

# Ports & Harbors

**September, 1987**  
**Vol. 32, No. 9**



*The Publisher*  
**The International  
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Overview of Peninsula of  
Halifax; and (Bottom) Pier C  
Container Terminal.



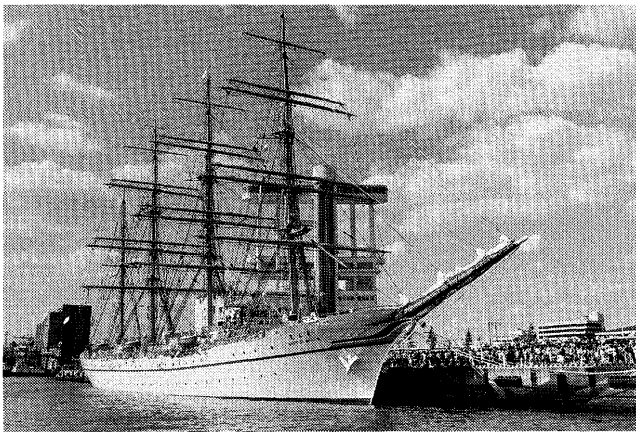
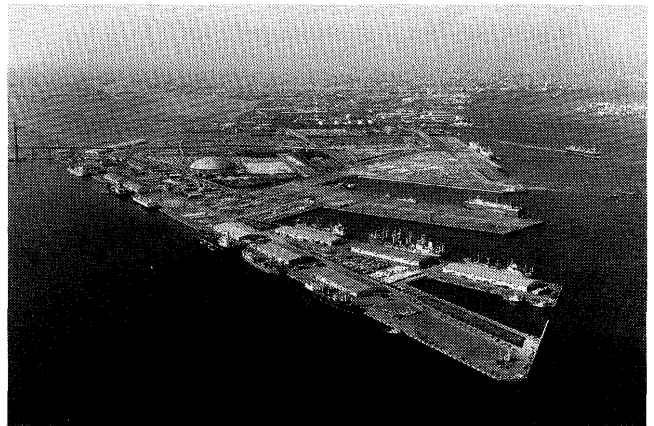
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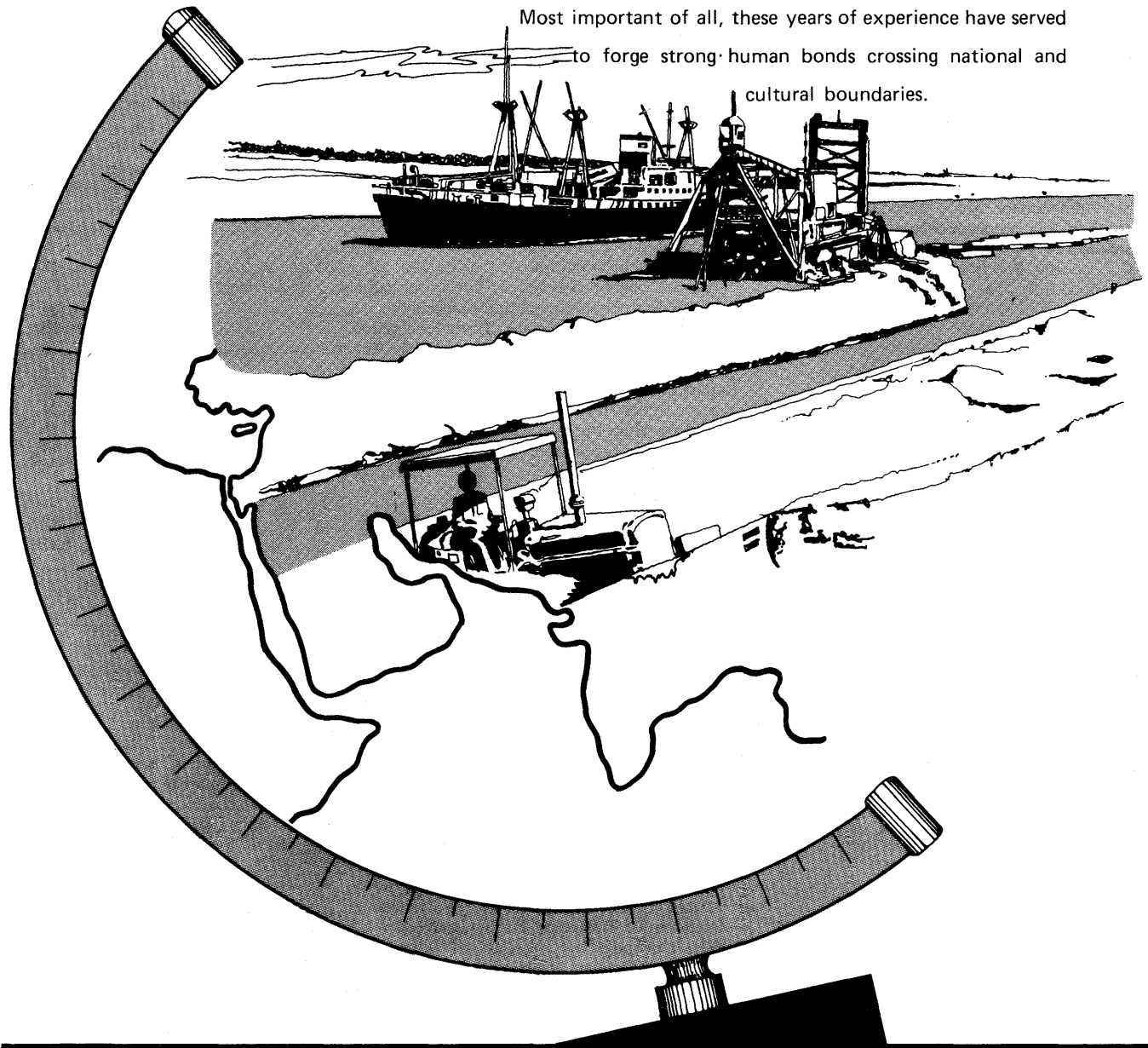
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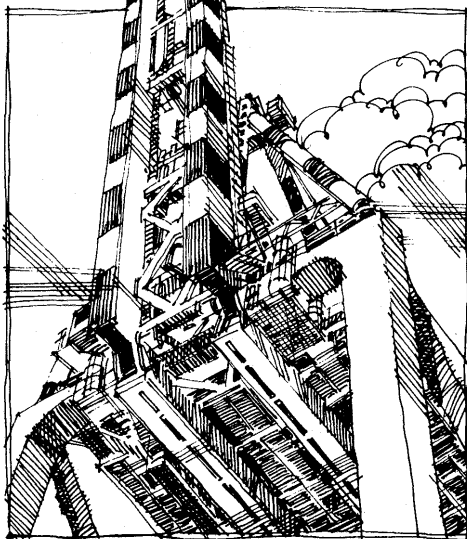
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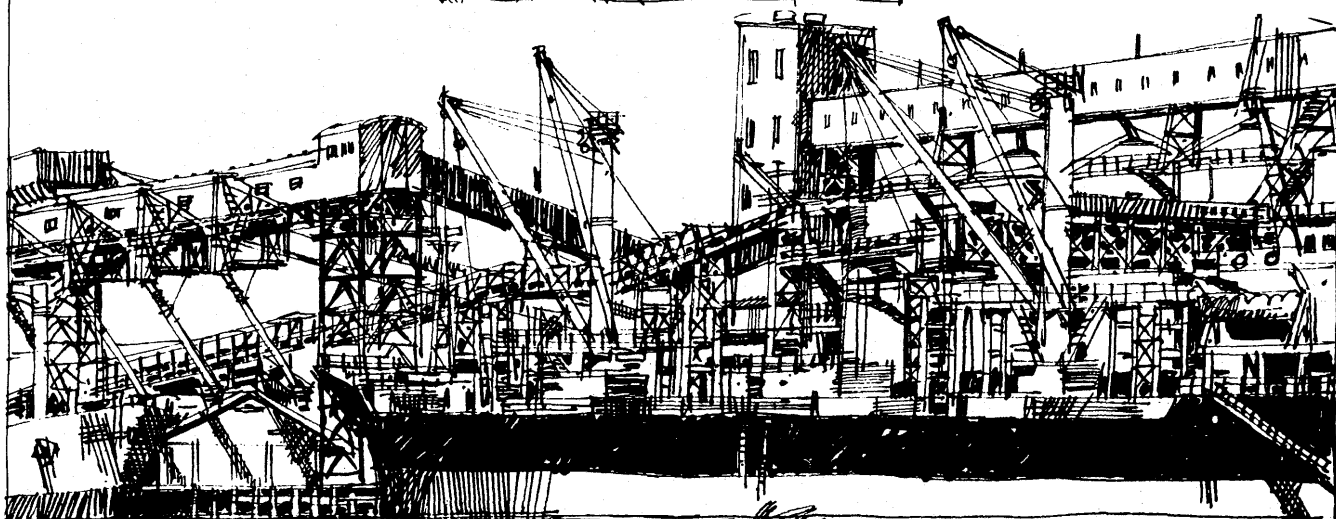
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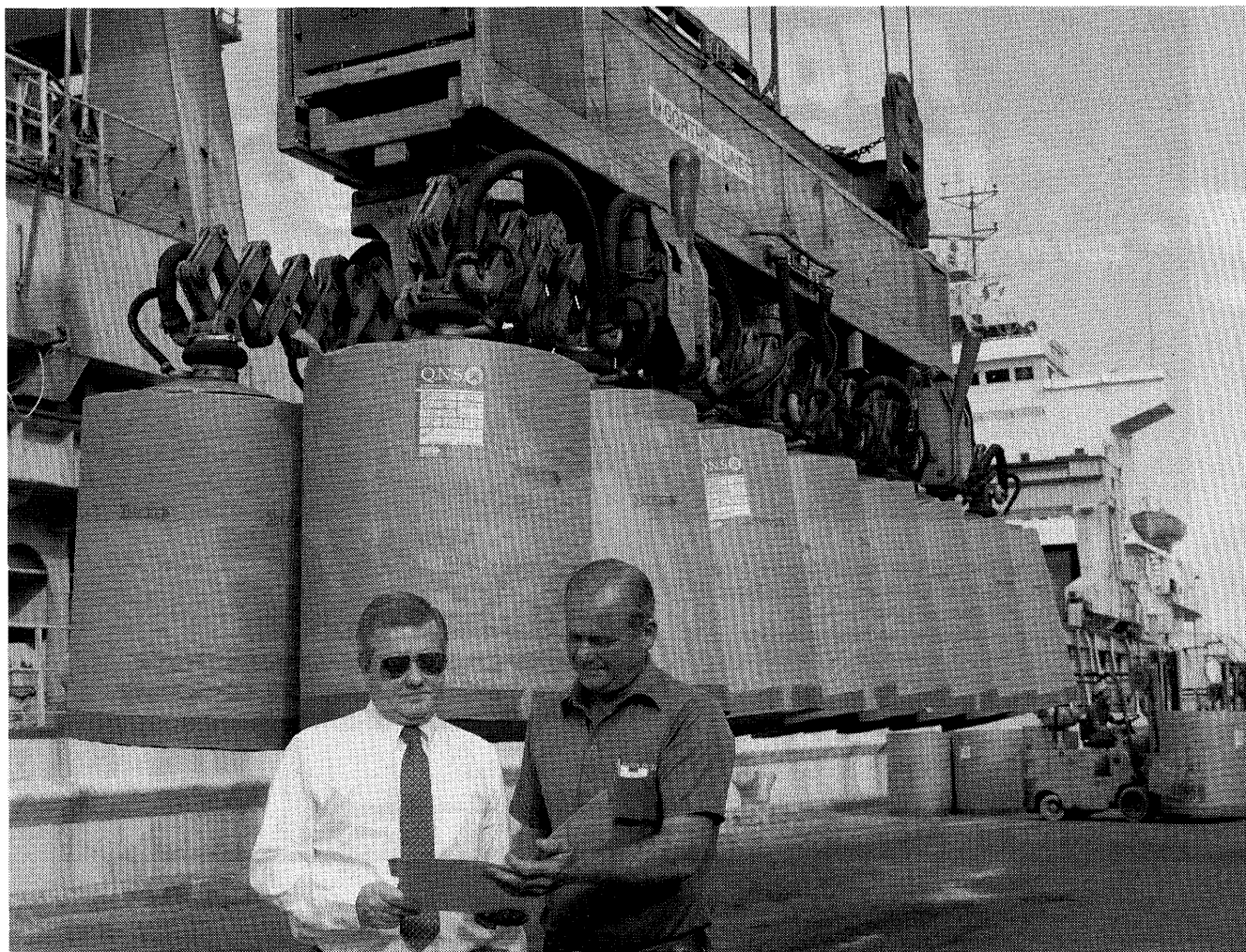
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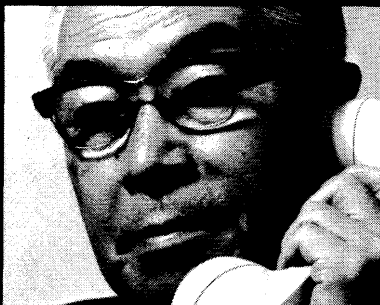
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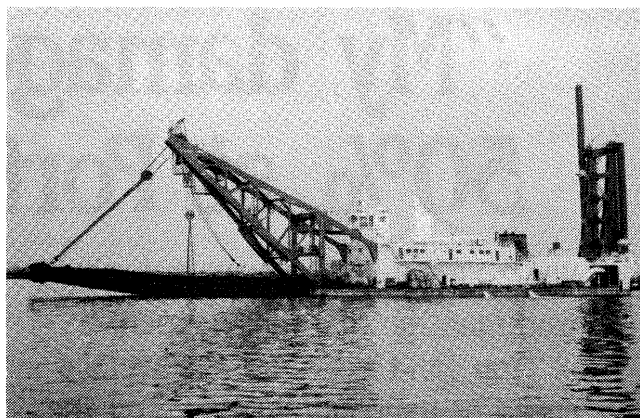
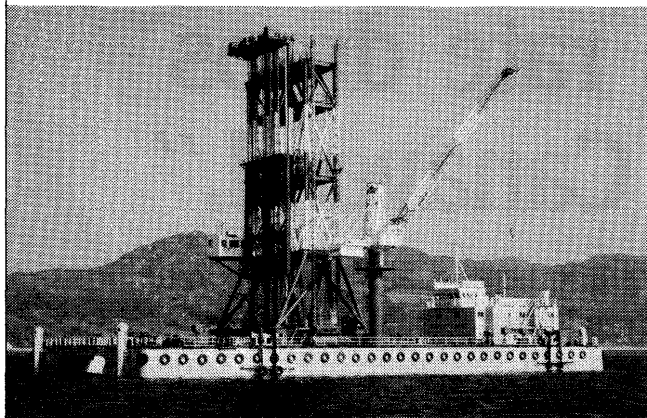
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# IAPH ANNOUNCEMENTS AND NEWS

