers to be won with tourism canvassing . . .

● Container Handling in Bremen/Bremerhaven increased by 15% in 1976

Bremerhaven, 17.1.77 (BremIn). The Bremen/Bremerhaven port-group has announced a record container handling for 1976 of 468,000 containers (on 20-footer basis). This is 58,209 (or 14.2%) more than for 1975 (409,791 containers) and even 47,834 more than for the, to now, record year of 1974 (420,166 containers). The tonnage inside these containers rose from 3.2 millions in 1975, to 3.7 in 1976, i.e., by 15.6% (1974: 3.4 million tons). The Bremen ports have thereby been able to assert still further their lead position in 1976 in container traffic.

The unusually stormy container traffic development began for the Weser in May 1966. Already in eight months of 1966, 72,462 tons were handled in containers. It was already 2.4 million tons for 1972. Contrary to the general trend for the European ports, where the handling figures receded noticeably in 1975, the container traffic in that crisis year in Bremen/Bremerhaven nearly attained the high niveau of the 1974 record year (3.4 million tons), with 3.2 millions. It is precisely in the recession, that the modern maritime methods, such as container, lash, and ro-ro have proved their worth. Future development is also given an optimistic rating by the Bremer Lagerhaus Gesellschaft, Europe's biggest cargo operating company. The recently commenced container service to the West Indies and the container trade starting with South Africa in 1977, are taken as further signs of an upward trend for this sector of maritime commerce. Bremen/Bremerhaven hopes, also in the future, to remain the biggest German and a leading European container port.

Register of Containerships 1976/77

Published by Westinform Service

London, December 1, 1976 (Westinform Service News Release):—It has been the fashion to think of Containerships as relatively new ships, yet 10 per cent of the capacity of fully cellular vessels is provided in tonnage which is over 30 years old, according to the Register of Containerships 1976/77 published today by the Westinform Service (London), the international shipping consultants. Many vessels of such an age, whose total capacity amounts to some 33,000 TEU (Twenty-foot Equivalent Units), should require replacement in the near future.

Although the growth of cellular container capacity began in the 1950's most of the vessels were in fact conversions, notably from war-built tankers such as the T2. It was not until the late 1960's that this practice decreased and purpose built tonnage took over as the major source of new capacity. This is one of the interesting aspects which emerges from the analyses incorporated in the Westinform Register.

The information contained in the Register can be divided into three broad groups: Analysis of the fleet; Cross-Reference sections; and the Register of Vessels.

The Analyses show the distribution of the fleet according to the flag, speed, size and age in terms of the year of build and year of conversion. The Cross Reference sections have been designed for those times when one is searching for containerships of a particular size, type, or belonging to a certain operator. This can be a time-consuming process when the fleet is only ordered alphabetically according to the vessel's name. Cross-references to the Register of Vessels have therefore been provided by grouping the vessels in the following ways: in order of Container Capacity; in order of Refrigerated Capacity; in order of Deadweight; by Type (e.g. semi or fully cellular vessels); and by Containership Operator.

The main part of the Westinform Register of Containerships with cellular and part-cellular capacity is taken up by the Register of Vessels itself which is in alphabetical order of the ship's name. The Owner and/or Operator of every single vessel listed has been contacted by Westinform in order to obtain the details which can prove essential to the smooth running of a container shipping operation. For example, the maximum number of containers that can be carried is shown separately from the maximum loaded containers, to account for those vessels whose maximum number would have to include some empty containers in order to satisfy stability requirements.

Similarly, the type of deck lashing system used should be of particular interest to Stevedores among others.

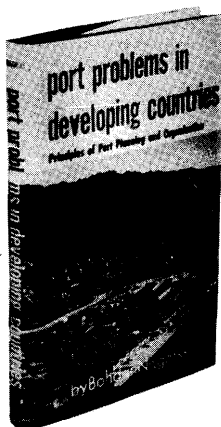
In addition to the deck and under-deck capacity, the size of containers carried and whether any slots can be converted to other sizes, the Register of Vessels also separates out the refrigerated container capability where applicable. Furthermore it is shown whether the refrigeration system below deck is centralised or uses integral units, while the number of power points on deck and the power supply in terms of the voltage and the cycles per second is detailed.

All too often controversies spring into life in the shipping world using arguments, which on closer examination are shown to have little basis in fact. Particularly interesting, therefore, is the flag analysis of the container fleet in relation to two topical shipping questions. Contrary to recent publicity, the Russian cellular container fleet still represents less than one per cent of total world capacity, although Westinform's newbuilding survey reveals several vessels yet to be delivered. However, it should be some time before the USSR fleet reaches the proportion of its western competitors.

The second fact emerges from the flag analysis is that 91 per cent of the World's cellular capacity is operated under the flags belonging to the developed nations.

The Westinform Register of Containerships with cellular and part-cellular capacity is issued to all subscribers of the Westinform Shipping Report Series. Individual copies can be obtained at £25 each from the Westinform Service, 9 Cork Street, London W1X 1PD (Telephone No.: 734-1178).





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Orbiter Probe

ICHCA's new Secretary General

London (Press Information from ICHCA=International Cargo Handling Co-ordination Association, received January 28, 1977):—On behalf of the Council and Executive Board of the International Cargo Handling Co-ordination Association, the Chairman, Mr. R.P. Holubowicz, is pleased to announce that MR. PATRICK FINLAY has been appointed Secretary General of the Association.

Mr. Finlay will take up his appointment on March 1st, 1977, to enable him to participate in the co-ordination and planning for ICHCA's Biennial General Assembly and Technical Conference which is to be held in Melbourne, Australia, 17-21 April 1977. The new Secretary General is no stranger to the work of the Association having been of the Central Office staff for five years, serving as Technical Secretary from 1963 until the end of 1965.

Mr. Finlay was born and educated in Scotland. He started his career in shipbuilding industrial relations after Army service. He then worked for a shipowning subsidiary of the P and O Group, during which time he was seconded for duty in India and the Far East. After his service with ICHCA, he joined the National Ports Council at the end of 1965, where he served as Senior Information Officer until his appointment as ICHCA Secretary General.

Concurrent with his other employment, Mr. Finlay has been serving as Editor of "Jane's Freight Containers" since 1969. The ninth edition under his Editorship will be published at the end of the year. He is a member of the Chartered Institute of Transport.

ICHCA 13th Conference in Melbourne

London (ICHCA=International Cargo Handling Co-ordination Association):—In line with his presentation at the 6th National Technical Conference of the Spanish National Committee, the Chairman of the International Council/Executive Board of ICHCA (INTERNATIONAL CARGO HANDLING CO-ORDINATION ASSOCIATION), Mr. Ray P. Holubowicz, in Helsinki on the 8th November 1976 presented a more detailed programme for the XIIIth Biennial General Assembly and International Conference.

Bearing in mind that it is the first time that ICHCA holds its most important, biennial event, i.e. an Assembly of all its members outside Europe for more than 20 years, this is not difficult to understand since ICHCA because of its international nature seeks to manifest internationality by giving members in the eastern hemisphere a better opportunity to attend one of the most important ICHCA occasions.

From the registrations so far received from countries in the eastern hemisphere it would appear that again ICHCA has touched on the right note. Attendance at this conference is expected to exceed over 400 delegates from more than 20 countries and as the emphasis of the theme of the

conference lies on "Cargo Handling in World of Differing Economies", it is expected that ICHCA can look forward to a greater attendance than before from those feeling that they represent countries with differing economies.

Speakers and papers to be presented during the conference are listed as per the attached conference programme and the ladies and social programmes are included.

The final paper will be presented by Dr. L.V. Jolmes and will be an endeavour to summarize the previous papers of the conference, and at the same time "zoom in" on the future of cargo handling and transportation until the 1990s.

For further information please contact:

| | |
|--|---|
| ICHCA Conference Secretariat, 13th Biennial Conference, Box 2239T, G.P.O. Melbourne, Australia 3001. | Secretary General, ICHCA Central Office, Abford House, 15 Wilton Road, London SW1V 1LX. |
|--|---|

NPC BOOK:

NPC Statistics indicate continued recovery in Britain's port traffic

London, 29th December, 1976 (National Ports Council News Release):—During the third quarter of 1976 non-fuel traffic through British ports continued its steady recovery from the low levels of 1975, according to statistics published by the National Ports Council*. Foreign and coastwise port traffic during the quarter was 11 per cent up on the levels in the corresponding period of 1975, the increase in non-fuel traffic being 24 per cent. Traffic in fuels was up by 5 per cent.

During the first nine months of the year total traffic was 6 per cent higher than in 1975, with fuel traffic 4 per cent up and other traffic 11 per cent up.

Total traffic through East Coast ports was 18 per cent higher in the third quarter than a year before, whereas traffic through West Coast ports was only 4 per cent higher. At West Coast ports traffic is still running at about 25 per cent below the level recorded in 1974. However, the difference in throughput recorded by the West Coast as compared with the East Coast ports is entirely due to the shift in fuel traffic, the Council points out. Non-fuel traffic at West Coast ports increased by 32 per cent, and by 27 per cent at the East Coast ports.

Total tonnage of goods on unit load services in the third quarter was 18 per cent higher than in the corresponding quarter of 1975. During the period there was rapid growth on all routes—near sea, short sea and deep-sea—although traffic with Northern Ireland continued to be relatively depressed.

Total container and roll-on traffic in the first months of 1976 was up by 16 per cent compared with the same period in 1975. This growth was experienced on all foreign routes.

* Quarterly Bulletin of Port Statistics 1976, Quarter 3. Published by the National Ports Council, Commonwealth House, 1-19, New Oxford Street, London, WC1A 1DZ. Price £6.00

New Book

Bremen, November 1976 (Institute of Shipping Economics):—In its series "Lectures and Contributions" the Institute of Shipping Economics has published a paper with the title.

"Operations Planning in Port Operating and Stevedoring Companies".

Basing on their practical experience, the authors, Dr. Günter Boldt and Dr. Rolf Stuchtey, examine those factors relevant for decision processes in port planning aiming at reaching optimum solutions with regard to cargo turnover. Depending on the specific objectives it has to be differentiated between short term and long term planning.

According to the authors long term planning of port facilities and equipment has to be orientated on the demand situation and also on the needs for facilities resulting from the amount and structure of cargoes handled.

Short term planning which is understood to be planning of ships dispatch and flexible—i.e. the most economic use of facilities, equipment and labour force—the efficiency of which is controlled by means of productivity monitoring and control. This short term planning largely determines the efficiency of the port.

This publication elaborates the pieces of information and the criteria necessary for short term and long term planning decisions. In this context it is rather the practical formulation of the problem than theoretical planning methods that is dealt with.

The publication is issued in English language and can be obtained from the Institute of Shipping Economics, Bremen, Hollerallee 32, Federal Republic of Germany, (Phone 0421/341511) at a price of DM 7,20 (plus postage).

"Portos e Navios"

Rio de Janeiro, Brazil (Selected headlines translated into English):

September 1976

- The Port of London and the commercial expansion Brazil-England are the beliefs of Mr. John McNab, Director of PLA's Upper Docks, after his third visit to Brazil in 1976.
- The Government extends to Brazilian ships and vessels chartered by Brazilian overseas trade shipowners the exemption of the Tax on fuels and lubricants.