## President Wong Visits the Head Office

On the afternoon of Tuesday, June 23, 1987, President Wong visited the Head Office and met Mr. Hiroshi Kusaka, Secretary General, and his staff, to discuss the various Association affairs arising since the Seoul Conference. After inspecting the Office, he commented that he was pleased to visit the Head Office as IAPH President for the first time and was satisfied to see that the recent rearrangement involving a cut-back in the office space had been handled neatly without hampering the smooth operation of the Head Office's business.

Leading a Singapore Port Promotion Mission to Japan and the U.S.A., Mr. Wong was in Japan for four days to promote the capabilities of the port and its economic and industrial infrastructure among Japanese industrialists. It was disclosed that this was the first occasion for the Port Authority to engage in trade promotion in overseas countries. Mr. Wong was accompanied by PSA officials including Mr. Lee, Chee-Yeng, Director (Operations & Info. Systems), Mr. Willie Rasiah, Dy. Director (Port Promotion), and Mr. M.M.J. Subramaniam, Chief Traffic Manager (Tanjong Pagar Terminal).

Dr. Hajime Sato, Secretary General Emeritus, Mr. Kusaka, Mr. Kondoh and Ms. Takeda were invited to a promotional seminar organized jointly by the Port Authority and the Economic Development Board of Singapore on June 23 at a hotel in Tokyo. The party visited the Port of Tokyo on June 24.

## Mr. Steiner Succeeds Mr. Gingell as Finance Committee Chairman

Mr. Fred Gingell, in his recent letter to the Secretary General, mentioned that he had to sever his involvement in IAPH affairs due to his leaving the Fraser River Harbour Commission, Canada, and that he consequently had to cease being a member of the Board of Directors, Executive Committee, and to resign from the chairmanship of the Finance Committee. He added that it was a great pleasure to have had the chance of meeting with so many IAPH people at the conferences since 1977 and to have participated in IAPH affairs during his tenure on the Commission. Secretary General Kusaka wrote to Mr. Gingell expressing the Association members' appreciation for the valuable contribution he afforded IAPH.

To succeed Mr. Gingell as Chairman of the Finance Committee, President Wong, by telex on July 28, 1987, appointed



*Presentation of a PSA pewter plaque L to R: Mr. Onso, Mr. Kusaka, Mr. Kondoh, President Wong and Ms. Takeda, at the IAPH Head Office*



*Mr. R. Steiner (left) at work Taken at the Finance Committee meeting at the 15th Conference in Seoul*

Mr. Robert Steiner, Deputy Director, Port Department, the Port Authority of New York and New Jersey, after obtaining his willingness to accept the appointment through the Tokyo Head Office.

Mr. Steiner has been serving on the Committee since 1985 and assisting the Chairman in the formulation of measures against the sudden appreciation of the Yen since September 1985, which has had a serious effect on the financial stability of the Association.

## Technical Committees in Full Swing

# Reports from the Chairmen to the 15th Conference

In order to familiarize all IAPH members and readers of this journal with the activities of our Technical Committees, in this issue we feature the presentations made by the Chairmen at the Seoul Conference based on the verbatim records provided by the SEPRECO (The Seoul Conference Preparation Committee). These reports were orally presented by the respective Chairmen or Acting Chairmen to the First Plenary Session held on the morning of April 27 immediately following the official Opening Ceremony.

Due to the limited time available, each Chairman was requested by the President to make his presentation as brief and compact as possible. Readers will readily appreciate what a hectic schedule everyone faced from the reports

below.

Also featured in this issue are the up-dated lists of both the Internal and Technical Committees with the Terms of Reference for the new term leading up to the forthcoming Conference in Miami, which is scheduled for April 22-29, 1989. The appointment of the respective members was made by President Wong Hung Khim when he visited the Tokyo Head Office on June 23, 1987, while the Chairmen and Subcommittee Chairmen were appointed at the time of the Seoul Conference. Please note, however, ins and outs of the members are yet to be announced as they occur from time to time.

## Committee on International Port Development (CIPD)

By C. Bert Kruk, Port of Rotterdam

*(The report actually presented by Mr. Kruk was rather lengthy as it included the presentation of the Akiyama Prize to Mr. Jose Paul, who won the First Prize of the IAPH Essay Contest. Thus we are providing abbreviated version covering the conclusions of his report.—Head Office)*

Mr. Kruk summarized the conclusions reached at the CIPD meeting held the previous day. In the first place, he reported the overall agreement that all CIPD schemes should be continued in the two-year period to come. He then presented a few of the highlights of the CIPD activities carried out and the Committee's strategy for the next-two year period. The key elements were:

### Bursary Scheme:

Although more than 40 applications were received during the last two-year period, only eight bursaries were granted. Reasons for turn-down could be classified as:

- non IAPH membership
- inability to guarantee the payment of expenses exceeding the maximum bursary amount of US\$3,500

In spite of this last point the feeling of this meeting was that the maximum bursary amount should not be increased.

### Award Scheme (Essay Contest):

Since the work of the panel members to judge the essays is time consuming, a suggestion on how to better specify the entry conditions was put forward and agreed upon.

The meeting was informed of Mr. Akiyama's announcement of the establishment of a special fund (administered by the IAPH Foundation) to guarantee the attendance of the winners of the First Prize in the Essay Contest at future IAPH conferences. The meeting showed its profound gratitude towards this initiative.

In view of the workload, it was decided not to initiate a

parallel essay competition with entries from representatives from developed ports.

To reduce the workload with regard to Spanish entries, the essay panel made a plea that a Spanish-speaking member be included in their number.

### Monograph Scheme:

- a) Monograph No.5\* is about to be published.  
Three other monographs are likely to be published in the next two-year period, whereas another two are in the pipeline.
- b) In order to evaluate the needs of the members, it was decided to once more send around the monograph questionnaire to the parties concerned.

Note: \*An English version of the UNCTAD/IAPH Monograph No.5 entitled "Container Terminal Pavements Management" was sent by surface mail to all IAPH members from the Tokyo Head Office after the Seoul Conference.

### 57 + Programme:

The first pilot project in Ghana has come to a successful completion. It was carried out by two experts from Rotterdam stevedoring companies. Presently investigations are being carried out exploring the possibilities of recruiting 57 + experts from Belgium, France, the U.K. and W. Germany.

The reason for selecting these countries is that the project can be easily monitored from Rotterdam.

The motion was passed to continue the pilot scheme in the next two-year period on a limited scale. At the end of the two-year period, the Chairman will draft an evaluation report of all projects carried out by that time. On the basis of the conclusions the expansion of the project will be decided.

# Marine Safety Sub-Committee Chairman Monks Retires

Captain G.T. Monks has recently retired from the office of Harbour Master of the Port Hedland Port Authority, Australia. Up until the Seoul Conference, Captain Monks was serving on the IAPH Port Safety, Environment and Construction Committee (PSECC) as the Chairman of the Marine Safety Sub-Committee. His service as a member and later as the Sub-Committee Chairman began in 1975, when the PSECC was called the Committee on Large Ships, and he attended seven consecutive biennial Conferences and PSECC's mid-term meetings held during the period between 1975 and 1987.

Mr. Jacques Dubois, Chairman of the PSECC, sent him a letter expressing the Committee members' appreciation for the valuable contribution Captain Monks afforded to IAPH through his PSECC activities. Chairman Dubois' letter is reproduced below.

As already announced, at the Seoul Conference, Captain J.J.H. van der Schaaf, Harbourmaster, Port of Rotterdam, was appointed to succeed Captain Monks as the Marine Safety Sub-Committee. Both the new and retired chairmen are seen in the picture below, which was taken in Seoul.

## Mr. Dubois' letter to Captain Monks dated 17th July 1987

Dear Geff:

Reference was made, I believe, during the Seoul meetings of the Port Safety, Environment and Construction Committee to your retirement from office with the Port Hedland Port Authority.

That fact, of course, signified your imminent departure from the ranks of PSECC membership; a situation which I cannot allow to pass unnoticed.

As Chairman of PSECC I am, more than most, aware of the immense contribution you have made to our work



From left, Capt. van der Schaaf and Capt. Monks at a PSEC meeting.

programmes over many years. Your commitment to PSECC's efforts has been total and your wise counsel has undoubtedly played a major part in shaping the format and content of the Guidelines on Port Safety and Environment Protection. On that account alone, the IAPH membership as a whole has good cause to be most grateful to you personally. There are however a good many other reasons why the IAPH membership generally, and your PSECC colleagues in particular, will miss your company, on a regular basis, at our meetings.

Thank you therefore most sincerely for all the valued support you have given to me as PSECC's Chairman. May I also wish you all that is best in whatever you choose to do in the future.

With best regards,

(Signed)  
Jacques Dubois  
Chairman, PSECC

## Jobmar Scheme:

A pilot project in the port sphere is likely to be started in the near future. The 2nd prize winner in the Essay Contest—Mr. Sinyangwe of Tanzania—has volunteered as a candidate for this project, which the Committee found was a very good combination of several initiatives of UNCTAD and CIPD together.

## Liaison with UNCTAD:

The meetings at UNCTAD attended by the Chairman and reported to the Secretary General of IAPH identified essential points to be brought to the attention of IAPH members.

The meeting unanimously suggested that these contacts should be maintained and intensified in close collaboration with Mr. Eric Williamson (Chief, UNCTAD Ports Section).

## Relations with Other Organizations:

The meeting noted the possible appointment of Mr. A.J. Smith on a full-time basis as the European representative of IAPH.

The Chairman informed the meeting of the initiative to propose the allocation of funds to cover travel and subsis-

tence allowances for the Chairmen of the Technical Committees or their designates. The Committee fully supported this initiative.

## Financial Situation of the CIPD:

It was brought to the attention of the meeting that the total funds available for CIPD activities on the 1st March 1987 amounted to US\$62,000. If all schemes envisaged are carried out there is a possibility that the funds will be depleted before the Miami Conference. To safeguard the work of CIPD the following strategies were suggested:

- 1) The membership dues should be increased.
- 2) A new appeal for voluntary contributions should be made.
- 3) The expenses of CIPD should be closely monitored and the Executive Committee should be given timely warning when the need for a membership dues increase becomes apparent.

After discussion the meeting passed the motion to follow strategy No.3.

In order not to interfere with the regular CIPD activities, a further motion was passed requesting the sum of US\$21,000 from the Special Projects Fund to finance the continuation of the 57+ pilot project.

#### Miscellaneous:

- a) It was suggested that an investigation be conducted as to how IAPH could engage itself in technical activities by organizing such events as workshops or seminars on a regional basis. Apart from the direct benefits ensuing, this could lead to an enhanced image for IAPH.

It was decided that the Chairman and the Vice Chairman will investigate this point further with the chairmen of the other Technical Committees and some CIPD members.

- b) From the experience of some CIPD members, it is noted that several developing ports are not aware of IAPH, and particularly of the benefits that can be derived from CIPD activities.

It was decided that the Chairman should follow up this point with the IAPH Head Office.

Mr. Kruk concluded by offering the thanks of his Committee to the Secretary General and his staff, the President, Executive and all members of IAPH for their support of CIPD's activities.

## Committee on Port Safety, Environment and Construction (PSEC)

**By A.J. Smith, on behalf of J. Dubois, Ministry of the Sea, France**

Mr. President, Officers, distinguished guests, ladies and gentlemen.

If membership is a guide to interest in the work of a committee, we must surely believe that PSEC's 50 or so members point to considerable interest, and it's right that it should be so.

The Committee's objectives are wide-ranging. It follows that fulfillment of its tasks requires the dedicated effort and the commitment of all its membership. So the Chairman of the Committee, Mr. Jacques Dubois, who unfortunately cannot be with us today and expresses his apologies for that, would like me, I know, to express his total appreciation to the Committee members for their services during the biennium on behalf of ports internationally. This session would, I hope, want to echo his appreciation. The scope and content of PSEC activity has been reported, the report has been presented and circulated. It is sufficient, therefore, at this time, to isolate certain aspects, certain recommendations which require endorsement by this session. Two of PSEC's basic objectives are as follows:

Firstly, to be aware, and to make IAPH members aware, of all port safety and environment protection matters processed by IMO, including the provision of IAPH policy and/or views where appropriate.

Secondly, to ensure that the widely-circulated "Guidelines on Port Safety and Environment Protection" are regularly reviewed and updated. Much time has been spent on these matters. We commend the results of our efforts to you for your use at your ports, as you might think appropriate.

Specific recommendations of our report from our Sub-Committees as a consequence of meetings held during the biennium and, particularly on Saturday last, are as follows:

#### Ship Sub-Committee:

- that a study be carried out of port aspects of the safety of ro/ro vessels and, in particular, car and passenger ferries;
- that approval be given for inclusion in the work program of the Committee-Trends of Ships Characteristics including container standards, development of the "high cubes" and introduction of "over Panamax" container vessels;
- that the program should also include consideration of aspects of ship design and equipment where they impinge on the design and operation of ports.

We wish also to study problems associated with towage.

The Ship Sub-Committee has also technical recommendations which are included in the circulated paper on ships' trends—circulated separately. We believe that these recommendations should form the basis of representations to the appropriate bodies.

#### Port Safety Sub-Committee:

We have the inclusion in the work program of a continuing consideration of activity areas currently under consideration by IMO, including Marpol reception facilities and waste disposal, floating reception facilities, and port security matters. At a particular moment in time during the coming biennium, we would also ask for the endorsement of the ICS tanker safety guide and industry guidance on the role of the port in ship-to-ship transfer of LPG within port limits. IAPH has been associated with these activities.

#### Marine Safety Sub-Committee:

This Sub-Committee proposes to promote the use of VTS and its harmonization where possible, which is also to commend support for the joint IAPH/IALA efforts on specific aspects of VTS.

#### Engineering Sub-Committee:

It is hoped to examine and finalize for submission to the next biennial Conference a draft manual of recommendations on environmentally related ports and coastal area development. This is a very interesting and, I believe, major IAPH initiative in an activity area which is becoming increasingly important worldwide. We wish also to carry out an in-house study of work already completed or in hand on safe minimum channel widths as an update to the Guidelines referred to earlier. We wish also to assess research needs in the area of port planning and design.

#### Dredging Task Force:

Wishes to commend the implementation of the guidelines for dredged materials, which we believe was a highly successful IAPH initiative promoted, accepted by the member states signatory to the London Dumping Convention. We commend also general circulation of the revised IAPH booklet "Dredging for Development." We wish to continue as the IAPH observer meetings of the London Dumping Convention signatories. We want also to co-ordinate with PIANC in their review of the final proposed FIDIC contract conditions and report back on these with recommendations. Finally, we would want to maintain surveillance and IAPH co-ordination on the International Standards Organization's development of international standard dredging terms.

# Committee on Legal Protection of Port Interests (CLPPI)

**By A.J. Smith, on behalf of Paul Valls, Port of Bordeaux**

With regard to the Committee, Mr. President, of Legal Protection of Port Interests, again I have to sadly say the Chairman, Mr. Paul Valls, is not with us today and he, too, sincerely regrets the fact and has made his apologies known to you, sir.

On his behalf, therefore, I present this for your approval. In an annex to that report, prepared by Mr. A. Pages, who is here with us today, the *raison d'être* for CLPPI has been made very plain.

Maritime law evolves very slowly and after lengthy and involved debate of complex issues. Sooner or later domestic legislation responds and impacts on the day-to-day lives and operations of the world's maritime and port communities. It follows the debates must be closely monitored by IAPH and every effort made to ensure that the legitimate interests of the world's port are taken account of by the parties involved by direct participation and involvement in the decision-taking processes. This is CLPPI's objective.

Our recommendations, therefore, submitted to you, sir:

Firstly, revision of the 1910 Salvage Convention: views expressed by the IAPH representative of meetings of our IMO's Legal Committee on the need for a wider perspective to be taken by national delegations on the draft article 9 were widely promulgated to IAPH members through "Ports and Harbors". We recommend, therefore, that IAPH membership should take positive steps to ensure that those views are put into a local context, that is, are widely understood and hopefully approved by the members of respective national delegations in anticipation of their representation of the Diplomatic Conference to be held in 1988/1989. With regard to a proposal for a draft convention on the transport of hazardous and noxious substances—proposals, I may say, which are not dead—CLPPI is clear on the points to be made as and when the opportunity arises. We have, however, stressed on occasions in the past and we do so now that we rely on substantiation of our views on hard evidence from IAPH membership on the related marine incidents and accidents involving hazardous and noxious substances which have occurred in port areas. We, therefore, commend that members be circulated yet again, sir, for such information.

With regard to maritime liens and mortgages, we have three recommendations: firstly, that IAPH members should be encouraged to take an active part in discussions of local maritime law associations to promote, in particular, the points of view enunciated in the IAPH position paper submitted to IMO and UNCTAD on that subject, details of which have been circulated in "Ports and Harbors"; also that IAPH members should be encouraged to bring the points made in the position paper to the attention of national delegations to IMO and UNCTAD for the incorporation in their remits to the discussions of these bodies; that IAPH should also actively publicize the memorandum submitted to all of us by Mr. Andre Pages recovering port authority claims against ships as a step in the progress towards the international harmonization of claims process.

With regard to measures to prevent unlawful acts against passengers and crews on board ships, IAPH members

should examine with their respective governments on a continuing basis the nature and extent of current or projected terrorist threats which impinge on port operations and available facilities. If additional measures are needed, government should be asked to take the responsibility for their coordinated implementation and funding as necessary from whatever source.

Finally, I would like to end this report with reference to the reflections of Andre Pages again and, in particular, close the report by recording our deep debt of gratitude—not only we in CLPPI but, I believe, the entire IAPH membership—owe to Andre Pages for his never-failing willingness to address the many complex issues which appear on our agenda, and to make positive constructive suggestions for their resolution in the best interests of us all.

## The Agreement on Representation

**By A.J. Smith, Liaison Officer with IMO**

Mr. President, if I may turn—and quickly—to the Agreement. The Agreement on Representation is dynamic events, discussions and proposals for action have, therefore, been recorded as they have arisen. Reports have been provided for circulation to IAPH members, or directly to the Technical Committees, and included in their work programmes.

The greater proportion of activity is committed to IMO liaison. The kind remarks and sincere expressions of continuing cooperation expressed earlier this morning by IMO's distinguished Deputy Secretary-General are, therefore, most welcome and encouraging. As you have heard, IMO is tackling subjects which are of particular importance to IAPH. We have, therefore, addressed these clearly within the IAPH Technical Committee structure, and the circulated report indicates very clearly the extent of that commitment.

In an UNCTAD context, Eric Williamson, who is here today—Eric is head of the Ports Section of UNCTAD, is an old and valued friend of IAPH and myself, and we would hope to explore with him even more opportunities for cooperation in the future. It is also a matter of great satisfaction to record our close and growing links with European based non-governmental international maritime organizations. And particular mention has been made in the report of our links with the European Harbormasters Association, the International Chamber of Shipping, the International Association of Lighthouse Authorities and Oil Companies International Marine Forum. Now we are dedicated to the further enhancement of these links.

Finally, there are many port personnel who have contributed their time and efforts and expertise to advancing IAPH interests in the European area. My gratitude to them is most sincere. Their continuing support in representational terms is vital to achieving the objective of advancing the acceptance and stature of IAPH as a credible authoritative organization, particularly in the eyes of other people.

Once again, in this context, I must pay tribute to the wise counsel continuously provided to me by Andre Pages, and I do so with grateful thanks. The agreement is a two-way



matter and it would be most unfitting of me not to pay my full and sincere compliments to the IAPH Secretariat—to Dr. Hajime Sato and, I may say, with continuing affection, to Mr. Toru Akiyama. Thank you.

## Committee on Cargo Handling Operations (CHO)

By Carmen Lunetta, Port of Miami

Thank you, Mr. President.

I try to be as quick as possible. The Committee on Cargo Handling Operations concentrated its agenda on four major issues: Variations of the ISO Standard Containers; Increased Containership Size "Beyond Panamax"; Labor Reform; and fourth and finally, Automated Interport Data Communications. It was agreed that changes to ISO Standard containers are inevitable, and since the last meeting of our Committee we have seen increases in the use of these containers.

It was believed that if non-standard containers are used only in captive situations, driven between dedicated terminals or distribution centers, the problems of investment in new equipment are minimized. However, it is when non-standard containers are introduced and mixed into other routes and terminals that major operation and cost problems can occur.

The view was expressed that the particular problems of light-weight and high-volume cargo between Asia and the West Coast of North America will continue to demand optimal use of space. This has resulted in an increase in length and height of containers with possible increases beyond 50 feet. It was also suggested that containers may be increased in width beyond the present 8 feet.

This increase will result in equipment problems such as crane leg width, possible restrictions of stacking heights and, if width is increased, redesign of lifting frames.

There was discussion on moves by some ports to re-equip for non-standard containers. It was expected that most ports would adopt a "wait and see" policy and not make any major investments until they had obtained appropriate assurances and guarantees of utilization.