—Ports & Waterways

- The Minister of Transports and the President of Portobrás visited the Port of Manaus in order to inspect the expansion works.
- Portobrás installs container terminal in Santos.
- 300 million for port dredging.
- Portobrás is going to build wheat and soya terminal in the State of Rio Grande do Sul.

October 1976

—Ports & Waterways

- Port of Salvador handled 584.000 ton of cargo up to the month of July, 51% being represented by solid bulk cargo and 49% by general cargo.

- Integrated transportation: several works are being built by Portobrás in the State of Rio Grande do Sul, between Estrela and Bom Retiro do Sul.
- From January through July 1976, the handling of cargo at the main Brazilian ports increased by 7% compared to the same period in 1975.
- The Industrial Complex of Imbituba needs quay expansion to cope with the operation of the Industrial District of the South of Santa Catarina State.
- International Port Area for São José do Norte (Rio Grande do Sul State): Committee is being formed.
- The studies for a canal to link the rivers Jacaui and Ibicui, in Rio Grande do Sul, are being postponed.
- Japanese Technical Committee delivers Report to Sudene about Suape.
- Ports in the North and Northeast have local Seminar.
- The largest Persian Gulf Port, in Dubai.
- Lloydbrati operates with greater efficiency at the Canoas Port.
- Portobrás and Unibanco sign financing contract for the modernization of ports.

A race to the finish

Hamilton, Ontario, Canada, December 17, 1976 (Information Release from Port of Hamilton):—Ice formation throughout the St. Lawrence Seaway has put considerable pressure on the Ocean Going Vessels to make a fast exit before official closing slated December 18th.

Hamilton anticipates 22 Lakers in Port discharging materials at the Steel Companies.

Should a Cold Snap hit, many Lakers will seek early winter berthing. Presently, the Hamilton Harbour Commissioners' Harbour Master has received 29 requests for winter lay-up, many who had berthed during the cold months of last year.

Navigation aids (floating buoys with flashing lights and radar reflectors) are still in place and will remain until the last ship departs from the Hamilton Harbour.

The Port of Hamilton is known for fine winter berthing and docking facilities, as well as excellent Security Service.

Lakers berthed range in size from 600 feet in length to 730 feet and with 20,000 to 30,000 ton capacity.

Some vessels will be storing grain which had been loaded at the Lakehead destined for Ports at the lower section of the St. Lawrence Seaway. Others, shall be "light" or without cargo and will undergo maintenance and repairs while in Hamilton.

The "Pinedale" now at Pier 12, now docked for the winter, will likely be our eldest visitor. Pinedale was built in 1902 and owned by Westdale Shipping, Port Credit, Ontario.

While most crew members are signed off and returning home to their families in time for Christmas, one ship-keeper remains aboard each vessel to see that routine inspections and necessary repairs are conducted prior to spring sailing in March or April '77.

Cargo tonnage for 1976

Montréal, Quebec, Canada, December 16, 1976 (Press Release from Port of Montreal, National Harbours Board):—Total cargo tonnage at the Port of Montreal for the year 1976 is estimated to reach 21.4 million tons

compared with 22.6 million tons in 1975.

In making this announcement today, Montreal Port Manager, Mr. N. Beshwaty, remarked that the decrease in tonnage was due to a decline of one million tons in grain handling. He attributed this result to an increased use of private elevators along the St. Lawrence and due to a disruption of the regular tug service at the Port during the latter part of the year.

The Montreal Port Manager has noted, however, with a great deal of satisfaction, that the general cargo category (the most profitable for the Port) has shown encouraging signs of recovery and will result in a total of 3.6 million tons which is an increase of 600,000 tons, or 20% over 1975.

Container traffic has continued its upward trend in units and volume compared with last year, and it is estimated that by the end of December 1976, 123,000 loaded units will have been handled, for a volume of 1.7 million tons of general cargo. This represents a significant increase of 32% over last year.

Passenger traffic at the Port has also increased, and it is estimated that some 25,500 passengers will have passed through our facilities as compared with 20,455 in 1975. Mr. Beshwaty attributes that this is due to the growing popularity of cruises.

Winter navigation (comprised between December 15th, 1975 and March 31st, 1976) resulted in 274 ship voyages carrying more than 2 million tons of various products. This was achieved despite the exceptional closing of the St. Lawrence River Ship Channel for a period of 22 days.

During the current year, an amount of \$7.5 million has been spent in capital and maintenance expenditures as part of a continuous modernization and maintenance program. The Port Manager stated that important appropriations will also be made in 1977 to ensure that the Port's installations efficiently meet users' needs.

Mr. Beshwaty also stated that even if the current year's tonnage does not compare as favourably with some of the previous years, he views present results as encouraging signs of continued growth for the future.

In conclusion, Mr. Beshwaty emphasized on the important economic contribution of Port activity to the region which is estimated to total \$300 million, and expressed the hope that the present climate of labour relations between employers and employees will be maintained at a high level throughout 1977.

Saint John Port News

Saint John, New Brunswick, Canada ("Saint John Port News" November-December 1976):

• Port Cargo Tonnages Improved

Cargo tonnage figures released by the National Harbours Board for the Port of Saint John, show increases in all types of cargo handled. The figures cover the period January 1 to September 30, 1976.

Total cargo compared with the same nine month period in 1975, increased by 280,925 tons for a total of 4,476,506. An increase of 120,127 tons was recorded for the month of September alone.

The labour intensive non containerized general cargo increased to 2,273,942 tons. Containerized cargo more than

doubled in the period from 378,000 to 775,000 tons.

• Port Days in New York

Chairman Joseph V. Streeter said Monday that members of the Saint John Port Development Commission were "tremendously encouraged" by results obtained at the Saint John Port Days activities held in New York.

Mr. Streeter said that about 175 persons attended the gathering. The attendance figure was the largest for a gathering of its type that Saint John has held in New York, he said.

Mr. Streeter said those attending showed "great interest" in the port generated through port expansion and greatly escalated traffic.

During the gathering, G.E. Benoit, Montreal, Canadian Pacific Railway's Atlantic region vice-president, announced that ACT lines has renewed a five-year contract to ship through the port of Saint John.

Port of Toronto goes metric

Toronto, Ontario, Canada, January 13 (Toronto Harbour Commissioners):—All Port of Toronto rates are now being quoted in the metric system of weights and measurements, six months ahead of the schedule set by the Federal Government, the Toronto Harbour Commission has announced.

"Effective January 1, 1977, most of our rates are being expressed in kilograms or cubic meters or both," said Commission General Manager, Ernest B. Griffith.

The Federal Government's target date for metric conversion at Great Lakes' ports and those in Eastern Canada is July 1, 1977.

"We moved our date up by six months so as to ensure statistical continuity and to avoid a mid-season changeover which could have caused some confusion," said Mr. Griffith.

Busy cruise season

Baltimore, Maryland, January 5 (News From Maryland Port Administration):—A record number of sailings and operating hours highlighted the M.V. PORT WELCOME's Bicentennial cruise season in the port of Baltimore.

In addition, the total number of passengers who cruised aboard the Maryland Port Administration excursion vessel in 1976 increased over the previous year.

The PORT WELCOME completed 298 sailings during the year, a jump of nearly 7 per cent over 1975 and the highest such total in the vessel's history. Charter cruises were up 7 per cent to 171 and catered group parties aboard the ship increased a huge 39 per cent over the number conducted the previous year.

Although public cruises for the PORT WELCOME increased about 5.5 per cent to 77 during the past year, the total fell short of expectations for the Bicentennial year. In discussing this, Henry P. Shade, manager of PORT WELCOME operations noted: "Upon comparing our season with that of other attraction operators in this region, we find that similar decreases in business were widespread. The prime reason for this industry-wide slump seems to be that the Bicentennial celebration proved to be a detriment to tourism rather than a stimulus."

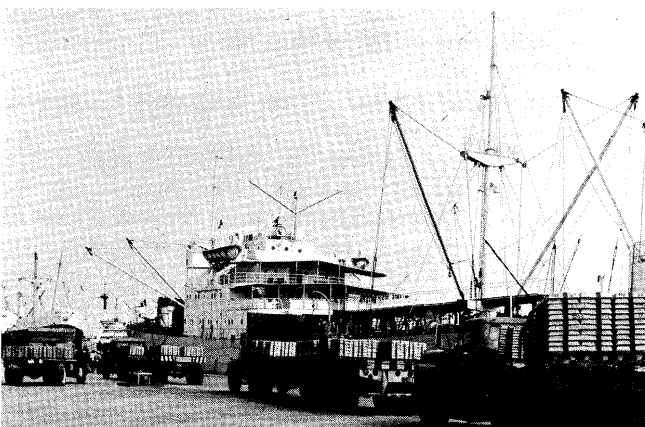
(Continued on page 39 bottom)

Port of Callao, Peru in Pictures

See also front cover of February issue



Maritime terminal of Callao. Storage Zone 1 and the administrative building.



Maritime terminal of Callao. Loading of metal bars.



Maritime terminal of Salaverry. A partial view of the wharf.

Sunken Ship Is Removed from Canal Entrance

The Panama Canal Spillway November 19, 1976

Balboa Heights, Canal Zone, Panama ("The Panama Canal Spillway" is an official publication of the Panama Canal):—The Colombian cargo ship *Tairona*, which struck the Cristobal east breakwater and sank last April, was raised last week and moved to a new resting place near Fort Sherman, away from the navigable channels of the waterway.

Successful completion of the salvage job was the result of efforts by the Industrial Division supported by the Dredging Division with launch and tug assistance from the Marine Bureau.

The 265-foot *Tairona* was refloated and moved in a partially submerged condition to 30 feet of water in a sheltered area outside the Canal anchorage some 200 yards from shore. Before she was raised from the bottom only the top of her superstructure was visible but now both the foredeck and bridge deck are out of the water.

Last week's successful attempt was the third try after two earlier ones fell short due to failure of lift chains.

(Continued from page 37)

In this regard, Mr. Shade noted that, according to the Division of Tourism of the State of Maryland, bicentennial-minded cities as Philadelphia, Baltimore, Annapolis and Washington, D.C. suffered decreases in attendance of from 8 to 10 per cent.

The total number of hours of operation for the PORT WELCOME during 1976 was a record 1,665, an increase of 11 per cent over the year before. Charter cruise hours showed the biggest increase, nearly 21 per cent, while public cruise operation hours increased almost one per cent.

Total passenger volume for the PORT WELCOME last year was 80,863, a jump of 2,751 or 3.5 per cent over 1975. Passengers on charter cruises increased 1.8 per cent to 44,552 while public cruise passengers showed a slight decline of about 3.2 per cent to 19,064.

"Had we not experienced a breakdown requiring the cancellation of three regularly scheduled Annapolis cruises and still one other Annapolis cruise cancellation because of bad weather, our total public cruise passengers actually would have increased about 2 per cent," Mr. Shade pointed out.

The manager of PORT WELCOME operations reported that educational cruises for the vessel during 1976 broke all previous records in terms of passenger volume. "The total number of student passengers was 17,247, a substantial rise of nearly 18 per cent over the previous year," he said. Historic Annapolis cruises registered 7,818 students, a jump of 35 per cent, while Baltimore harbor tours accommodated 9,429 students, an increase of 6.4 per cent.

"Overall," said Mr. Shade, "we enjoyed a very good season in 1976 and we are looking forward to another successful program in 1977."