In summary, the Committee believes on this issue that this subject should be closely monitored and it should be watched very delicately in the future.

With respect to Item No. 2, Increased Container Ship Size "beyond Panamax," the effects on port facilities of container ship size increases to "beyond Panamax" paralleled those of the previous discussion items that we in the Committee have taken up.

There was discussion on the developments and likely trends in increased ship size and routes on which such ships are likely to be employed. It was not thought that recent spectacular failures in some shipping line operations would have any lasting delay on building programmes for these large ships. It was also noted that current opinion suggests increases in beam are more likely than increases in draft.

The main effects will be on the height and outreach of gantry cranes and also general increases in dimensions to provide flexibility for future changes in container sizes.

It was suggested, however, there may be two approaches by ports in making decisions on the new cranes.

The first suggests that a new gantry crane would have a shorter building leadtime than a new "beyond Panamax" ship. Therefore decisions may be delayed until there was some certainty of use.

The second approach showed that there may be strong marketing strategies in being able to provide the equipment ahead of decisions on port choices and also as "beyond Panamax" ships become more common. There will be much less leadtime for ports if these ships are diverted to new routes or new ports.

With respect to Item No. 3, Labor Reform, there was considerable discussion on the real and perceived problems caused by existing labor agreements which are still impeding the flow of the full benefits of containerization. Particular reference was made to the "50 mile rule" or "beneficial owner" clauses. It seemed that ports in most countries suffered similar disadvantages with the distraction of LCO cargo. There also appeared to be common problems of manning levels and over-time premiums. The latter leads to under-utilization of port facilities and equipment with, in some countries, ships lying over berths after premium times end.

There was discussion on the merits of averaging tariff rates, with the spread of cost encouraging shipping companies to make the most use of berth time available on ship arrivals.

In summary, the Committee believed that industrial relations management has not achieved the benefits to match containerization at the same rate of technological development. It was felt that out-of-date agreements which may have been relevant to manning reduction and redundancy situations 30 years ago are no longer relevant to the requirements of transportation today.

With respect to the final item, Automated Interport Data Communications, discussion on this item indicated that most ports already have data communication systems to suit their particular needs. A need was seen for a clear distinction between the transfer of information as it relates to cargo handling and the information that relates to port entry and clearance.

It was the majority view that the port authority should act as the catalyst for the collection and distribution of information to the various governments, regulatory bodies and shipping companies. This role is already adopted by many ports, and although there will be differences on the modus operandi, it was agreed that the services should be paid for by the users.

With regard to cargo information flow, there is an on-going need for ports to have some information, such as cargo manifesting, but this should not be mixed in with more detailed requirements for cargo operations. President, that concludes my report.

## Committee on Trade Facilitation (TF)

By F.L.H. Suykens, Port of Antwerp

Mr. Chairman, gentlemen:

When the purpose of IAPH is the promotion of world trade through world ports, the purpose of our Trade Facilitation Committee is to promote world trade by simplification of

documents. When we speak about simplification of documents today, we mainly speak about EDP, Electronic Data Processing. Therefore, we proposed with our Committee that a kind of questionnaire would be sent around to all member ports, a questionnaire the draft of which has been made by the Port of Copenhagen, and which should be discussed further in our working group; and that, therefore, we should have an idea about the types of EDP systems existing in the ports and about the problems existing about direct data exchange between ports and within the ports.

If we want to have a good trade facilitation, then there should be a good collaboration with Customs. Therefore, we appointed a representative, Mr. Raven, with the Customs Cooperation Council, and in the latest number of IAPH magazine you saw a few of his reports. Customs have a problem today, a problem with illicit drug traffic. Therefore, they proposed that a kind of draft of guidelines on cooperation between port authorities and Customs should be approved by our Association, so that in common cooperation between the Customs authorities and the port authorities, we could facilitate further trades. Thank you very much.

## Committee on Public Affairs (PACOM)

By R. Hayes, Port of Dublin

Thank you, President.

This report is brief because most of our activities have been covered recently in an article in "Ports and Harbors". The Committee has been active since the Hamburg Conference, and we have re-organized the membership arrangements.

The "Community Attitude Survey" project has been completed and the "do-it-yourself kit" in this regard has been cir-

culated in printed form to all of the Conference delegates. Because of a technical problem this kit is published without the information that should have been included in Appendix A through D. This will be put right in a subsequent printing and amended copies will be made available to all Association members.

The case study on Community Attitudes to the dumping of dredged material has been prepared, has been printed and is in the hands of all of the delegates of this Conference.

Work on the "Economic Impact Analysis" project continues and this should be completed and will be reported upon at the EXCO meeting in 1988.

The Committee feels that a greater emphasis should be placed upon the sharing of material related to work done by individual ports so as to avoid repetition and undue cost in duplication of work. In this regard the Association magazine "Ports and Harbors" will be used to a greater extent, and close cooperation will be achieved with the American Association of Port Authorities. This is advocated and will be pursued.

A practical example in this area is the exhibition of publicity material aimed at children in school and of pre-school age which is currently running in the "Jade Room" of the hotel on the 2nd floor. This has been so successful that most of the material has already been removed and taken away because it seems to be of interest!

The Committee hopes to devise prototype booklets to appeal to children and to their parents and to do this through the medium of literature under IAPH sponsorship and approval.

These books could be adopted to meet the needs of individual ports worldwide, while still carrying the stamp of approval of IAPH.

The Committee wishes to thank all port authorities worldwide who have cooperated willingly with the Public Affairs Committee in carrying out our work over the last couple of years. Thank you, Mr. President.

# Membership of Internal and Technical Committees for 1987-1989

## Membership Committee

### Chairman

John Mather, Managing Director, Clyde Port Authority U.K.

### Vice-Chairman

Erik Schäfer, Managing Director, Port of Copenhagen, Denmark

### Members

#### African/European Region:

Pap Njanko Njie, Secretary General, Port Management Association of West and Central Africa, Nigeria

#### American Region:

John B. Belford, Deputy Executive Director, Port of Seattle, U.S.A.

J. Ron Brinson, Executive Port Director, Port of New Orleans, U.S.A.

George W. Colquhoun, Port Manager, North Fraser Harbour Commission, Canada

C.J. Lunetta, Port Director, Port of Miami, U.S.A.

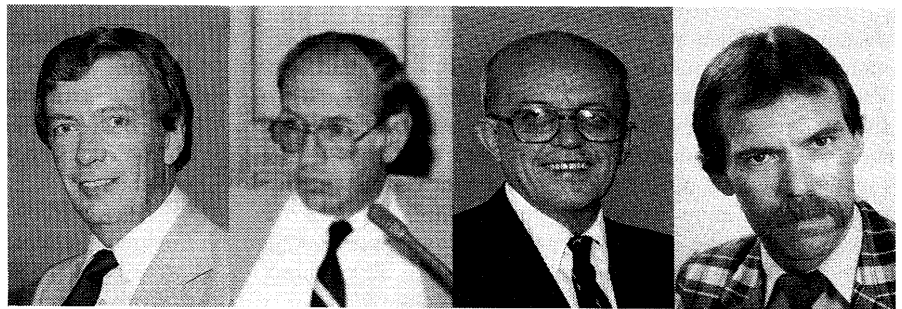
#### Asian Region:

P.M. Abraham, Additional Secretary, Ministry of Surface Transport, India

S.F. Makalew, Managing Director, Public Port Corporation I, Indonesia

Abdul Samad Mohamed, General Manager, Kelang Container Terminal SDN.BHD., Malaysia

## Chairmen of Internal & Technical Committees and Legal Counselors



### Membership

Mr. John Mather  
Managing Director  
Clyde Port Authority,  
U.K.

### Finance

Mr. Robert Steiner  
Deputy Director  
Port Department  
Port Authority of  
New York & New  
Jersey, U.S.A.

### Constitution and By-Laws

Mr. J.H. McJunkin  
Executive Director  
Port of Long Beach,  
U.S.A.

### International Port Development

Mr. C. Bert Kruk  
Director  
TEMPO  
Port of  
Rotterdam  
The Netherlands

## Finance Committee

### Chairman

Robert Steiner, Deputy Director, Port Department, Port Authority of New York & New Jersey, U.S.A.

### Members

#### African/European Region:

Per Bjurström, President, Port of Gothenburg AB, Sweden

Brigadier M.B. Haladu, Executive Chairman, Nigerian Ports Authority, Nigeria

Michel Pechere, General Manager, Port of Marseilles, France

#### American Region:

C.R. Langslet, Commissioner, Port of Long Beach, U.S.A.

D.J. Taddeo, General Manager & Chief Executive Officer, Port of Montreal, Canada

#### Asian Region:

Goon Kok Loon, Deputy Executive Director, Port of Singapore, Singapore

Yoshiro Haraguchi, Executive Vice President, Nagoya Port Authority, Japan

R.P. Snodgrass, General Manager, Taranaki Harbours Board, New Zealand

Commissioners, Ireland

Gunnar A. Lustrup, Chairman, Port of Copenhagen, Denmark

E.T. Waiyaki, Secretary & Legal Officer, Kenya Ports Authority, Kenya

#### American Region:

D.E. Johnson, Vice Chairman, Thunder Bay Harbour Commission, Canada

Richard P. Leach, President, Port of Houston, U.S.A.

John McCarthy, Commissioner, Port of Tacoma, U.S.A.

#### Asian Region:

Yahya bin Haji Abdul Ghani, General Manager, Johor Port Authority, Malaysia

F.M. Williams, General Manager, Bay of Plenty Harbour Board, New Zealand

## Committee on International Port Development

### Chairman

C. Bert Kruk, Director, Technical and Managerial Port Assistance Office (TEMPO), Port of Rotterdam, The Netherlands

### Vice-Chairman

Joseph Bayada, General Manager, Cyprus Ports Authority, Cyprus

### Members

#### African/European Region:

Gustaaf De Monie, Director, Antwerp Port Engineering & Consulting, Belgium

H.P. Dueker, Chief of Section Planning, Cargo Handling and Traffic Systems, City of Hamburg, Fed. Rep. of Germany

P. Fraenkel, Chairman, Peter Fraenkel International, Inc.,

## Constitution and By-Laws Committee

### Chairman

J.H. McJunkin, Executive Director, Port of Long Beach, U.S.A.

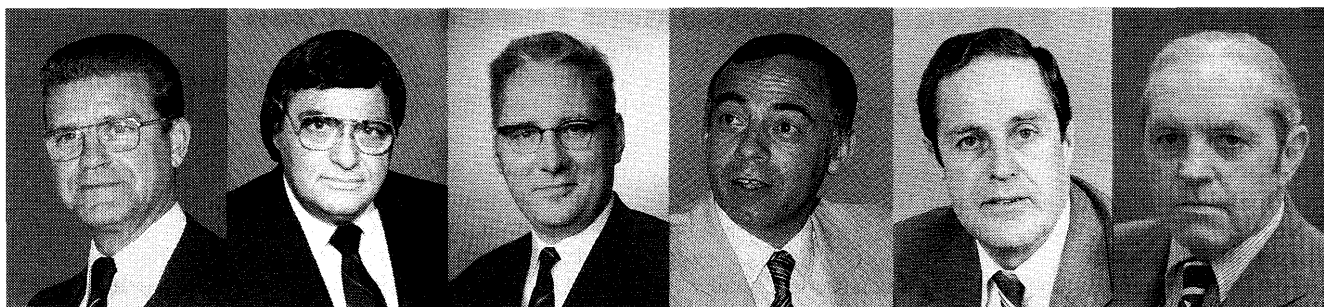
### Vice-Chairman

John Leech, Director, Department of Harbours and Marine, Australia

### Members

#### African/European Region:

M.J. Hctor, General Manager, Limerick Harbour



**Port Safety,  
Environment and  
Construction**  
Mr. Jacques Dubois  
Ministry of the Sea,  
France

**Cargo Handling  
Operations**  
Mr. C.J. Lunetta  
Port Director  
Port of Miami, U.S.A.

**Trade Facilitation**  
Mr. F.L.H. Suykens  
General Manager of  
the Port  
City of Antwerp,  
Belgium

**Legal Protection  
of Port Interests**  
Mr. Paul Valls  
Director General  
Port of Bordeaux,  
France

**Public Affairs**  
Mr. R.N. Hayes  
General Manager  
Dublin Port & Docks  
Board, Ireland

**Legal Counselors**  
Mr. P.J. Falvey  
General  
Counsel/Asst.  
Executive Director  
Port Authority of  
New York & New  
Jersey, U.S.A.