Gusty winds and choppy Atlantic waters also delayed completion of the *Tairona* salvage work.

The *Tairona* was laden with a cargo of 32,500 bags of salt bound for Tumaco, Colombia, when she struck the breakwater while entering the Canal for a southbound transit sinking nearby in 44 feet of water. Marine Bureau floating equipment removed the vessel's crewmen, including one who was hospitalized for treatment of a leg injury.

Presence of the ship did not reduce the Canal capacity but it did limit the entrance channel between breakwaters to about 1,000 feet, slightly more than half the normal width. As a result, it constituted a significant hazard to navigation and shipping had to be restricted to one-way traffic at the entrance as a safety measure. Also, buoys were placed to mark off the safe channel through the eastern half of the breakwater entrance.

Compulsory pilotage was imposed for all vessels of 90 feet in beam or greater but smaller ships were permitted to pass through the entrance at the discretion of the master after obtaining permission from the signal tower.

A total of 22 flotation devices were used to provide the buoyancy to lift the ship from the bottom. The floats included four steel pontoons belonging to the Locks Division which measure 20' by 24' by 20', and 18 Navy, inflatable rubber pontoons measuring 10' by 7'. In the first two attempts to raise the ship, only the four big ones were used. The pontoons were submerged at the site of the wreckage and lines secured to them and the ship by divers. Next air was pumped into the pontoons so that their buoyancy could act as the lifting force to raise the vessel.

Considerable preparatory work was required to set the stage for the job. All cargo was removed and modifications made to the ship. Also, 90 percent of the water was pumped out of the vessel's tanks to provide additional lift.

The entire removal operation took place exactly as planned.

"Chuck" Bullock retiring

Houston, Texas, 1/5/77 (Port of Houston News Release):—C.E. "Chuck" Bullock, Port of Houston Authority General Manager-Operations, will take early retirement from the Port on September 1, 1977.

Bullock's planned retirement was announced at the January meeting of the Port of Houston Commission.

Bullock has served in his present position since August, 1973, having joined the Port staff in 1959 as Operations Manager. His duties include administrative supervision of all operations at the Port's public facilities.

He was born May 4, 1913, in Tylertown, Mississippi, and completed high school in Magnolia, Mississippi. He also attended Texas A & M University.

Bullock has served in his present position since August, the transportation field at the Port of Houston since then except for four years when he served in the U.S. Marine Corps in the Pacific and China Theaters from 1942 to 1946.

In 1941, he went to work for the Port Terminal Railroad Association and was employed in various capacities by that



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agency until he joined the Port Authority staff.

When announcing Bullock's decision to the Port of Houston Commissioners, George W. Altvater, Port Authority Executive Director, said he deeply regrets losing the services of a man whose dedication to the Port has helped bring it to its position of prominence among world seaports.

Bullock and his wife, Ella, have one daughter who lives in Houston.

Conference Goes Metric

Houston, Texas, November, 1976 (Port of Houston Magazine):—The Far East Conference, in what is considered a major step forward, is issuing a new tariff on January 1 that will be metricated. Rates have been quoted on a per 2,000 pounds or 40 cubic feet basis. The new tariff rates will apply per 1,000 kilograms (2204.62 lbs.) or one cubic meter (35.314 cu. ft.), whichever produces the greatest revenue.

From "The Port of Long Beach 1976 Annual Report"

Board President's Report

With this, our 1976 Annual Report, the Port of Long Beach joins in celebrating the 200th anniversary of the United States of America and at the same time lights a

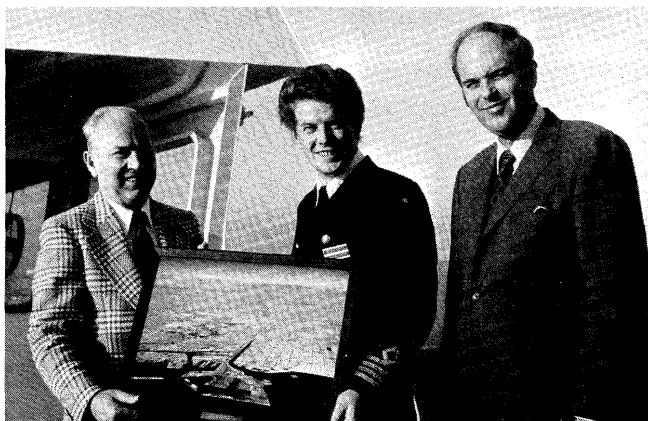
candle on the birthday cake of what has become in just 65 years America's Most Modern Port.

Rather than rest on the laurels of yesteryear, however, the Long Beach Harbor Department and its 300 employees have dedicated this year to the future—to the research and to the studies and to the planning that must go into the Port of Long Beach General Plan—before we set sail for the year 2000 and the day-to-day needs of the world of tomorrow.

This is also a year at the crossroads... where the ecological health of the nation and the seas which surround it must be weighed with the economic well-being that all our citizens can only realize through a bountiful exchange of our goods and raw products with the other nations of the world. In the coming pages we will touch on our accomplishments over the last twelve months as well as citing the projections for an ever-increasing flow of commerce from California and all America to every corner of the globe through the next quarter-century.

The growth of the past ten years saw Long Beach mature to become the undisputed cargo handling leader on the U.S. West Coast, virtually doubling its tonnage in a single decade. That progressive leadership will continue under the General Plan in the generation ahead.

During the last year, the Port expanded its environmental activities by creating an Environmental Affairs Division under the direction of Dr. Donald B. Bright, former chairman of the South Coast Regional Coastal Zone



Long Beach, Calif., 122876 (Port of Long Beach News):—Maiden call of Wallenius Lines' car carrier MS Don Carlos at the Pasha Group terminal in the Port of Long Beach found harbor officials coming aboard to present aerial view of Long Beach to the 664-foot 14,479 gross ton ship. From left are Director of Port Operations Harvey H. Harnagel, Captain Sten Erik Hakansson and Assistant Operations Director Adolf B. Zetterberg. The 12 deck vessel, built in Sweden, carried 4676 Japanese cars. With a total capacity of 5000 automobiles, the Don Carlos is believed to be the largest car carrier ever to call at Long Beach.

Commission. A recognized authority in his field, Dr. Bright has assembled a staff of experts in ecological matters to assist him with Long Beach Harbor's complex environmental program.

Frequent water quality sampling over nearly a quarter century has resulted in Long Beach enjoying a reputation as one of the world's cleanest harbors. The Port commissioned a unique craft to pick up any floating debris and has completed a costly portwide sewage system. For these and other activities Long Beach Harbor was recipient of the first Environmental Enhancement Award ever presented by the American Association of Port Authorities.

Thus, the Port of Long Beach intends to advance to the forefront of modern maritime environmentalism, just as it has long been a leader in providing the finest cargo handling facilities.

Nor are the recreational benefits of a well-conceived harbor overlooked. A continuing program of landscaping and beautification goes hand in hand with public parks and promenades for picnicking, fishing and ship watching.

Facilities have been provided for a sportfishing landing and harbor cruises. The Hyatt Queen Mary and Queensway Hilton hotels offer the visitor 600 luxury rooms and diverse dining opportunities. The Quiet Cannon restaurant is the most recent addition to the Port scene, while the veteran Reef restaurant is to be rebuilt this year at its present site.

Additional marina berths are also part of the public recreation plan as your Port moves into the final fourth of this century with the same foresight and vigor that has marked its remarkable growth in the past.

James G. Craig, Jr.
President
Board of Harbor Commissioners



Long Beach, Calif., 123076 (Port of Long Beach News):—PACIFIC TOWBOAT LAUNCHES 'PACIFIC VIKING' AT LONG BEACH. In colorful ceremonies at the Port of Long Beach, Pacific Towboat & Salvage Company recently launched the second of a series of three sea-going tugboats, the 'Pacific Viking', which now joins her sistership 'Pacific Mariner' in West Coast tug service. The launching was carried out by the YD-171, world's largest self-propelled floating crane, which has been in use continually at the neighboring Long Beach Naval Shipyard for 28 years. Harbor Commissioner James H. Gray, right, was on hand to present plaque for wheelhouse to company president John J. Turner.

Chief Harbor Engineer Retiring

Long Beach, Calif., 11177 (Port of Long Beach News):—Bob N. Hoffmaster, Chief Harbor Engineer for the Port of Long Beach since 1958, recently informed the Board of Harbor Commissioners that he intends to retire June 30 after 39 years with the Harbor Department.

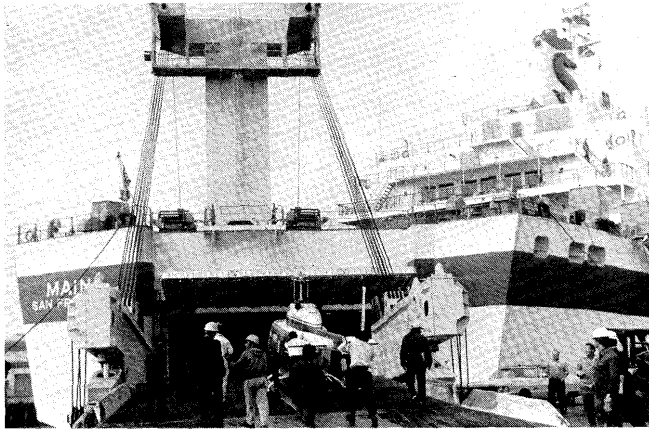
During those four decades, Hoffmaster rose through the ranks from chainman to Director of the Engineering Division and was largely responsible for the development of a relatively minor harbor into what is today widely regarded as "America's Most Modern Port".

General Manager Thomas J. Thorley noted in making the announcement that Hoffmaster will actually terminate his duties in mid-May and added that a replacement for his position would be solicited on a nationwide basis.

Port promotion director

New Orleans, La., January 10 (Port of New Orleans):—Nathaniel J. Chesnut has been named promotion director for the Board of Commissioners Port of New Orleans. He was formerly director of communications for Louisiana Family Planning Program, headquartered in New Orleans.

Chesnut has served as public relations director for several New Orleans advertising and public relations firms and was special assistant to the superintendent of New Orleans Public Schools. He has also served as assistant to the



Long Beach, Calif., 10477 (Port of Long Beach News):—**FLY-IN, ROLL-ON CONCEPT LAUNCHED BY STATES LINE.** One of the most unusual cargo loading operations in recent port history occurred at Long Beach Harbor with the fly-in arrival of a Bell 206-B helicopter at the Pier B States Line terminal. Photo shows the \$200,000 aircraft with its rotors removed and ready for rolling aboard States Line's new Roll-On/Roll-Off vessel Maine. The shipment is the first of what the shipline hopes will be a series of such air-sea deliveries to Mitsui Co. in Yokohama.

advertising manager of New Orleans Public Service, where he was responsible for media advertising and publications. His work earned for Public Service and the public schools several national awards.

A native of New Orleans, Mr. Chesnut attended local schools and earned a bachelor's degree at Loyola University and a master of Business Administration degree from the graduate school of Business Administration, Tulane University.

Chesnut is married to the former Manolita Hoz and they have two sons, Randall and Stephen.

Steel handling charges reduced

New York, N.Y., January 1977 (News from The Port Authority of New York & New Jersey):—When the freighter "Lucy," carrying 2,500 tons of steel beams and angles from Japan recently arrived at the Elizabeth-Port Authority Marine Terminal here, it was the result of a cooperative campaign by labor and management to once again make the New York-New Jersey Port a major import/export gateway for primary metals and steel. Participating in these efforts were the New York Shipping Association, International Longshoremen's Association, New York Terminal Conference and The Port Authority of New York & New Jersey. The joint actions of these organizations caused substantial reductions in steel handling charges at the Port of New York-New Jersey which now make it competitive with other United States East Coast ports.

Specifically, the New York Shipping Association and the International Longshoremen's Association jointly designated primary metals as exempt cargo in computing tonnage assessments; the New York Terminal Conference



James G. Craig, Jr.



Llewellyn Bixby, Jr.

HARBOR COMMISSIONERS ANNOUNCE RETIREMENT

Long Beach, Calif., 11276 (Port of Long Beach News):—Two members of the Long Beach Board of Harbor Commissioners—President James G. Craig, Jr. and Llewellyn Bixby, Jr.—have submitted their letters of resignation to the City Manager. Both have served as Commissioners for nearly a dozen years and their decision to step down came with the deepest personal regret.

Craig's family founded Long Beach's first major industry, the Craig Shipyard (now California Shipbuilding and Dry Dock Company) in 1907. This is the third time he has served as Commission President. He has also been a Director of the Los Angeles Museum of Science and Industry and the Queen Mary Museum of the Sea and remains the General Chairman of the 51st annual World Trade Week to be observed in Southern California May 22-28, 1977.

Bixby comes from a pioneer Long Beach area family and has also been Harbor Commission President three times. He was President and a Director of the Long Beach Dock and Terminal Company which was instrumental in establishing the Port of Long Beach, and presently heads both the Alamitos and Bixby Land Companies.

reduced truck loading rates—in some instances, by as much as 80 percent; and the Port Authority reduced its transit shed charges from \$1.00 to 25 cents per ton. In addition the Port Authority has developed a promotional program to inform shippers of the reduced charges.

Concurrent with the reduction in steel handling charges a Port Authority representative, Captain Allan Lonschein, flew from New York to Tokyo where he and William C. Gibson, Manager of the Authority's Trade Development Office in that city, met with major Japanese steel exporters, trading houses and steamship lines to explain the newly developed program and its economic advantages for routing steel shipments through the Port of New York.

Imports of steel products through the Port of New York, which had declined from 1,088,000 long tons in 1968 to 376,000 long tons in 1975, are expected to rise again this year under the impact of the improved rates and promotional program.



Long Beach, Calif., 12577 (Port of Long Beach News):— Carl C. Bland, veteran shipping official who recently retired as Senior Vice President and Director of Balfour, Guthrie & Co., San Francisco, was honored by the Port of Long Beach recently for his four decades of service to the maritime industry. Pictured at presentation of Port plaque are, from left, former Long Beach Harbor Commission president James G. Craig, Jr., Bland and Long Beach Harbor General Manager Thomas J. Thorley. Bland recalled acting as agent for Swedish-East Asia Company's "Benares" before World War II when that vessel was the first ever to call at Pier A.



Long Beach, Calif., 12577 (Port of Long Beach News):— First call at the Port of Long Beach by the fully-cellular Soviet-flag containership *Khudozhnik Zhukov* was marked with traditional welcome ceremonies including presentation of Apollo photo of Southern California taken from 105 miles in space. James G. Craig, Jr., immediate past president of the Long Beach Harbor Commission, left, and Commerce Director Lee Sellers, right, are seen with Captain Vadim A. Vigovskiy and Raymond A. Abbott, Vice President Operations for Salen Shipping Agency, agent for Fesco Pacific Line. The *Zhukov*, third K-class ship to enter transpacific service, carries 750 TFE's, has 14,440 DWT displacement and is 556 feet long.

New Steamship Service Directory Becomes Available

New York, N.Y., January 1977 (News from The Port Authority of New York & New Jersey):—The 1977 edition of the Port of New York and New Jersey Scheduled Steamship Service Directory is now available without charge at trade development offices of The Port Authority of New York & New Jersey in the United States and overseas. This directory is used by exporters, importers, freight forwarders and business and governmental agencies as a primary information source on the ocean shipping services available at America's leading port. It is updated and published annually by the Port Promotion Division of The Port Authority of New York and New Jersey and lists the names, office addresses, telephone numbers and pier locations for all the steamship lines and agents offering regularly scheduled cargo, passenger, or cruise service at the New York-New Jersey port.

This year, to better meet the needs of shippers, forwarders and others, the directory also lists the post office addresses of all the active piers in the port. Another addition is an identification of those cargo lines which also carry passengers at the Port of New York and New Jersey.

A cross-index, identifying by nation over 350 ports around the world, precedes a list of all the countries to which scheduled service is provided from the Port of New York and New Jersey combined with the names of the related steamship lines. This arrangement enables directory users to pinpoint quickly ocean carriers and the trade

routes and ports they serve. The directory also contains a listing of all the active steamship piers in the Port of New York-New Jersey along with the ocean carriers, terminal operators and railroads at each.

Free copies of the booklet may be obtained from the Port of New York-New Jersey Regional Trade Development Office, Kokusai Building, Marunouchi, Chiyoda-Ku, Tokyo, 100, Japan.

Virginia Ports sailing schedule

Norfolk, Virginia, November/December 1976 ("Virginia Ports—Port of Hampton Roads"):—In order to provide shippers with the most up-to-date, accurate schedule of sailings from Virginia ports, the Virginia Port Authority has begun a special "Virginia Ports Sailing Schedule" on the front page of the shipping section of the Journal of Commerce every Monday. The listings are extracted from the JofC ship cards and the concise schedule is printed separately. The new system allows shippers to tell at a glance what sailings are offered from Virginia ports to the various areas of the world without having to refer to a number of ship cards. "Lastout" sailings are plainly marked with an asterisk, and terminal information is printed at the top of the schedule. Shippers not regularly receiving the Journal of Commerce may contact: Public Relations Office, Virginia Port Authority, 1600 Maritime Tower, Norfolk, Virginia, 23510, or telephone (804) 622-1671. They will be given a free, two-month subscription.

Ben E. Nutter, Oakland Executive Director Is to Retire Leaving Towering Achievements

**Port of Oakland
January 19, 1977**

Oakland, Calif.:—Ben E. Nutter, who has done more than anyone else to build the Port of Oakland into a leading containerport of world-wide importance, announced today at a meeting of the Oakland Board of Port Commissioners that he would retire as Executive Director on July 1, 1977.

The Port Board announced at the same time the appointment of Walter A. Abernathy, Deputy Executive Director, to succeed him.

"The retirement of Ben Nutter will conclude one chapter of an exciting career which has effected the world commerce and the lives of many persons," said William Walters, President of the Oakland Board of Port Commissioners.

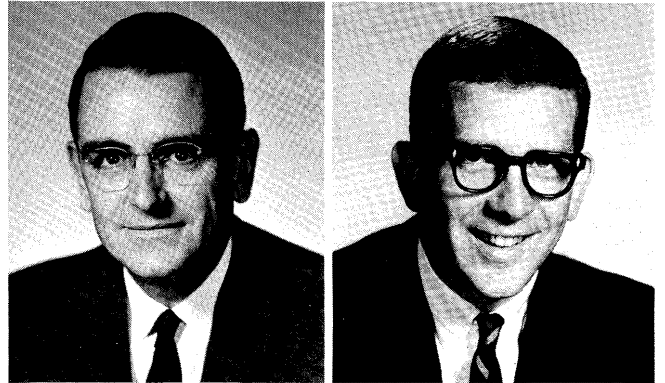
"His foresight on the evolution of shipping and harbor development will have a lasting impact on the City of Oakland and on international commerce. Our city and all East Bay communities will long benefit from his vision, leadership, integrity and dedication to purpose. We anticipate following his future efforts as an advisor and recognized expert in the field of harbor development and international commerce, and know that his expertise will continue to be available for the improvement of others."

"He will have left the Port of Oakland with an excellent staff who will be able to continue his programs under the direction and leadership of Wally Abernathy, who will assume the position of Executive Director in July," Walters said.

Nutter has been at the Port of Oakland for more than 20 years and has been its Executive Director since 1962. During that period and through his knowledge and effective leadership, the Port of Oakland has developed ocean shipping facilities to grow from a mid-sized general cargo facility to the fifth largest containerport in the world; a new passenger terminal was built at Oakland International Airport and air traffic climbed from 300,000 to more than 2.2 million passengers per year; Jack London Square became an attractive center for dining, entertainment and shopping; and, other commercial and industrial properties were developed. In an interview with an Oakland Tribune reporter recently, Nutter said: "What am I proud of? The Port of Oakland and what it has accomplished."

Abernathy has worked alongside Nutter as his chief assistance since 1966 and as Deputy Executive Director since 1970. At that time he was considered the youngest top executive of a major United States port. He came to the Port in 1964, as Public Relations Director, from the staff of the Oakland Chamber of Commerce. He was on the advertising staff of the Standard Oil Company, served in the U.S. Army and received a degree in psychology from Vanderbilt University.

"I am very pleased that the Board has chosen Wally



Mr. Ben E. Nutter

Mr. Walter A. Abernathy

Abernathy as the next Executive Director of the Port," said Nutter. "He is an experienced port manager and has participated in every major decision and business transaction of the Port for more than 10 years."

Nutter, who holds a degree in civil engineering from Oregon State University, began his career with the Army Corps of Engineers in Hawaii working in military airfield and fortification construction, flood control and port and harbor development. He was appointed Superintendent of Public Works in Hawaii, and in that capacity supervised planning and construction for the Hawaii Aeronautics Commission, served as chairman of the Board of Harbor Commissioners and as Highway Engineer. When he joined the Port of Oakland in 1957, he served as Chief Engineer and Assistant Executive Director until his appointment as Executive Director.

New T-6 Distribution Warehouse

Portland, Oregon, December 1976 ("Portside", News from the Port of Portland, Oregon):—The most modern container terminal on the U.S. West Coast—the Port's T-6—now has company.

Immediately adjacent to the Port's John M. Fulton Terminal 6 is the just completed 200,000-square-foot distribution warehouse which started taking import cargoes on November 1.

This major new distribution facility was a priority modernization project. It will serve and complement the fast throughput of T-6. The entire complex sets a new industry standard for efficient, lowcost, fast distribution.

The new warehouse offers immediate access to the interstate highway system and quick transfer to and from rail, barge and ocean transport.

Total phase-in time for the warehouse is expected to be around 60 days, or late December 1976, reports Tom Matthews, cargo distribution manager for the Port.

The most advanced operational techniques are employed



Oakland, Calif., January 26 (Port of Oakland):—**FIRST CALL**—Port of Oakland Executive Director Ben E. Nutter climbed to the bridge of the containership *America Maru* recently to pay special greeting to the master, Captain S. Ayabe, and Chief Engineer T. Shimura. The Mitsui—O.S.K. Lines vessel was the first to call at Oakland's newest container facility, the two-berth, 32-acre Port of Oakland Outer Harbor Container Terminal. Built for a consortium of Four Japanese steamship companies also including Japan Line, "K" Line and Y.S. Line, the terminal will soon be augmented by a third berth and an 18-acre Public Container Terminal to be operated by Marine Terminals Corporation with Maersk Line the principal user. Two 40-ton Paceco Portainer gantry cranes serve the facility baptised to weekly sailings from Oakland by the arrival of the *America Maru*.

by the new T-6 facility.