#### U.K.

A.G. Gauthier, General Manager, Port of Rouen, France

Gunnar B. Gudmundsson, General Manager, Port of Reykjavik, Iceland

O.B. Houncanrin, General Manager, Port of Cotonou, Benin

J.P. Lannou, Head of Equipment Operations Dept., Port of Le Havre, France

Pap Njanko Njie, Secretary General, Port Management Association of West and Central Africa, Nigeria

D. Noll, Director, VEB Seehafen Rostock, German Democratic Republic

Y. Oyeyipo, Traffic Manager, Nigerian Ports Authority, Nigeria

M. Pintor, Civil Engineer, Direccion General de Puertos y Costas, Spain

E. Pollock, Economist, Associated British Ports, U.K.

H. Ramnarain, Chairman, Mauritius Marine Authority, Mauritius

P. Sjoberger, Vice President, PGC, Port of Gothenburg AB, Sweden

#### American Region:

John Belford, Deputy Executive Director, Port of Seattle, U.S.A.

D.E. Johnson, Vice Chairman, Thunder Bay Harbour Commission, Canada

Ben Nutter, Honorary Member of IAPH, U.S.A.

Ken Snaggs, Chief Executive Officer, Point Lisas Industrial Port Development Corporation Ltd., Trinidad and Tobago

#### Asian Region:

P. Mathew Abraham, Additional Secretary, Ministry of Surface Transport, India

Nouri A.E. Al-Saad, Director of Planning and Research, Port Public Authority, Kuwait

R.K.R. Gonela, Chairman, Visakhapatnam Port Trust, India

Seichi Matsuura, Director-General, Bureau of Port & Harbour, City of Kobe, Japan

Tin Maung Soe, Managing Director, Burma Ports Corporation, Burma

Fasahat H. Syed, Member (Operations), Port Qasim Authority, Pakistan

#### Special Advisors

Barry Cable, Head, Shipping, Ports and Inland Waterway Division, ESCAP, Thailand

J.R. Lethbridge, Ports, Shipping and Aviation Advisor, World Bank, U.S.A.

E. Williamson, Chief, Ports Section, UNCTAD, Switzerland

#### Terms of Reference

- 1) To propose and administer schemes for assistance in the education and/or training of ports' staff in developing nations.
- 2) To stimulate port authorities in both developing and developed countries to achieve closer collaboration in exchanging knowledge in all fields of port administration and port operations for the benefit of all port operators and port users throughout the world.
- 3) To agree the means of publicising by IAPH of details of training and technical assistance available to ports.
- 4) To maintain liaison with international agencies and regional associations with a view to the promoting of co-operation, exchanging of experience and strengthening of port ties.

# Committee on Port Safety, Environment and Construction

## Chairman

Jacques Dubois, Ministry of the Sea, France

## Vice-Chairman

A.J. Smith, IAPH European Liaison Officer, U.K.

## Terms of Reference

To consider matters relating to the construction, maintenance and safe marine operations of ports and harbors and the protection of the port environment;

To report, advise and make recommendations thereon, as appropriate or as may be requested, from time to time, by the Association;

To establish Sub-Committees, including the Dredging Task Force;

To take such action, alone or jointly, with the representatives of inter-governmental and other international maritime organisations, to further the interests of ports and harbors, as may be authorized from time to time by the Association, the Board of Directors, or Officers authorized to act on the subject on behalf of the Association, and to undertake day-to-day liaison with other international and national organisations as necessary.

## 1: Marine Safety Sub-Committee

### Chairman

J.J.H. van der Schaaf, Harbour Master, Port of Rotterdam, The Netherlands

### Members

Aftab Alam, Chairman, Karachi Port Trust, Pakistan

B. Coloby, Liners Manager, Commercial Department, Port of Le Havre, France

Yoshio Fujino, Councilor, Japan Port and Harbor Association, Japan

J.R.D. Sandison, General Manager, Port Hedland Port Authority, Australia

Fasahat H. Syed, Member (Operations), Port Qasim Authority, Pakistan

G. Varney, Harbour Master, Port of London Authority, U.K.

J.T. Varney, Harbour Master, Port of Auckland, New Zealand

### Observers

M.A. Calder, Marine Manager, International Chamber of Shipping, U.K.

Norman Matthews, Deputy Secretary General, IALA, France

## Terms of Reference

In accordance with the terms of reference of the Port Safety, Environment and Construction Committee, the Sub-

Committee is to consider matters relating to marine safety, including the following items:

- vessel traffic services
- pilots and pilotage
- ships/harbor navigation rules
- aids to navigation
- risk analysis and crisis management in the field of marine operations

Its main tasks will include:

- to go on following the action undertaken in IMO in the field of VTS and to assert the point of view of IAPH on this subject, in IMO as well as any other appropriate "forum"
- to undertake any action, within IAPH, to promote VTS
- to review the need for improvement in Harbour Navigation Rules, including the pre-entry inspection of ships
- to identify the main technical problems in the same field of marine operations to which ports are faced, especially developing ports
- to advise any port which has a particular problem covered by the areas the Marine Safety Sub-Committee deals with of the Committee's willingness to comment upon that problem in an effort to resolve that port's difficulty. Such activities to be reported upon at the next conference.
- to keep under review general developments with regard to the marine aspects of matters related to port safety and environment protection and to make appropriate recommendations
- to continue to review the following sections of the "Guidelines on Port Safety and Environmental Protection":
  - a) Vessel traffic services in port areas and their approaches
  - b) Pilots and pilotage
  - c) Aids to navigation
  - d) Crisis management in ports
  - e) Ship/harbour navigation rules
  - f) Tugs and support boats
  - g) Risk analysis as a tool of port management

Papers could be prepared for presentation at the next conference as to how these technical matters are handled by ports. (For example, papers could be presented on V.T.S. operations, crisis management, stranding of vessels and pollution incidents.)

## 2: Port Safety Sub-Committee

### Chairman

Per H. Olson, Manager, Safety and Environmental Control, Port of Gothenburg AB, Sweden

### Vice-Chairman

P.C. van der Kluit, Head, Safety and Operational Research, Port of Rotterdam, The Netherlands

### Members

R.K.R. Gonela, Chairman, Visakhapatnam Port Trust, India

Brigadier M.B. Haladu, Executive Chairman, Nigerian Ports Authority, Nigeria



Charles M. Rowland, Port Director, Canaveral Port Authority, U.S.A.

Neil G. Samuels, Chairman & Chief Executive, Port of Geelong, Australia

J.T. Varney, Harbour Master, Port of Auckland, New Zealand

### Terms of Reference

As decided at the 15th Conference, the Terms of Reference for the Port Safety Sub Committee shall be as follows:

In accordance with the terms of reference of the Port Safety, Environment and Construction Committee, the Sub-Committee is to consider matters relating to safe practice in ports regarding:

- transport, handling and storage of dangerous substances;
- management of waste substances;
- environmental control in port operations;
- security; and
- contingency planning and crisis management.

The Sub Committee will have to continue to review the following sections of the Guidelines on Port Safety and Environmental Protection:

- Crisis Management in Ports
- Safety at Terminals Handling Bulk Liquid Substances
- Disposal of Waste
- Security
- Risk Analysis as a Tool for Port Management

## 3: Engineering Sub-Committee

### Chairman

Aftab Alam, Chairman, Karachi Port Trust, Pakistan

### Vice-Chairman

P.M. Fraenkel, Chairman, Peter Fraenkel International, Inc., U.K.

### Members

Goon Kok Loon, Deputy Executive Director, Port of Singapore, Singapore

Herbert R. Haar, Jr., Deputy Executive Port Director, Port of New Orleans, U.S.A.

Kiichi Okubo, Director, Japan Port & Harbor Association, Japan

E.B. Osoba, Asst. General Manager (Administration), Nigerian Ports Authority, Nigeria

G.B. Page, General Manager, Wellington Harbour Board, New Zealand

G. Patey, Works Director, Port of Le Havre, France

H. Velsink, Dy. Managing Director, Netherlands Engineering Consultants "NEDECO", The Netherlands

### Special Advisor

Barry Cable, Head, Shipping, Ports and Inland Waterway Division, ESCAP, Thailand

### Terms of Reference

In accordance with the terms of reference of the Port Safety, Environment and Construction Committee, the Engineering Sub-Committee will continue to carry out further work along the following lines:

- a) To identify and inventory the ecological parameters for port and coastal area development.
- b) To identify and present acceptable marine environmental control standards.
- c) To examine their effects on proposed development for integration in the planning and design process.
- d) To outline control surveillance and sensing techniques for the monitoring of pollution and quality control and adherence to standards.
- e) To devise and develop an economic evaluation methodology for such an environmental policy, setting down limits, identifying broad tangible benefits that would be realised from incremental environmental expenditures, quantifying such expenditures and suggesting an economic rate of return.
- f) To identify the managerial and legislative framework within which decision-making takes place.
- g) To finalise guidelines and recommendations for the planning, design and construction of environmentally integrated ports, including coastal area development.

The Sub-Committee will have to continue to review chapter 3.1 of the "Guidelines on Port Safety and Environmental Protection".

The Sub-Committee will report, advise, and make recommendations as may be required.

## 4: Ship Sub-Committee

### Chairman

Jean Smaghe, General Manager, Port of Le Havre, France

### Members

O. Bonnin, Head of the Ports and Navigable Waterways Division, BCEOM, France

B. Coloby, Liners Manager, Commercial Department, Port of Le Havre, France

J.K. Hojbjerg, INTERTANKO, Denmark

P. Keenan, General Manager, Cork Harbour Commissioners, Ireland

D.B. McMurray, Harbour Master, Clyde Port Authority, U.K.

J.M. Moulod, General Manager, Port of Abidjan, Ivory Coast

J. Rommerskirchen, Chief of the Port, Shipping and Transport Division, City of Hamburg, Fed. Rep. of Germany

## Observers

M.A. Calder, Marine Manager, International Chamber of Shipping, U.K.

Jean Coune, President, Institut de Recherches de la Construction Navale, France

P.J. Lewis, Vice President, European Harbour Master Association, U.K.

Lopinot, Vice-President, International Maritime Pilots Association, France

## Terms of Reference

In accordance with the terms of reference of the Port Safety, Environment and Construction Committee, and in liaison with other technical committees, the Sub-Committee is:

1—to inquire and comment, with the help of international organizations such as ICS, as appropriate, on trends in the characteristics of ships and to inform IAPH members on such matters.

2—to consider the trends in ships' characteristics as they concern the designs and equipment for new port facilities and to make appropriate recommendations.

3—to consider port requirements for ship designs and equipment and to make recommendations thereon to the appropriate bodies.

4—to review the Guidelines on Port Safety and Environmental Protection (Chapter 2.1: "Ships characteristics and manoeuvrability"), including the report on trends in the development of ships' characteristics presented at the 15th IAPH Conference in Seoul.

## 5: Dredging Task Force

### Chairman

H.R. Haar, Jr., Deputy Executive Port Director, Port of New Orleans, U.S.A.