A computer inventory service and rack-type storage system for quick-order picking are some of the efficient features. Three narrow-aisle electric lifts handle orders in the warehouse while propane fork-lifts are used for truck and railcar loading. The narrow aisles give up to 10 per cent more storage space. This narrow-aisle design boosts the total storage area of the new warehouse to 4,000,000 cubic feet.

Two of the 17 truck doors at the warehouse are over height. All are equipped with dock levelers. Four doors open onto rail spurs alongside the building.

Twenty-four hour security service is provided by the Port and a sprinkler system (both wet and dry) protects the entire facility. The huge warehouse is also fully fenced for additional security.

Matthews said efficient inventory control will be assured by an IBM 370 computer as well as on-site traffic assistance.



Oakland, Calif., January 4 (Port of Oakland):—"I never want to go to sea again. I don't think anyone should!" Thus Nancy Perry described for television reporters her reaction to three grueling weeks adrift on a tiny raft after the sinking of a sailboat on which she had been traveling to California from Hawaii last September. Miss Perry, 21, and a companion, Durel Miller, 28, were rescued by the Orient Overseas Container Line ship *Oriental Financier*. The ship's skipper, Captain N.S. Lin, and his crew held a reunion with Miss Perry at the Port of Oakland recently, three months after she was plucked near death from the raft and treated aboard ship en route from Oakland to Yokohama.

"Ours will be a personalized inventory service where the computer will be used as a working tool—but not the answer to all things under the sun.

"When a shipper calls up and wants to know where his cargo is, we're not just going to tell him it's logged into the computer. We will be able to tell him at all times the location and the status of the shipment," Matthews said.

He noted this cargo knowledge will be true of cases where advance documentation of shipments is not available—such as when the warehouse will be used as a staging or assembly point for large shipments.

New T-6 warehouse has 4,000,000 cubic feet of storage area and provides 17 doors.

While the mammoth distribution center is now filled with import cargoes bound for Midwestern and Eastern United States it is believed that such export cargoes as heavy machinery and general commodities may also be handled through this center.

The warehouse provides immediate U.S. Customs Service and 40,000 square feet of U.S. Customs bonded storage space.

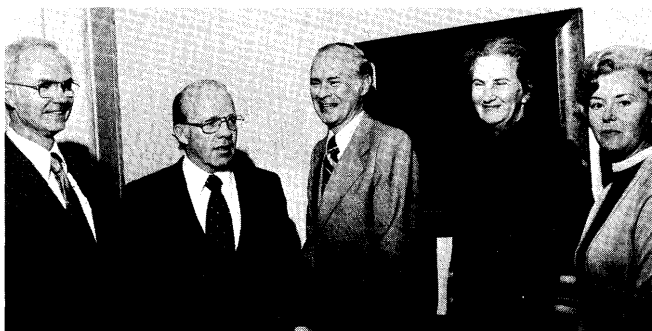
Port Trade on the Rise

Portland, Oregon, December 1976 ("Portside", News from the Port of Portland, Oregon):—

• Portland Tops 1975 Exports

Waterborne commerce statistics for the United States for 1975, recently released by the U.S. Army Corps of Engineers, show Portland leads the U.S. West Coast in foreign exports.

Portland harbor exported 16 percent more cargo than runnerup Long Beach, Calif. Portland harbor's 1975 ex-



San Francisco, Calif., 1/18/77 (San Francisco Customs Brokers and Freight Forwarders Association):—Retiring president Marshall Brownfield of the San Francisco Customs Brokers and Freight Forwarders Association (left) congratulated new officers at recent World Trade Club election meeting: William F. Bosque, new president, who is a partner of J.E. Lowden & Co.; Ted L. Rausch, 1st vice president, and president of the Customs brokerage and forwarding firm bearing his name; Bonnie Beijen, 2nd vice president, and vice president of W.J. Byrnes & Co., and Jean Cordoba, 3rd vice president, and export manager of Harper, Robinson & Co. Not pictured is Robert H. Langner, association executive director, who was reelected secretary/treasurer. The association spearheads study and action programs for its more than 100 members, and cooperates closely with other Pacific Coast brokerage and forwarding groups, and the national association.

ports totaled 6,560,447 short tons.

In overall West Coast port rankings (exports and imports) Portland retained its third place position behind Los Angeles and Long Beach in the classifications of total waterborne commerce (foreign and domestic) and total foreign waterborne commerce.

• 1976 Exports On The Rise

During the first three quarters of 1976 exports through the Port of Portland registered a substantial 11.8 per cent increase.

Total foreign ocean commerce, in and out, showed a 7.7 per cent increase over the same period the previous year.

Exports, excluding grain and logs, Portland's regular high volume export cargoes, registered a 13.3 per cent increase over the same period last year.

Substantial growth in the export of processed potatoes, paper products and plywood was noted during this period.

Marine Development Director William E. Plymale said Portland is experiencing burgeoning domestic trade with fastgrowing Alaskan markets—tonnages Portland has not enjoyed in the past.

Public Relations officer

Savannah, Georgia, December 30, 1976 (Georgia Ports Authority):—Veteran Radio and Television Newsmen, Ralph C. Price, Jr., joined the Public Relations Department of the Georgia Ports Authority, under the direction of Jim Bisson, on January 3rd according to an announcement by George Nichols, Executive Director of the Georgia Ports Authority.

Price will serve as Assistant Director of Public Relations.

He has been Public Affairs Director of WSAV-TV since 1971, moderating "CANDID OPINION" and "THE PEOPLES' PLATFORM", interview programs and anchoring "11TH HOUR NEWS".

He was born in Johnson City, Tennessee and attended East Tennessee State College, University of Florence, Italy, and William and Mary.

Price is married to the former Geraldine Altizer of Roanoke, Virginia. They have three children, Clint, age 20; Ben, age 19; and Penny, age 17.

New Port Tariffs

Caracas, Venezuela November, 1976 (Carta de la C.A. Venezolana de Navegación):—The National Ports Institute, an agency of recent legal creation, has established new tariffs for Port Services, effective as of November 1st this year. The services that are rendered by the ports are: to the vessel, the cargo; anchorage and use of wharves, stevedoring, carrying and storage. The establishment of the new tariffs is intended, in addition to regulating port services, to strive toward self-financement under the new autonomous administration of the Institute, pursuant to the Law on this matter.

Extraordinary measures to solve the congestion in ports

Caracas, Venezuela, December, 1976 (Carta de la C.A. Venezolana de Navegación):—The National Government, through the recently created National Ports' Institute, has established some emergency measures in order to regularize in a quick manner the situation in the country's commercial ports, which are highly congested due to the affluence of vessels loaded with imports, a circumstance which can, to a great extent, be explained by the year-end season. Among the steps taken, is the continuous 24 hour service, in three shifts, as well as temporarily outfitting private and military ports in order to alleviate the more congested ports, such as La Guaira, Puerto Cabello and Guanta-Puerto La Cruz. This has been a severe test for the new ports' administration, that is to say: to the National Ports' Institute, which is, however, achieving success in this emergency. Of course, the complete normalization of ports and the attainment of high levels of efficiency in its operations may be achieved within a reasonable period, when the present lack of organization, equipment, installations and personnel have been duly overcome. It is undoubtable that with the new Ports' Law and the creation of the National Ports Institute important steps have been taken towards the correct operation of the country's maritime terminals.

Boom with us?

Portland, Boston and Hong Kong do!



Container cranes supplied to the Port of Portland, U.S.A.

70-long ton container gantry crane for the Port of Boston.

Two container cranes now in operation at the Port of Hong Kong.

Profits go up. Costs go down.
In Portland, Seattle and Boston.
And in Hong Kong, Singapore,
Port Kelang and Japanese
ports, too.
Worldwide.
Via over 15,000 Hitachi cranes.
Container and otherwise.

And a word to the wise.
Check out our patented
"semi-rope" trolley gantry cranes.
They reduce shock and sway of cargo.
We have also provided high
speed container cranes which
employ our recently developed
sway stop system.

Put both in your port and see for
yourself.
You will be busy . . . but happy.

 **HITACHI**

6-2, 2-chome, Otemachi, Chiyoda-ku, Tokyo 100

The Port of Antwerp Extends Its Towing Service

Port of Antwerp Promotion Association Press Release

Antwerp, 9/12/1976, by April 1977, 7 new tugs of the series "80" will have brought the existing Antwerp tug fleet to a total of 33. Twenty-six of them will be equipped with a modern fire-fighting equipment, whereas all 33 will have a propulsion of the "Voith-Schneider" type for quick and precise manoeuvring during the service in the port. The 7 newest can be used as an ice-breaker, thanks to a reinforced stern, and an ice-strengthening over the entire length.

At present the seven new tugs are being delivered unit by unit to the Antwerp Municipal Towing Service, and will thus bring the total propulsion capacity on 42,950 HP, and the total pulling power on ca 500 t. The 14 most powerful tugs then will have a pulling power of 24.5 tons.

Constant renovation of the towing fleet

The Antwerp Municipal Towing Service already exists over 100 years, in which it had to constantly adapt the tug fleet to the changing demands which came about with the evolution in the port activities and its technology.

Mainly in the course of the past 20 years the tug fleet has been extended. On March 1st, 1957 it consisted of 36 tugs (14 with steam, the other with diesel engines), with a total propulsion capacity of 8,750 HP (or on an average 243 HP per tug). The total pulling power didn't exceed 142 t, which gives an average of ca 3.94 t per tug. All units were driven by propellers.

In March, 1965 the last steam tug was taken out the service and before the end of 1976 the last propeller vessel will have been taken out the towing service.

A new era

This brings about a new era for the Antwerp port. Indeed, in order to replace the old tugs, it was decided to bring 7 new vessels in the service.

The tugs are specially designed and equipped, in order to meet the specific requirements of the Antwerp port, where between 45,000 and 50,000 towing tasks have to be performed annually. Beside the big pulling power demanded (at least 22 ton), the new series "80" disposes of "Voith-Schneider" propulsion, to guarantee an optimum manoeuvrability, and it has the avail of $2 \times 1,100$ HP, to reach a maximum speed of 22.4 km/h (12.1 knots).

The long and excellent experience with the "Voith-Schneider"-type of propulsion (in December 1975 a total of 1,000,000 running hours), didn't make the choice difficult, and in the new tugs this type of propulsion is being commanded and controlled in the wheelhouse, where also the whole control system for the engines and the towing tasks is grouped. Thus for instance the pulling power on the towing cable can be read out continuously.

The necessary noise-insulating material is placed, so as to make navigating more comfortable and safer (the different commands can better be understood by all men).



With their length of 28.43 m, their width of 9.12 m and a maximum draught of 4.25 m, the new tugs have a displacement (loaded) of 340 t. Thanks to their powerful engines and the very appropriate "Voith-Schneider" propulsion, they can stop to stand from the maximum speed of 22.4 km/h, in about 12 seconds, on a distance of only 40 m. In 47 secs the new "80" can make a full-circle movement.