### Vice-Chairman

K. Jurriens, Head, Legal Department, City of Rotterdam, Rotterdam Municipal Port Management, The Netherlands

### Members

Aftab Alam, Chairman, Karachi Port Trust, Pakistan

Christian Brossard, Ingénieur en Chef des Ponts et Chaussées, Port of Nantes-St. Nazaire, France

J.J. De Cloedt, President, International Association of Dredging Companies, The Netherlands

Kees d'Angremond, Managing Director, Port Management of Amsterdam, The Netherlands

G. J. de Wolf, Secretary General, International Association of Dredging Companies, The Netherlands

Harald Gohren, Department of Economics, Transport and Agriculture, Port of Hamburg, Federal Republic of Germany

Jean Pierre Graillot, General Manager, Port of Nantes-St. Nazaire, France

A.J. Hope, Chairman, Northern Shipping & Stevedoring Pty. Ltd., Australia

J.A. Mulock Houwer, General Manager, International Association of Dredging Companies, The Netherlands

R.P. Leach, President, Port of Houston, U.S.A.

H.G. Plomarity, Port Director, Port of Corpus Christi, U.S.A.

James J. Scott, Executive Director, Port Authority of Jebel Ali, U.A.E.

J. Smagghe, General Manager, Port of Le Havre, France

## Observers

William R. Murden, Chief, Dredging Division, Water Resources Support Center, U.S.A.

Cass van der Burgt, Director, Industrial Council for Oceanology, Ministry of Transport & Public Works, 'North Sea' Directorate, The Netherlands

## Terms of Reference

In accordance with the terms of Reference of the Port Safety, Environment and Construction Committee, the Sub-Committee on Dredging Task Force is to keep under review major matters relating to seaport and inland dredging and dredging equipment, particularly through the following means:

- continuing interface meetings and coordination with the LDC (IMO) and the Scientific Group of the LDC (to include implementation of the LDC Guidelines for Dredged Materials). In addition, liaison should be maintained with the United Nations Environmental Programme Headquarters in Geneva, and with PIANC (including coordination to accomplish a review of the final FIDIC Conditions of Contract and to report back to the PSEC with appropriate recommendations).
- publishing periodical IAPH information alerts pertaining to potential problems in permitting inland water operations.
- maintaining a log of all recommended corrections, changes, additions or modifications to the new "Dredging for Development" IAPH Booklet and arranging for a third printing at an appropriate time, in coordination with the IAPH leadership.
- keeping the IAPH membership informed on all of the activities above by providing appropriate new articles, letters and information alerts to the Secretary General for dissemination to the membership as is deemed suitable. In most cases, this will involve publication in "Ports and Harbors".
- contributing jointly with IADC towards the International Standardization Organization (ISO) project on Dredging Terminology Standards.
- continuing to review chapter 3.2 of the Guidelines on Port Safety and Environmental Protection.

## Committee on Cargo Handling Operations

### Chairman

C.J. Lunetta, Port Director, Port of Miami, U.S.A.

### Vice-Chairman

R. Cooper, General Manager, Auckland Harbour Board, New Zealand

### Members

African/European Region:

J.P. Lannou, Head of Equipment Operations Dept., Port of Le Havre, France

J.A. Ogun, Asst. General Manager (Operations), Nigerian Ports Authority, Nigeria

W. Stoppenbach, Vice President, Port of Gothenburg AB, Sweden

### American Region:

Walter A. Abernathy, Executive Director, Port of Oakland, U.S.A.

Ben E. Nutter, Honorary Member of IAPH, U.S.A.

A.A. Shaw, Director, Sales & Marketing, Nanaimo Harbour Commission, Canada

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

### Asian Region:

Hashir H. Abdullah, General Manager, Kelang Port Authority, Malaysia

N.C. Cantrick, General Manager, Southland Harbour Board, New Zealand

Yoshiro Haraguchi, Executive Vice President, Nagoya Port Authority, Japan

### Terms of Reference

- a) To continue to monitor the variations to the dimensions of ISO containers. This monitoring should also be supported by information and views from ports to the effects on their port, facilities, equipment and infrastructure that may follow widespread introduction of non-standard containers. It is intended to promote this by means of a questionnaire.
- b) Similarly, to continue to monitor the trends in the construction of containerhips to beyond "Panamax" dimensions and will disseminate information as it becomes available.
- c) To encourage the exchange of information between ports which may assist in forming appropriate manpower strategies in ports, regions or countries. This has arisen because of the views expressed that many labor contracts and agreements may no longer be relevant to the present and future situations, particularly in relation to containerisation.
- d) To survey member ports to establish the introduction and use of modern communication systems for the exchange

of port clearance, entry and cargo information. It will also establish the level of commonality between such systems, either presently in place or being contemplated.

e) There was discussion, particularly relating to the North American continent experience, of double stack trains. It was agreed that although many countries would have serious geographical limitations on their ability to handle double stack trains, where this was possible the concept of such highly efficient overland distribution services posed many threats to established sea routes.

The above represents a very brief resume of the programme the committee has in mind. We have concurrently expanded the membership of the committee itself and a wider representation is being achieved. The principal thrust of the committee's work will be aimed at providing a service to the membership particularly in matters of new technology, marketing and port promotion.

It is also intended that a further questionnaire on these subjects be circulated mid-term among the members to ensure that the committee is regularly updated on the needs of our members.

## Committee on Trade Facilitation

### Chairman

F.L.H. Suykens, General Manager of the Port, City of Antwerp, Belgium

### Vice-Chairman

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

### Members

#### African/European Region:

Joseph Bayada, General Manager, Cyprus Ports Authority, Cyprus

P. Hanappe, Economiste, Transport de Marchandises et Logistique, Institut National de Recherche sur les Transports et leur Scurit, France

A.I.J. Hoewerckx, Adviser, Port of Antwerp, Belgium

D.J. Jeffery, Chief Executive, River, Port of London, U.K.

E. Muurinen, Managing Director, Port of Helsinki, Finland

Michel Pechere, General Manager, Port of Marseilles, France

G. Velter, Development Manager, Port of Le Havre, France

### American Region:

Maximo Ramos Arias, General Manager, Empresa Nacional de Puertos S.A., Peru

Donald R. Caddo, Commissioner, Thunder Bay Harbour

Commission, Canada

F. Hollrigl, Technical Manager, Administracion General de Puertos, Argentina

#### **Asian Region:**

Ahn, Hee-Do, Korea Ocean Research and Development Institute, Korea

Wimal Amarasekera, Chairman & Chief Executive, Sri Lanka Ports Authority, Sri Lanka

K.J. Hoggett, Asst. General Manager, Port of Brisbane Authority, Australia

Dong-Hee Lee, Vice-President, Korea Maritime Institute, Korea

J.H. Rowland, Deputy Secretary, Department of Transport, Australia

#### **Terms of Reference**

At the 15th Conference in Seoul, the IAPH Trade Facilitation Committee was of the unanimous opinion that ports worldwide need to ensure that standardized documents are developed for the shipping industry in coping which take into the requirement of ports worldwide and have their backing.

To this end the Trade Facilitation Committee (TFC) of the IAPH will work together with:

1. **The Customs Cooperation Council (CCC)**  
to ensure that the data elements required by ports are also contained in the single administration document (SAD) under discussion by the CCC.
2. **Lloyd's**  
to ensure that standard messages now being developed satisfy port requirements before being incorporated into the worldwide ports informatics network presented by Lloyd's at the Conference.

#### **The Committee will:**

1. ask all ports to comment on the message structures developed by Lloyd's;
2. undertake a survey of existing and planned computer applications and networks with the assistance of regional organizations such as port associations, ESCAP, etc.;
3. evaluate the results with all ports on a regular basis;
4. strengthen its links with the CCC to ensure that the development of the SAD contains all data elements required by ports worldwide, and materialize the guidelines agreed on by the General Assembly; and
5. work together with the UN Trade Facilitation Working Party to ensure that international documents developed to agreed standards are in line with port requirements.

## **Committee on Legal Protection of Port Interests**

#### **Chairman**

Paul Valls, Director General, Port of Bordeaux, France

## **Members**

#### **African/European Region:**

L. Bergfelt, Legal Advisor, Port of Gothenburg AB, Sweden

S. Dibong, Director General, Office National des Ports du Cameroun, Cameroon

K. Jurriens, Head, Legal Department, Port of Rotterdam, The Netherlands

P. Keenan, General Manager, Cork Harbour Commissioners, Ireland

Jean Michel Moulod, General Manager, Port of Abidjan, Ivory Coast

André Pagès, Honorary Member of IAPH, France

A.J. Smith, IAPH European Liaison Officer, U.K.

Carl Veng, Deputy Managing Director, Port of Copenhagen, Denmark

E.T. Waiyaki, Secretary & Legal Officer, Kenya Ports Authority, Kenya

#### **American Region:**

F.K. DeVos, International Consulting, Canada

Patrick J. Falvey, General Counsel/Assistant Executive Director, Port Authority of New York & New Jersey, U.S.A.

John McCarthy, Commissioner, Port of Tacoma, U.S.A.

N.M. Ornstein, Port Counsel, Port of Vancouver, Canada

#### **Asian Region:**

Takao Hirota, Director, Japan Port & Harbor Association, Japan

J.F. Stewart, Honorary Member of IAPH, New Zealand

## **Special Advisor**

E.F. Ellen, Executive Secretary, International Association of Seaport & Airport Police, U.K.

## **Terms of Reference**

The follow-up, study and recommendation of proposed action, to be taken on behalf of the IAPH in any domains in which the collective interests of port authorities are brought into question from the legal and financial points of view. This, especially applies to the Association's relationship with the IMO and with its various partners in the maritime field.

## **Committee on Public Affairs**

#### **Chairman**

R.N. Hayes, General Manager, Dublin Port & Docks Board, Ireland

#### **Vice-Chairman**

Bob Calis, Commissioner, Fraser River Harbour Commission, Canada

#### **Members**

##### **African/European Region:**

W.Y. Dixon, Manager, National Port Authority, Liberia

G.B. Gudmundsson, General Manager, Port of Reykjavik, Iceland

Mogens Munk, Vice Chairman, Port of Copenhagen Authority, Denmark

##### **American Region:**

E. Bruno, Port Secretary, Port Authority of Trinidad & Tobago, Trinidad and Tobago

James J. Kirk, Director, Port Department, The Port Authority of New York & New Jersey, U.S.A.

##### **Asian Region:**

Wataru Kitamura, Director General, Port and Harbour Bureau, City of Yokohama, Japan

L.T. Padman, Officer, Public Relations Office, Townsville Port Authority, Australia

G.B. Page, General Manager, Wellington Harbour Board, New Zealand

R.P. Snodgrass, General Manager, Taranaki Harbours Board, New Zealand

F.M. Williams, General Manager, Bay of Plenty Harbour Board, New Zealand

#### **Terms of Reference**

The encouraging of the development of all ports and harbours, which in turn means the development of the whole port community. The identification of community attitudes to port development, operations and industrial growth in port areas. The determining of areas of public concern as well as the assessment of the economic impact of the port on the daily lives of the community and the development of a public relations strategy to deal with problems that may arise.

#### **Legal Counselors**

##### **Chairman**

P.J. Falvey, General Counsel/Asst. Executive Director, Port Authority of New York & New Jersey, U.S.A.

##### **Members**

##### **African/European Region:**

L. Bergfelt, Legal Adviser, Port of Gothenburg AB, Sweden

Kick Jurriens, Head, Legal Department, Port of Rotterdam, The Netherlands

##### **American Region:**

D.E. Johnson, Vice Chairman, Thunder Bay Harbour Commission, Canada

Mr. E.C. Petersen, Senior Deputy City Attorney, Port of Long Beach, U.S.A.

##### **Asian Region:**

Dr. Ibrahim Makki, Director General, Ports Public Authority, Kuwait

## **Report on the 9th International Port Training Conference at Aarhus, Denmark and Visit to the World Maritime University at Malmö, Sweden 16-19 June, 1987**

#### **By C. Bert Kruk**

Chairman, Committee on Int'l Port Development, IAPH Director, Technical & Managerial Port Assistance Office, Port of Rotterdam

### **The International Port Training Conference**

The International Port Training Conferences are held in bi-annual sequence. The one in Aarhus was the ninth Conference. The aim of the Conference is to enable port trainers and representatives of all types of organizations related to port training to meet and exchange new

experiences. The Conference at Aarhus was attended by 38 delegates from 12 countries. The list of participants clearly indicates the wide spread of backgrounds of the delegates attending.