Tugs also used for the fire fighting in the port

But beside the equipment for the towing tasks—and these can be easily handled with, thanks to the pulling power of 24 t and 19 t (forward and backward respectively)—the new tugs are provided with an up-to-date fire-fighting equipment. The "80"s have the avail of 2×2 pumps with a capacity of 12,000 liters of water per minute (on a pressure of 18 kg/cm²) or of 16,000 liters/min (on a pressure of 15 kg/cm²). Together with a foam contents of 20 cubic metres, these pumps can produce a 0% to 7% foam-mixture, of which 56,000 liters/min can be produced per monitor. Beside a monitor on starboard and one on port side on top of the wheelhouse, a third monitor is available on starboard of the wheelhouse. The latter makes the new tugs unique in Europe. Indeed, this monitor is placed on a telescopic mast which can be raised in one minute to a height of 7.5 m, thus bringing the monitor 16.5 meters above waterlevel, in order to better fight fire aboard large vessels. For the protection of the tug itself against heath a waterfront can be produced around the tug.

Thus by April 1977 the Antwerp Municipal Towing Service will have the avail of 33 modern tugs, over 20 of which are being equipped to fight fire in the port area, in order to be of immediate assistance in no time all over the port.

Symposium "Modern Dredging"

The Hague, The Netherlands, 16th December 1976 (Symposium Modern Dredging):—The Symposium Committee, which consists of representatives of the Dutch "Rijkswaterstaat", the "Foundation Post Graduate Courses in Civil Engineering" in Delft, Dutch consultants and leading Dutch dredging contractors, are organising a SYMPOSIUM entitled "Modern Dredging". This Symposium will officially be opened by His Royal Highness the Prince of The Netherlands.

The SYMPOSIUM "Modern Dredging" is aimed at top management and executives who are involved in the integral realisation of dredging projects.

We have pleasure in inviting your senior executive to participate in this SYMPOSIUM which will be held from:

Wednesday 1st up to and including Friday 3rd June 1977, in the Netherlands Congress Centre in The Hague, the Netherlands.

Chairman of Pilotage Advisory Committee

Belfast, Northern Ireland, 20th January (Port Development Department, Belfast Harbour Commissioners):—A Northern Ireland man, Dr. Denis Rebbeck, C.B.E., M.A., M.Sc., Ph.D., D.L., J.P., has been appointed by the Secretary of State for Trade as Chairman of the newly-formed Pilotage Advisory Committee.

Dr. Rebbeck, who comes from a family long connected with shipbuilding, is Chairman of John Kelly Ltd., and holds several Directorships including the Royal Bank of Scotland. He is also Consultant to Swan, Hunter Shipbuilders Ltd., and a Belfast Harbour Commissioner since 1962.

In May, 1976, Dr. Rebbeck was appointed a Warden of the Worshipful Company of Shipwrights, London.

The Pilotage Advisory Committee will advise the Secretary of State for Trade regarding changes which might be made in aspects of pilotage arrangements, both at local and national level, in advance of proposed legislation, and to work for early agreement on such legislation.

Dockers pay deal

Bristol, January 12, 1977 ("Portfolio", a newspaper for the Port of Bristol):—Port General Manager, Stanley Turner, met registered dockworker shop stewards on Monday to discuss the men's claim for fringe benefits under their new pay agreement.

Afterwards he said,

"We had a frank exchange of views. As far as any progress being made, yes, they listened to the points we made.

The next thing will be to arrange a mass meeting with the men, when I shall be talking to them."

The date of the meeting has yet to be fixed.

Middle East cargo service from Lowestoft

London, 29 December 1976 (British Transport Docks Board):—The East Anglian port of Lowestoft is now the

regular port of loading for a fortnightly general cargo service to Iran and Iraq, operated by International Express Company Ltd., of Brentwood, Essex. The next sailing is by the motor vessel "Satelith", which is due to begin loading on Friday, 31 December.

Employing vessels with a carrying capacity of about 1,200 tonnes, the service is based at the North Quay in Lowestoft's Inner Harbour and deals mainly with manufactured and semi-manufactured goods. Modern transit shed accommodation and a Scotch derrick for lifts of up to 35 tonnes are available alongside the berth.

Mr. Jan Posner, Middle East Co-ordinator for International Express, praised Lowestoft's handling of the service since the first vessel loaded at the end of October. "It's a small port where we get personal service," he said. "We are pleased with the loading rate and the facilities provided by the British Transport Docks Board, and also the fact that there's no waiting time for our ships. The port has reasonable road access and is well located from both the sea and inland route aspects."

The Lowestoft docks manager, Stuart Bradley, sees the new service as "a step in the right direction" for the port because "this is precisely the type of service we are equipped to accommodate."

"While the port is no stranger to regular short-sea services, the Middle East is a new area for us and the new service represents a real boost to Lowestoft's export tonnage," Mr. Bradley said.

Agents and stevedores for the service at Lowestoft are East Anglian Shipping Company Ltd.

100 Years of Progress

Amsterdam, November 1976 (Amsterdam Newsletter):— "Without the North Sea Canal, Amsterdam and Zaandam would probably be in the same position as the former major ports of Hoorn and Enkhuizen".

— Amsterdam Mayor Ivo Samkalden in 'Amsterdam Werk'

1876—King Willem III of the Netherlands opened the North Sea Canal—a ten-mile long artery of commerce linking Amsterdam to the North Sea. Expectations ran high that the new waterway would restore the Dutch capital to its former prominence as a center of shipbuilding, trade and tourism.

1976—One hundred years later, the faith and foresight of the Canal's original advocates has been fully justified. Ports along the canal's perimeter handle approximately 35 million tons of international sea-going goods traffic a year, ranking the area among the world's 15 largest port areas in terms of tonnage. Finance, trade and industry are flourishing. And, as the Canal enters its second century of operation, plans are being discussed for additional expansion to handle the increasingly mammoth—and specialized—ships that now ply the Seven Seas.

Le Havre Flashes, November, 1976

Le Havre, France (Port of Le Havre Flashes, November, 1976):—

- **Front cover feature: One of the leading features of the new commercial port: The Ro-Ro Terminal**
- **New ore berth to be built**

To reduce transport costs on seaborne coal imported for use in its coal-fired power stations, the French Electricity Board is proposing to use 120,000 dwt vessels from 1978 onwards instead of the 88,000 tonners that it has chartered hitherto for its imports through Le Havre. Unfortunately, the present coal wharf was designed for vessels of up to 90,000 tonnes fully laden and cannot be modified to take a higher tonnage.

Moreover, the French Electricity Board is planning to import 3½ million tonnes of coal a year through Le Havre at least until 1982.

The Board of Management of the Port Authority has therefore decided to build a new ore berth capable of accommodating bulk carriers of up to 120,000 dwt. It will be sited on the north side of the Tidal Basin, between the present ore berth and the western end of the Quai de l'Atlantique container terminal, and will consist of a

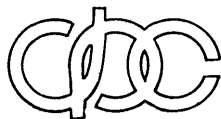
berthing jetty 220 metres long by 20 metres wide (722 ft x 66 ft) set roughly 60 metres (197 ft) out from the presents shore line. It will have two grab transporter cranes and a network of conveyor belts for shifting discharged cargo direct to the stacking area. The cranes, which have a lifting capacity of 35 tonnes and can shift 1,200 tonnes an hour, have been so designed that they can be transformed into container cranes, should the coal trade decline somewhat in the more or less distant future.

The total cost of the new installations will amount to 140 million francs, with the State subsidising 60% of the infrastructure costs. Work is scheduled to begin this November and the new ore berth will come into operation in April 1978.

- **Quai de l'Europe Container Terminal lengthened**

The first 50 m (165 ft) of quayside to be completed under the extension programme were opened to shipping at the end of July and though the extra section is hardly impressive in itself, it allows us to make far better use of the total length of waterfront.

Construction work on the full 275 m (902 ft) quay extension was completed in August and that on the roll-on/roll-off platform in September. The dredging pro-



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gramme and the preparation of the stacking areas are going ahead well and it is expected that everything will be ready by the end of November. The Quai de l'Europe will then be usable throughout the 1,175 m (3,855 ft) of its definitive length.

● Visit from the President of Senegal

The President of the Republic of Senegal, Mr. Léopold Senghor, toured the port of Le Havre and the Antifer oil terminal on August 29th last, during his stay in Le Havre, where he was visiting the large Senegalese element in the local population. He also went over the signal station and was shown its ultra-modern equipment in action.

● New cruise line

On October 5th the Spanish liner Monte Toledo, owned by Naviera Aznar S.A., sailed on the first of a scheduled series of cruises from Le Havre to the Canaries. The Monte Toledo, which has very comfortable air-conditioned accommodation for 800 passengers, is represented in Le Havre by the Consortium Maritime Français and undertakes 14-day cruises, calling at Southampton, Le Havre, Vigo, Madeira, Santa Cruz de Palma, Teneriffe, Las Palmas and Corunna. She calls at Le Havre every other Tuesday at the start of a cruise and returns on alternate Sundays.

● 6 Giants together

A record was set up on July 28th when the four berths available at Havre proper and Antifer for tankers of over 200,000 dwt were occupied simultaneously. Berths 8 and 10 at the Havre oil terminal were occupied by the Dutch Mytilus (210,292 dwt) and the Iranian Khark (235,431 dwt), while the Norwegian Berge Queen (284,976 dwt) and the Liberian Esso Hawaii (278,999 dwt) were tied up at Antifer, with two more, the Liberian Olympic Bond (269,244 dwt) and the French Licorne Pacifique (269,007 dwt) waiting to enter harbour there. The oil trade remains buoyant, with imports of crude up 14% during the first 9 months of the year compared with the same period last year.

● New lines

© A new weekly service to New York, Philadelphia, Baltimore and Savannah was inaugurated on September 21st by the Soviet **Pavlograd**. This new all-Russian service is operated by mixed vessels equally well adapted to conventionally-packed or containerised cargo. The agents here are the Société Française de Consignation.

© Since Seatrain's deep-sea containerships stopped calling at Southampton, a twice-weekly shuttle service has been set up between the British port and Le Havre, opened by the German feeder **Sagitta** on September 3rd. Le Havre's position as a scheduled port of call for the company's mother ships, **Asiafreighter**, **Asialiner**, **Eurofreighter** and **Euroliner** is, of course, quite unaffected.

It is worth noting that the new Le Havre/Southampton shuttle service is not restricted to Seatrain customers only, but is open to all comers.

● Record cargo discharged

The largest vessel in service anywhere in the world, the 554,000 dwt French tanker **Batillus**, arrived at the Havre-

Antifer terminal on September 12th at the end of her maiden commercial voyage. She was carrying 412,282 tonnes of crude from the Persian Gulf, the biggest load ever recorded at Le Havre. Out of this total, 173,844 tonnes were transhipped directly into the Norwegian **Norse Queen** for onward carriage to Rotterdam, which was another "first time ever". To cap everything, the **Batillus** and the **Norse Queen** were also the first two vessels to come into Antifer on the same tide.

● New dock equipped with container cranes

As already announced, 700 m (2,300 ft) of quayside are at present being laid out alongside the new dock dug in the port extension zone to handle both containerised and conventionally packaged cargo. Erection of the first container crane began on August 24th. Early in 1977 two 40-tonne Caillard gantry cranes will come into service, to be joined later by a Titan brought over from the Quai de l'Atlantique container terminal. The new dock will be able to accommodate three normal-sized vessels simultaneously or two 3rd generation vessels of up to 300 m (985 ft) in length.

● More frequent sailings

Trans-Freight Line, which last August inaugurated a bimonthly container service between Le Havre and the U.S. East Coast, has increased the number of sailings to one a week, effective from September 6th last, when two additional container vessels, the **New England Scout** and the **New England Trapper**, were brought into operation on the line. Trans-Freight is represented in Le Havre by Jokelson & Handtsaem.

● Cotton from Angola

1,774 tonnes of cotton from Angola were taken off the Somali vessel **Secil Brasil** at the end of September, an exceptionally rare event when quantities of that order are involved. It was the first consignment due under a contract covering a total of 10,000 tonnes.

Board Meeting January 1977

Dunkirk, France (Service de Presse, Port of Dunkirk):—

In the main:

- 1976 traffic: +11.9% with 33.4 million tons.
- New forest products terminal at DUNKERQUE/WEST.
- Development scheme of the western Port towards the East.

1976 traffic:

With 33.4 million tons of goods transhipped in 1976, DUNKIRK, third French Sea Port, increases its traffic by almost 12% over 1975. This traffic can be broken down as such:

- 10.8 million tons of petroleum products (even)
- 15.5 million tons of iron ore and coal (+21%)
- 1.7 million tons of iron and steel products (+4.3%)
- 1.3 million tons of sand and gravel (+30%)
- 4.1 million tons of general cargo (+9%)

The achievements of the commercial policy in 1976 concerned the exports of grain and sugar, the imports of

(Continued on next page bottom)

Rouen visited by ships of 48 nations in 1975

"Rouen Port" International Issue November 23, 1976

Rouen, France:—In 1975 the Port of Rouen welcomed a total of 4,011 ships flying flags of far-flung nations. According to LLOYD's Register, 142 different flags are possible at mastheads. As for Rouen Port, she saw 48 of them come and go.

The number of flags on ships using Rouen Port, moreover, goes on mounting regularly as the African and Asiatic lines go on developing. In 1972, only 40 nations were represented, and in 1962 only thirty. A growing share of the world's flags can be seen, as Rouen's trade continues to grow. Twenty-five European flags was the score, twelve African, five Asian and six American.

The French flag clearly heads the list, and accounts for 17.6% of the number of ships coming in, 31.7% of the net tonnage of incoming ships and 31.6% of total tonnage of loadings and unloadings. The year 1975 saw a strong up-turn for the national flag as far as Rouen's trade was

potatoes as well as the imports of sand and gravel, the iron ore traffic for the Saar Region and the movements of containers between U.K. and France (40,533 T.E.U.).

The aims of the commercial policy for 1977 are:

- business finding for the commissioning of the rapid-transit port of Dunkerque-West
- seeking deep sea container lines
- and further developing the Cross Channel services

New forest products terminal at Dunkerque-West

The Swedish shipowner COMBI-SHIPPING represented in Dunkirk by Jules ROY company appointed Dunkerque-West terminal for the reception of wood and paper pulp from Scandinavia to France and Belgium. A yearly traffic of 120,000 tons is expected as from May 1977 which could be doubled later.

Development Scheme of the Western port towards the East

The Board of Directors examined an alternative development of the Western port either towards the South or towards the East for the duration of the VIIth French Government plan (1976 to 1980).

The Eastward solution was preferred as it would allow:

- the commissioning of a new iron ore and coal bulk terminal in 1979 (with a possible future slurry terminal)
- the current offer of industrial land at the rate of 100 hectares per year (240 acres) from now on to 1983
- the junction of the two ports for inland navigation
- the possibility of developing a methane terminal
- and a further extension to another mile of the general cargo quays.

Also to be noted

The Board agreed to the buying of a second 36 ton GOTTWALD mobile crane on wheels.

concerned, after a few year slow downturn. However, it must be agreed that things could be better still, and high hopes can be entertained for the growth plan for the French merchant fleet now taking place.

And so the traditional maritime flags generally fall into groups according to how the categories are determined;

— For the highest number of ships calling, Great Britain (13.7% of ships entering) is runner-up to France, then Germany with 10.9%, the Netherlands with 8.5% and then Norway with 8.1%.

— For net tonnage of ships coming in, Norway, with 8.5% of the tonnage is runner-up to France, then Great Britain with 8.4%, Greece 6.7%, and the Liberian flag of convenience 6.7%.

—For tonnage loaded and discharged, the list comes out with France first, then Great Britain (10.8%), Greece (8.4%), Liberia (7.4%) and Norway (6.9%).

Liberia, then, can be seen challenging for top rankings with certain traditional flags, which is not surprising when we realise that this country is at the moment easily by far the leading maritime power in the world, with nearly 23% of the deadweight of the world fleet for herself (at the 1st July 1975.)

The Liberian flag and these of the four other great flags of convenience (Panama, Singapore, Cyprus and Somalia) are featured largely in Rouen's port trade. There has, certainly, been a rise in the number of ships coming in (12.3% of the ships calling in 1975 as compared with 6.4% in 1972), but the tonnage loaded and discharged has gone down after a steady upward trend (12.8% of the total tonnage in 1972, 13.1% in 1973, 16.1% in 1974 and 13.9% in 1975).

The Eastern countries' flags have often been under scrutiny lately. It is difficult to give them an «invading» label in Rouen as their part in the Port's activity is steadily declining. Their flags were responsible for 10.3% of the ships coming in (in 1972) and only 7.9% in 1975. They carried 13.3% of Rouen's trade in 1972 as compared with 9.3% last year. At the moment, Rouen is served (as far as regular services go) by three Polish lines, two Russian and one East German line, in other words—six out of fifty-nine lines actually engaged in export. By contrast, 18 services are laid on under the French flag, 23 under the traditional European flags, and 12 under the flags of countries that have recently entered the maritime transport scene.

New flags will certainly be making their appearance on the Seine in the months and years ahead (to date, the last one coming was from Bangladesh) when we see how fast the shipping is developing in the developing countries at the moment. We shall be pleased to welcome them one after the other, without forgetting to celebrate the revival of the French flag.

Rouen News

Rouen, France ("Rouen Port" International Issue, November 23, 1976):—

- **1977 teach-in of the I.D.I.T.**

For its fifth teach-in the INSTITUT DU DROIT INTERNATIONAL DES TRANSPORTS (I.D.I.T.) has decided to organise a gettogether on the subject of:

«AUXILIARY EXECUTIVE SERVICING IN TRANSPORT IN THE COUNTRIES OF THE COMMON MARKET.»

It will be held at the Palais des Congrès, Place de la Cathédrale, Rouen, on Thursday the 20th and Friday the 21st October, 1977.

The I.D.I.T. Office asks all legal specialists and more generally all those who have an interest in these problems to be good enough to let the Office know, so that they can receive summonses for the different work committees that promise to be continually cropping up.

For full information, please write to the Secretary of I.D.I.T., 3 rue Jacques-Lelieur, 76000 Rouen (France) Tél. (35) 71.33.50.

- **First container-gantry**

The first of the two container-gantries that the Port of Rouen Authority ordered from Liebherr Container Cranes (Ireland) became the object of spectacular handling at the Rouen-Quevilly Basin on the 17th August. In fact, seven cranes—one of which was a Gottwald model with a 500-ton lift, belonging to the N.V. Sarens S.A. of Steenhuffel (Belgium)—lifted the centre pillar of the hoist to its new appointed height, while managing to get the legs of the new hoist into position. The hoisting gantry legs, jointed to the central column high up, were at the start of the handling operation in a wide-straddle position. The forward arm of the gantry was fixed several days later, and this new Rouen Port acquisition took on its final outline. It is now in full use.

Gray Mackenzie Monthly October 1976

- **Abu Dhabi**

83 vessels called at Abu Dhabi during the month of October with 152,292 deadweight tons of cargo on board for discharge. Imports consisted of 50,008 tons general, 34,828 tons steel, 41,700 tons cement and 25,756 tons timber.

The position in the port deteriorated during October with delays ranging between 25 to 30 days due to bunched arrival of vessels with heavy tonnages. Congestion is expected to be in the region of 30 to 35 days during November.

Work on the five new deep water berths is progressing satisfactorily. It is hoped that the sheds opposite these berths will be ready for occupation by March, 1977.

To cope up with the heavy incoming tonnage, additional trailers, cranes and fork lifts have been ordered by the Port Authorities.

15 of the new sheds outside the Port area are now ready and the remaining 15 sheds are due for completion by early January which should considerably assist in easing congestion in the port area.

It has been reported that two transport ferries have been ordered by Abu Dhabi from the Beverley Shipyard of Phoenix Shipbuilders of the U.K. at a cost of about

\$800,000/-.

- **Dubai**

During October, 135 ocean vessels discharged 304,374 deadweight tons of cargo at Port Rashid which included 21,957 tons bulk cement, 199,228 tons bagged cement, 18,658 tons timber, 2,587 tons Oil Company cargo and 6,068 tons pipe.

Berthing delays for new arrivals averaged from 55 to 60 days for general cargo and 50 to 55 days for cement carriers. A mobile gantry of 50 tons capacity has been received by the Port Operators to facilitate the handling of the increasing number of containers now coming in through Port Rashid and this will be operational in December. Early in the new year a Tango 80 container crane will arrive at Dubai and once this is in service the port will be fully set up to handle container services which will enjoy priority at berth No. 10.

Some shipping companies are already putting in general cargo ships with containers only aboard and these receive priority provided discharge can be completed in twentyfour hours. In these instance vessels normally berth within fortyeight hours of arrival.

- **Khorramshahr**

During October 73 vessels discharged a total of 398,273 tons of import cargo.

There was a berthing delay of 25 days for the vessel at the top of the berthing turn list for vessels having a suitable draft to berth alongside, 150/160 days for the vessel at the top of the list of vessels lightening for a berth alongside and up to 7 days for anchorage space for discharge into barges at ships expense.

- **Kuwait**

During the month of October, 168 vessels called at Kuwait port discharging 282,601 tons cargo inclusive of 10 cement carriers which discharged 154,270 tons. This compares with September when 162 vessels called discharging 234,279 tons inclusive of 8 cement carriers which discharged 105,490 tons.

Berthing delays at Kuwait varied for Conference Lines from 35 to 40 days and non-Conference from 80 to 90 days.

The Third Gulf Ports Seminar was held from 2.10.76 to 6.10.76 the outcome of which was:—

- 1) Talks were restricted to principle of setting up Gulf Port Union Bureau in Dammam which was agreed.
- 2) Bureau aims to co-ordinate efforts/rules/regulations of Gulf Ports.
- 3) Decided to appoint three-men Committee from Saud-Iraq-Bahrain to carry out function of office until appointment of Board of Directors and Secretary General.
- 4) Muscat though present was undecided whether they will join. Iran did not attend.
- 5) Jack Bathurst of UNCTAD Geneva was present.

Total cargo exported during October was 176 S/tons 50 D/Weight tons.

Ports of South Australia

Extracted from Annual Report 1974-75 of Department of Marine and Harbours South Australia (For the Year ended 30th June, 1975)

(By J.G. Griffith, Director of Marine and Harbours
—as from 12/2/76, to the Hon. The Minister of Marine)

INTRODUCTION

Financial returns for 1974-75 disclosed a net deficit of \$1 364 642 compared with a net surplus of \$141 110 for the previous year. Cash receipts were \$10 888 624 whilst payments were \$12 253 266. The increase of \$851 227 in receipts was due mainly to a considerable increase in the export of grain, together with an increase in the bulk loading charge for grain effective from January, 1975. The increase in receipts was offset partly by a reduction in wharfage. Considerable increases occurred in all items of expenditure, particularly due to higher payments for salaries, wages and workmen's compensation and the re-introduction of payroll tax. Interest charges increased considerably compared with those for the previous year.