During the Conference most attention is paid to items such as:

- new teaching techniques
- port training needs in developing and developed ports
- the role of International and Intergovernmental Organizations in port training.

For further details please refer to the attached programme.



During my stay at Aarhus I was also given the opportunity to explain the viewpoints of IAPH, and in particular of the CIPD, in the field of port training. With the various representatives of organizations present I exchanged views on the execution of the various CIPD schemes and closer collaboration in various fields in the future.

All participants presented their brochures and programmes, which are available to all IAPH members, either directly or via my TEMPO Office.

Also a number of interesting papers were presented and distributed, such as:

- Future demands on enterprises, labour and training by Mr. Jørgen Ladegaard, Technological Centre, Aarhus.
- A study on the Social Problems/Effects on Port Work through Advanced Technology by Mr. B.N. de Boer, Maritime Industries Branch, International Labour Office, Geneva.
- The ILO Strategy for Port Training Development by Dr. B.J. Thomas, Senior Lecturer, Department of Maritime Studies, UWIST, Cardiff.
- Training for the Future by Mr. J. Vooys, Principal, Rotterdam Port Transport College, Rotterdam.

This paper presents the results of an investigation executed by the Rotterdam Port Transport College on the Future Needs in Training in Developed Ports and how the College in Rotterdam intends to implement the results of the investigation.

- EEC Maritime and Port Policy by P.J. Powrie, Commission of the European Communities.

At the Closing Session, Dr. J. Thomas introduced the new UNCTAD IPP (Improving Port Performance) training course related to Container Terminals: A Policy for Development and Container Terminal Planning.

Mr. B.N. de Boer gave an overview of the Technical Assistance in the Port Industry already provided and to be provided in the future by the International Labour Office.

At the Closing Session the Meeting furthermore adopted the following Resolution:

#### Resolution of the Ninth International Port Training Conference Aarhus, Denmark, 19th June, 1987

Delegates to the Ninth International Port Training Conference, recognising the scale, diversity and urgency of the portworker training have resolved to:

- Reaffirm their commitment to act in co-operation with all members to provide assistance in establishing and/or upgrading the portworker training capability of developing countries' ports.
- Express their support for the conclusions, recommendations and proposals contained in the International Labour Office (ILO) study entitled "An ILO Strategy for Portworker Training".
- Recommend the ILO to request the financial support of the commissions of the European Committees and/or individu-

al member states to undertake a pilot project to implement this ILO strategy.

- Affirm their willingness to assist this project with their expertise as required during its implementation.

The ILO Study referred to in the Resolution is highlighted in a Summarizing Paper by Mr. B.N. de Boer, attached to this Report.

Before closing the Conference, it was decided that the next Conference will be held in Hamburg, Federal Republic of Germany, in 1989.

Summarizing the results of the Ninth Conference, I must conclude that also this Conference was most useful to attend and successful in its results. This was also due to the excellent organization by the Vocational Training Centre at Aarhus and the Permanent Secretary of the International Port Training Conference, Mr. Will C.H. van Zutphen.

## Visit to the World Maritime University

On my way to Aarhus via Copenhagen, I had the pleasure of crossing to Malmö in Sweden to pay an official visit to the World Maritime University on June 16, 1987.

I had been invited a few weeks earlier by Prof. A.D. Cooper, Professor at the WMU, when he was visiting Rotterdam accompanying a group of WMU students on a European Study Tour. Besides inspecting the University and its facilities I had the honour of having lunch with the President of the WMU, Mr. Erik Nordström, and the Vice President, Prof. Günter Zonde.

The highlight of my visit, however, was a lecture I was invited to give for over a hundred WMU students, on the organization and work of IAPH in general and of the CIPD in particular. The discussions during and after my presentation were very lively.

To explain the WMU briefly for those who are not familiar:

The World Maritime University was established in 1983 under the auspices and aegis of the International Maritime Organization. It has international status.

The Academic and Administrative work of the University is directed by the Rector, who is assisted by seven full-time professors and five full-time lecturers. In addition to the full-time academic staff, the University heavily depends on short-term visiting professors to cover certain specialized fields.

The faculty contains the following departments:

- Nautical Sciences
- Maritime Safety and Administration
- Maritime Technology
- Marine Environment Protection
- Shipping Economics

The University conducts two-year and one-year and awards degrees and certificates depending on the qualifications of the students upon entering and the length of the course. Furthermore, short courses on special subjects are organized.

## A summary of the feasibility study prepared by the ILO for a strategy for portworker training

### Background to the study

In 1986 a study was commissioned to determine the most effective ILO strategy for assisting developing countries to establish or upgrade their training capabilities for portworkers. This study arose from another study published by the ILO at the end of 1986 entitled "New cargo-handling techniques: Implications for port employment and skills". The major issue to emerge from this publication was the scale and extent of the training needs of portworkers in developing countries. It concluded that insufficient attention was being given to human resource development and estimated that, worldwide, well over 1,000,000 portworkers require some form of training. It was against this background that the feasibility study was prepared by the ILO to develop a strategy for portworker training. This feasibility study was prepared on the basis of two postal questionnaires, personal contacts, telephone interviews, etc.

Based on a summary of the responses to the postal questionnaires, projections were made of the numbers of portworkers in ports. As a result it was estimated that some 1,200,000 portworkers are the target population of this ILO strategy for portworker training. West Asia, South-East Asia and the Pacific between them contribute 70 per cent of the total portworker population of developing countries in need of training. West Africa and North Africa contribute 16 per cent of the total. It should be noted that the estimated total does not include maintenance personnel but only refers to categories of portworkers (supervisors and below).

Another significant fact that the study reveals is that 21 per cent of the population (over 250,000 portworkers) are due to leave the industry in the next ten years, to be replaced by new entrants. Portworkers under the age of 30 (18 per cent, equalling 210,000) can be assumed to need basic skills training and/or specialised training and retraining during that period. Even if there is no population increase, it is possible to derive a figure of over 450,000 portworkers needing training in the next decade—the target population of an ILO portworker training strategy.

Another important aspect which this survey reveals is that there may be as many as 3,000 adequately trained and experienced trainers available in the ports of developing countries. This important trainer population would form part of the target population of the ILO portworker training strategy.

## 9th International Port Training Conference—June 16th—19th 1987

### PROGRAMME

#### Tuesday, June 16th

20.00 Welcoming cocktail party Informal  
introduction of delegates

#### Wednesday, June 17th

08.45— Departure bus from hotel

09.00—09.10 Opening of the 9th international port training conference  
Jørgen Damgaard, Chairman, Transport Economic Society, Denmark  
09.10—10.30 Presentation of Vocational Training Centre Aarhus  
Hans Frørup, Aarhus  
10.30—10.45 Coffee  
10.45—11.30 Future demands to enterprises, labour and training  
Jørgen Ladegaard, Technological Centre, Aarhus  
Discussion  
11.30—14.30 Lunch  
14.30— Presentation of the Port of Aarhus and prospects for the future  
Kaj Schmidt, Port of Aarhus  
19.00— Dinner  
Conference members are invited to dinner as the guests of the Port of Aarhus

#### Thursday, June 18th

08.45— Departure bus from hotel  
09.00—10.30 EEC maritime and port policy  
P.J. Powrie, Commission of the European Communities  
Discussion  
10.30—10.45 Coffee  
10.45—12.30 Vocational training in Denmark—A new concept  
Jørgen Damgaard, Chairman, Transport Economic Society  
Exporting know how, planning and training systems  
Ulrich Møllgaard, Hoff & Overgaard A/S  
Discussion  
12.30—13.30 Illustrative demonstration of training modules  
Theodore Mathias, ORT  
13.30—14.30 Lunch  
14.30—16.00 Strategy for port training development  
B.J. Thomas, University of Wales, Maritime Studies  
Discussion  
16.00— On your own in the Town of Aarhus  
19.00— Dinner  
Conference members are invited to dinner as the guests of the Town of Aarhus

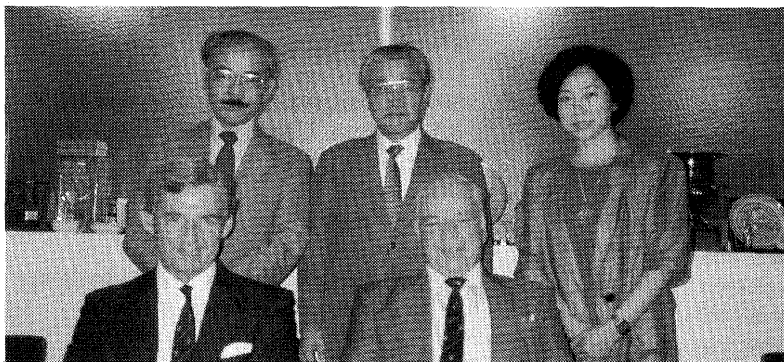
#### Friday, June 19th

08.45— Departure bus from hotel  
09.00—11.00 "Round table session"  
Changing/adapting ports with regards to manpower planning and technological training possibilities  
\*)Contributions from delegates on their own specific problems are invited.  
11.00—11.30 Coffee  
11.30—12.30 What's new in the assistance to developing countries \*)  
12.30—13.00 Summing up session and arrangements for the 1989—conference  
13.00— Lunch  
\*) Delegates who wish to enlarge on a subject are requested to give notice to the chairman on one of the previous days!

## List of participants

Belgium:	J. Gervais, CEPA P.J. Powrie, Commission of the European Communities	Finland:	Inst. of Science & Techn. Enzio Ranien, The Kotka School of Maritime Studies
Canada:	Denis Lafrance, Maritime Employers Association	Germany:	Georg Backhaus, Fortbildungszentrum Hafen Hamburg e.V. Michael Borgwardt, Fortbildungszentrum Hafen Hamburg e.V. Klaus H. Logemann, Port and Transport Consulting Bremen GmbH Franz Lorenz, Fortbildungszentrum Hafen Hamburg e.V. Winfried Strauch, Hafenfachschule im Lande Bremen E.V.
Denmark:	Jørgen Damgaard, TØF—Transport Economic Society Hans Frørup, Vocational Training Centre Aarhus P.V. Jensen, Landtransportskolen Jørgen Ladegaard, Jysk Teknologisk Institut Ulrich Møllgaard, Hoff & Overgaard A/S Jack Nielsen, The Association of Merchants and Port Employers Leif Norking, The Association of Merchants and Port Employers Kaj Schmidt, Port of Aarhus Birgitte Glerup, TØF—Transport Economic Society	The Netherlands:	C. Bert Kruk, Port of Rotterdam, Tempo-Office Ir. G.C. Meeuse, Stichting Vervoer- en Havenopleidingen C.de Rijk, The Apprenticeship Foundation of the Port Transport Industry P.M. van der Sluis, Stichting ter Bevordering van het Leerlingwezen J. Wildervanck, Portconsultant—Training Jan Vooijs, Senior Port Transport College Will Chr. H. van Zutphen, Educational Foundation for Port Transport Industry
Egypt:	Gamal Hussein, Port Training Center	Norway:	Roald Pedersen, Norwegian Port-and Terminaloperators Assc.
England:	Richard Bridges, Port of Felixstowe International Derek Chadburn, Centre for Maritime Transport and Operations Peter Davison, National Dock Labour Board C.A. Hurcombe, National Dock & Railway Company Ltd. Theodore Mathias, World O.R.T. Union Johan Siebols, Ocean MacKenzie Brian John Thomas, University of Wales,	Portugal:	Antonio Ferreira Beirao Belu, Socarmar-EP Reis Martins, ANEE
		Sweden:	Sven Sandström, Göteborg Hamn AB
		Switzerland:	B.N. de Boer

## Visitors to the Head Office



*L to R:  
Front Row: Mr. R. Cooper and Mr. Bob Carr  
Back Row: Mr. R. Kondo, Mr. Kusaka and Ms. Takeda  
at the IAPH Head Office*

\* On 13th July, **Mr. Paul Smulders**, Director, Special Projects of the Netherlands Council for Trade Promotion (The Hague), visited the Head Office and was received by Mr. R. Kondoh, Dy. Secretary General. The purpose of his visit was to explore the possibility of expanding the Council's overseas trade promotion activities in the field of port-related industries. His visit to the Head Office was recommended by Mr. C.B. Kruk of the Port of Rotterdam.