During the year, 3 262 ships arrived at South Australian ports (both State and private), 334 fewer than during the previous year. The total gross of the vessels involved was 19 284 118, a decrease of 365 657 tons from the figure for the previous year. The amount of cargo handled at all such ports (exports and imports) decreased by 983 655 tonnes to 18 634 205 tonnes, with imports decreasing by 646 338 tonnes and exports decreasing by 337 317 tonnes.

The main decreases in imports were iron and steel (412 504 tonnes), phosphate rock (118 455 tonnes), iron ore (100 845 tonnes) and timber (60 009 tonnes), offset to some extent by increases in imports of motor vehicles, caravans, tractors and trailers (97 592 tonnes) and crude petroleum (86 121 tonnes).

The decrease in exports was attributable to decreased shipments of ores and concentrates (672 219 tonnes), refined petroleum (158 996 tonnes), motor vehicles (141 977 tonnes), gypsum (107 160 tonnes), lime and shellsand (43 582 tonnes) and cement clinker (45 025 tonnes), offset to some extent by increased exports of grain (634 244 tonnes), coke and coke breeze (141 733 tonnes), salt (100 405 tonnes) and iron and steel (69 897 tonnes).

Work continued on the construction of the new berth for cellular container ships near Outer Harbor. The berth has been designed to accommodate the larger container ships calling at Australian ports and will be capable of being extended and deepened if required in future. Good progress was made with the project and the construction of the wharf was well advanced by the end of the year. Designs were prepared for the provision of a container crane and work on the preparation of the container handling area at the rear of the wharf was in progress.

The project to widen the Port Adelaide River Channel continued and involved the removal of considerable quantities of dredged material near the new container berth, adjacent to Snowden's Beach, seaward of the southern breakwater and near the wharves at Outer Harbor. The provision of a new jetty in the North Arm for use by fisheries research vessels was completed.

At Port Lincoln work on the construction of new berths for larger vessels carrying grain and phosphate rock in bulk continued. The phosphate rock berth on the eastern side of the main structure was completed the previous year and during the year under review the construction of the two berths for the bulk loading of grain was completed. Work on the provision of the loading plant was well advanced.

Major repairs to the shipping pier at Wallaroo continued, a new steel slipway was constructed for the fishing industry at Kingscote, whilst at Franklin Harbor the old fishing jetty was demolished and replaced by a structure of pre-stressed concrete piles and timber decking.

Developmental planning included the preparation of plans and estimates for deepening the entrance channel at Outer Harbor from 10 metres to 12 metres at low water and the provision of a swinging basin for the new containership berth; a scheme to provide a new berth at the northern end of Le fevre Peninsula to handle phosphate rock in bulk; the provision of a new berth in No. 3 Dock at Port Adelaide for roll-on/roll-off vessels; a scheme for the development of land on the eastern side of the Port Pirie River and plans and estimates of a break-water at Port MacDonnell for the protection of the fishing fleet.

Pines may bring big dividends

Whangarei, New Zealand, ("Points North", No. 3, 1976—Published by the Northland Harbour Board, Private Bag, Whangarei, New Zealand):—Spectacular growth rates are being achieved in a Northland Harbour Board pine plantation near Port Whangarei.

Four- or five-year-old trees already range up to 10 metres in height, with trunks of 25 cm in diameter—far faster growth than recorded in forest areas like the Bay of Plenty.

That growth rate confirms the board's view that afforestation in Northland can be based on a 15-year growing cycle, as against 20 to 25 years allowed elsewhere between planting and harvest.

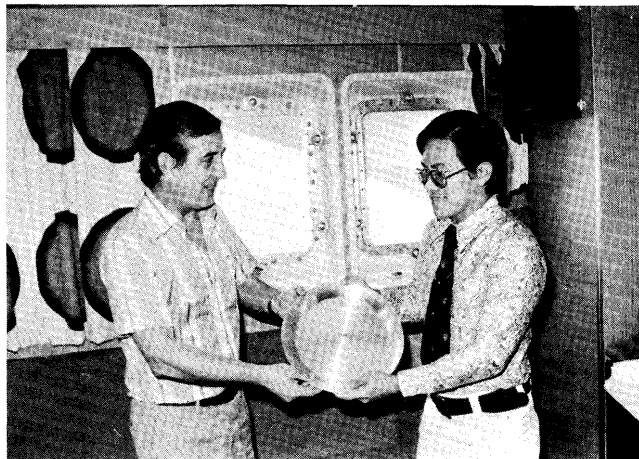
"There's been colossal growth," says the board's maintenance manager, Mr. M.P. Helean, "considering that planting only started in 1971-72."

That was when the board bought 440 hectares of fertile slopes down the south-western face of Mt. Tiger, running down beside the Awaroa Creek Road almost to the edge of the Whangarei Harbour, opposite Port Whangarei and the board's works headquarters.

"It was a long-term investment," says the chairman of the board's forestry committee, Mr. J.C. Blacklock. "The objective was to plant the land and, with year to year management, ultimately produce revenue for board needs."



Mr. Chen Meng Sheng, Traffic Manager (Sembawang Port), PSA presented a salver to Capt. K.P. Naithani, Master of the Bulk Carrier M.V. "Rimba Balau" during her maiden voyage call at PSA Sembawang Port on 20 Dec 76. (Port of Singapore Authority)



The New Year began on a promising note for the PSA's Container Terminal at East Lagoon when the container vessel m.v. "Camelia" berthed alongside on New Year's Day on its maiden voyage from Japan. Last year 15 new container vessels on maiden voyages berthed at the PSA's Container Terminal bringing the total of vessels utilising the Terminal to more than 60. To commemorate this maiden call, Mr. Or Kum Thong, Operations Manager (PSA Container Terminal) presented a salver to the Master of the ship Capt. Roberto Gonzalez. M.V. "Camelis" is owned by Hariz Tankers Corporation, plying Japan-Far East-Australia route. She is capable of taking 310 TEUs. On her visit to Singapore, she discharged 13 TEUs and loaded a total of 186 TEUs. (Port of Singapore Authority)

Mr. Blacklock, who has been active in harbour board affairs since 1956, and chairman of the Bay of Islands Harbour Board before its merger into the Northland board, says that revenue could ultimately help the board finance new tugs, dredging plant or other capital projects.

Working to a development plan prepared by Auckland forestry consultant, Mr. A.N. Sexton, a former conservator of forests with the N.Z. Forest Service, the board has set aside 126.3 hectares of the Mt. Tiger Block as a native bush reserve.

Another 298.8 ha have been planted so far, and another 34.8 ha is now being readied for planting next autumn and winter, under the board's 1976-77 budget.

That area has been cleared and will be burnt off this summer, before contractors move in with 65,000 saplings.

When that work is completed, almost half a million trees will have been planted, finishing the first stage of work on the block.

But pruning and thinning, which has already started on the earlier plantings, will continue year by year, yielding posts and battens for interim revenue.

In 1975 the board also started planting pines at a 41.5 ha Kioreroa block, behind Port Whangarei. Last winter it employed six relief workers to plant 6,000 trees, bringing the tally to 81,000 trees overall.

Recognising the benefits of mixed land use, the board has 273 head of cattle dispersed between Port Whangarei and Marsden Point.

Describing the yearlings and steers as "the lawn-mowers of the forest", Mr. Helean says they help control growth around the young trees.

Furthermore, the stock yield additional revenue to help offset development expenses.

By shrewd planning and sound management, in five short years the board has not only transformed an area of eroding hillsides. But it has also built up an investment which in future should pay big dividends.

Board members visit local ports

Whangarei, New Zealand, ("Points North", No. 3, 1976—Published by the Northland Harbour Board, Private Bag, Whangarei, New Zealand):—Kaitaia Borough is \$20,000 richer as a result of a Far North tour by the Northland Harbour Board at the end of November.

During the three-day tour by board members and senior staff, the board met the Mangonui County Council and Kaitaia Borough Council at Kaitaia, where the board's deputy chairman, Mr. J.C. Blacklock, made a surprise announcement.

Pointing out that the board was aware loan finance was needed in the borough, Mr. Blacklock commented: "We do not travel in private jets, but we are able to make a contribution at this juncture.

"We have \$20,000 in our sinking fund which will be available to your borough."

Kaitaia's Mayor, Mr. D.W.R. Bell, said he was pleasantly surprised by the gesture, which made the board's visit most worth-while.

Local reinvestment

"When Mr. Muldoon said that the Auckland Regional Authority was the only public body in financial difficulties, he forgot to look north to Kaitaia, which requires something like \$112,000," Mr. Bell said.

"This is a wonderful surprise and it will be appreciated that you are reinvesting your money in Northland."

Mangonui County chairman, Mr. M. Srhoj, said the

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county was equally pleased to see the NHB supporting a sister local body.

The money will be invested in Kaitaia's amenities building loan.

The trip north also afforded the board an opportunity to hold its regular monthly meeting outside Whangarei, while gaining a first-hand look at some of the more remote harbours under its control.

For instance, the party inspected Parengarenga Harbour, travelling by launch to the site of a Japanese box net installation which has been making big catches during the last few seasons.

Meeting some of the box net fishermen at Te Hapua, the board was told of plans to extend the Te Hapua wharf so that a freezer and packing plant could be built.

Locals were confident about the potential of the box net industry, providing employment for the area.

In reply, Mr. Blacklock said the board had a real and sincere interest in proposals for fish processing in the Far North.

He said the board would give them every consideration, and could well support an application for financial assistance from the Northland Regional Development Council and the Export-Import Corporation.

The board also met the Whangaroa and Bay of Islands County Councils, discussing harbour facilities.

Wood exports

Board general manager, Mr. A.G. McHugh, said many Whangaroa people were opposed to any development of a commercial port there for exporting wood or pulp.

But a big forest industry was building up throughout Northland, and would need port access somewhere to get its products to market.

"From the point of view of long-term planning, this is something that needs to be looked at urgently, in consultation with the forest companies, the local bodies and the people of each area that might be affected," Mr. McHugh said.

In the Bay of Islands the need for more boat ramps, moorings and attendant parking facilities was the main topic of discussion.

"There are several new marina projects on the go, but the big problem is the back-up facilities like parking cars and trailers," Mr. McHugh said.

Future planning for the port at Opuia also came under scrutiny, in terms of zoning and use of a new board reclamation there.

The area was planned for industrial and port back-up land, but now a marina has been suggested for the area.

"Locals have to decide whether they want Opuia to continue as a port, or if it is to be closed down," Mr. McHugh commented.

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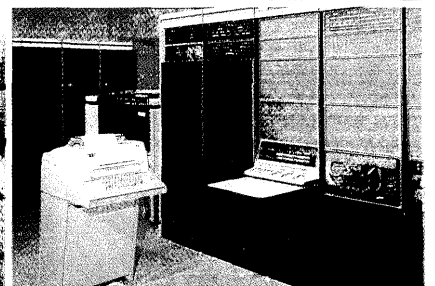
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