\*\* On 6th July, **Mr. Bob Carr**, Chairman, and **Mr. Robert Cooper**, General Manager, Auckland Harbour Board, visited the Head Office and were received by Mr. Hiroshi Kusaka, Secretary General, and his staff. They were visiting Fukuoka in Kyushu Island to attend the ceremonies and events held in the City commemorating the sister ports affiliation.

According to Mr. Carr, the sister ports affiliation arrangement, entered into between the two ports in 1979, has gradually expanded not only to business and trade promotion activities but also to an exchange of cultural and sporting activities based on the citizen-to-citizen level. The sister ports arrangement has thus developed to a city-to-city affiliation, which was concluded in 1985.

For this week-long events, led by Her Worship the Mayor of Auckland, Dame Catherine Tizard, a jumbo-jetfull of Aucklanders numbering more than five hundred people went directly to Fukuoka on chartered and other flights. "People have never seen such a big number of Aucklanders leave their City in one group except in war-time," remarked Mr. Carr.

# **Report on Multi-Purpose Terminal Operations (PACT 01) organized by TEMPO, 18th May–12th June 1987**

**By C.C. Worwornyo**

**Ghana Ports and Harbours Authority  
A recipient of the IAPH Bursary**

## **Introduction**

The PACT (Practical Approach Concept in Training) Courses are designed for Middle Management Staff from ports in Developing Countries. The PACT 01 is tailored to train Multi-Purpose Terminal Managers in the consequences of handling multi-purpose cargo in respect to terminal layout, equipment, personnel, administration, safety, etc. These objectives were approached during the course period through lectures backed up by on-the-spot visits and simulation games.

## **The Lectures**

The lecturers were very dutiful in their presentations, and in most cases hand-outs or brochures were prepared to back up whatever was given out. This was a very sound principle since it helps participants to recoup what has been done in the lecture room during their free time. The lectures were apt and to the point and were not so long as to bore the participants. One interesting aspect of the lectures was the slides and video shows, provided to bolster whatever was discussed.

## **The on-the-spot visits**

The Course participants had the privilege of visiting some of the famous Multi-Purpose Terminals via ECT, Seaport, Multi-Terminals and Müller Thomsen. In all cases Course participants were given introductory lectures that preceded the visits to the terminals or workshops. These made the programme very flexible and interesting.

## **Management game**

The most interesting and, rather, most beneficial of all the schedule of the course was the Simulation game of the Rotterdam Port Transport College. This was where some of us were introduced to solving problems with the use of computers—a fast-growing phenomenon in the port industry. Games on Communication and Bargaining were vividly experienced at this session and I think of it as a very useful element of the Course.

## **Observations**

The Course as it stands is very useful and serves the purpose for which it has been designed. The Port of Rotterdam is an ideal port with a solid infrastructure and adequate and sophisticated equipment in most cases. Moreover, it is an inspiration to Developing Countries to see what could be achieved in the Port Industry. Even where exact copies of the system could not be introduced, there is the scope for adaptation to meet individual needs.

## **Recommendations**

I recommend that more and more Developing Countries be allowed to enjoy the privilege of participants in these PACT Courses. Considering the packed schedule within the Course period, I recommend also that the duration of the Courses be extended over six weeks instead of four. For participants to benefit fully from the Courses I would suggest that fluency in the English language and a fair working knowledge of it is important and must be considered as a prerequisite for the candidates.

# **Report on the Business of IMO**

## **Sub-Committee on Ship Design and Equipment**

**By Mr. A.J. Smith**

The Sub-Committee on Ship Design and Equipment of IMO met from the 1st to the 5th June under the Chairmanship of Professor J.W. Doeffer (Poland). The session was attended by thirty-two Member States and observers from

ten Non-Governmental Organisations, including IAPH.

The items discussed which had a bearing on port operations or are of current interest are outlined below. Certain reports related to the agenda items were, because of their

bulk, presented in original only. These were as follows, and included is the source from which a copy may be obtained if required:

- Marine Casualty Report—Capsizing and Sinking of Drill Ship Glomar Java Sea—United States Coastguards—available from the National Technical Information Service, Springfield, Virginia 22121, USA.
- Report Two by Royal Commission on Ocean Ranger Disaster (Safety Offshore Eastern Canada)—available from Canadian Government Publishing Centre, Supply and Services Canada, Ottawa, Canada K1A 0S9
- Industramar Limited's Twin Independently Controlled Schilling Rudders—available from Industramar Limited, Oakridge Road, High Wycombe HP11 2NU, Bucks, England

### Manoeuvrability of Ships

The Sub-Committee had for consideration a report prepared by Japan on Manoeuvring Standards and discussed the subject at some length. It was evident that there is a large proportion of the Sub-Committee who consider it would be useful to establish international manoeuvring standards for ships. In order to progress this, the Sub-Committee agreed, subject to the receipt of sufficient data, to reconvene a Working Group on the subject at their thirty second session. To enable the Working Group to make a full assessment of the subject, IMO need the fullest possible amount of detail on the manoeuvring characteristics of existing ships. A data bank on the subject is being created and MSC Circular No. 389 is the current document indicating what information is being sought. Delegates were urged to provide as much data as possible.

In this connection, a convincing and useful demonstration was available during the session, given by Industramar Limited of the Schilling Twin Rudder System. The particular merit of this system is that it enables a vessel to manoeuvre with a far greater degree of precision than one fitted with conventional rudder arrangements. The twin rudders serve when required to act as a brake, and are so effective that the ship can stop in its own length. Moreover, to stop the vessel, it is not necessary to reverse the propeller, thus providing greater economy, and obviating a need for reversing gear. The system is not yet sufficiently widely fitted to establish the facts, but it does seem possible that its fitting could provide some reduction in the extent of scour caused by conventionally designed vessels (particularly ro-ro ferries) which frequently need to use the maximum power of their engines to berth and un-berth.

### Operation of RO-RO Ferries

The United Kingdom made an initial report to the Maritime Safety Committee following the tragic capsizing of the ro-ro passenger ferry "Herald of Free Enterprise" off the port of Zeebrugge. In consequence that Committee agreed that the Sub-Committee on Ship Design and Equipment, in conjunction with the Sub-Committee on Stability and Load Lines and on Fishing Vessels Safety as necessary, should undertake various tasks affecting the safety of this type of vessel, and the different aspects are outlined below.

### Warning Lights

There is already a proposal for ro-ro cargo vessels, and it is considered that this should be extended to all ro-ro vessels

that on the navigating bridge should be fitted lights which will show green when the loading doors are closed and all devices for securing those doors are in place, and show red when this situation does not apply. The possibility of requiring a warning light to indicate if water was entering through the door was also raised.

### Television Surveillance of Vehicle Deck

The UK consider the fitting of television surveillance of the vehicle deck(s) from the navigating bridge would provide an additional degree of safety. However, the provision of such equipment is not simple, because of the varying heights of vehicles.

### Ventilation of Vehicle Decks during Loading and Unloading

The problem of adequate ventilation of vehicle decks from the exhausts of internal combustion engines was recognized as a factor in loading doors being left open. The UK propose that the present regulations requiring forced ventilation of 10 changes per hour be increased to 20. Denmark reported that their national requirement is for 40 changes per hour and that vessels are also required to closely monitor the level of carbon monoxide. Increasing the number of air changes can cause problems in conditions of extremely low temperatures. It was agreed that in tackling this problem, the need was to ensure personnel safety with flammable danger as the secondary major consideration.

### Operational Procedures Covering Vehicle Spaces

The UK recommended the introduction of a comprehensive check list for completion by ship's staff prior to departure, the form of the list to follow that introduced for steering gear.

### Date of Next Meeting

The Sub-Committee agreed that dates of their two meetings scheduled during 1988 to take place on:-

31st Session 7—11 March 1988

32nd Session 5—9 December 1988

## Membership Notes:

### New Member

### Associate Member

### Development Planning Unit [Class D] (U.K.)

Address: 9, Endsleigh Gardens, London WC1H 0ED

Office Phone: 01-388-7581

Telex Number: 896559 GECOMS

Ports Course Director: Mr. Keith E. Sargent

### Changes

### Bundaberg Port Authority (Australia)

Bundaberg Harbour Board has been changed its name to the above recently.



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# OPEN FORUM

## Design of Storage Facilities for Containers A Case Study of Port Louis Harbour, Mauritius

By  
**Mr. K. Dharmalingam, BE, DIIT,  
MIE (IND)  
MCIT (UK) M. ASCE  
Port Manager  
Mauritius Marine Authority**

*In this article, the author outlines the development programmes undertaken at the Port Louis Harbour for the expansion of the Container Park. Certain suggestions are put forward for the estimation of the park throughput on a practical basis in the light of the experience of the author on the planning of port facilities. An attempt is also made to review the design philosophy of heavy duty pavement in a port situation with particular reference to the use of precast concrete blocks.*

### Introduction

Like many developing countries, Mauritius was not spared by the economic recession of the late seventies and early eighties, which, coupled with rising oil prices and high inflation rates at both national and international levels, called for a review of the country's resources in an attempt to equilibrate the economy and stimulate growth.

With the rising unemployment problem and growing inflation, the policy was, therefore, geared to job creation through export-oriented manufacturing industries.

A series of incentives was introduced by the Government in order to give the manufacturing sector a further means for expansion. These measures were also aimed at projecting the industrial sector as one of the major economic operators in the country.

The results have been most encouraging and the manufacturing sector has witnessed unprecedented expansion during the past three years. Annual GDP growth rates have recovered from around +0.4% in 1983 to reach around +7.1% in 1986 and the rate of unemployment has registered a major decline.

This recovery in the economy has indeed had its effect on the port, which in the past few years has seen an upsurge in its traffic activities, more so on containers.

To cope with the increasing volume of container trade, the port Authorities have embarked on several capital intensive investment projects of which the expansion of the Container Park tops the list of priority apart from the purchase of additional container handling equipment.

### Port Louis Harbour

Port Louis Harbour is the only sea-port in the island. The port has five deep water quays (including a Container Terminal) capable of accommodating vessels of draught 10 to 10.5m and adequate back-up facilities in terms of equipment, storage area, etc. A fully mechanised "Sugar Terminal", with the capacity to load sugar in bulk at the rate of 1,400 tonnes per hour, is indeed a landmark in the history of port development. Besides these, a number of lighterage quays and buoy/berths provide complementary services to the port users.

The Container Terminal at the Port Louis has been designed on modern lines and serves container vessels and "combi" carriers. Other supporting facilities such as the Container Park, container handling equipment, etc. are available at the port. The Mauritius Marine Authority (MMA), which is a para-statal body under the Ministry of External Communications, is responsible for operation, maintenance and creation of marine facilities. The cargo handling operation is carried out by a Company called "Cargo Handling Corporation" (CHC), a wholly-owned private company of the Government of Mauritius and the MMA.

At present, no quay cranes are available to handle the cargo; only ship's gears are used. However, for servicing gearless container vessels, heavy duty mobile cranes are being used at present. The port authorities are closely monitoring shipping trends, and should any need arise in future, fully-fledged shore-based equipment will be provided to meet the demand in time.

### Traffic at a Glance

The port handled traffic of about 1.85mt during 1985/86, of which dry bulk cargo constituted 45 per cent, liquid cargo 25 per cent and general cargo 30 per cent.

To start with, the port handled 3,800 TEUs during 1976/77. Within 10 years the container trade increased eight-fold. The container traffic reached a level of 32,000 TEUs during 1985/86, which is 24 per cent more than the traffic of 1984/85.

The traffic forecast made by the Authority reveals that the port will be required to handle about 50,000 TEUs annually during the next five years, of which laden containers will be 35,000 TEUs and the empties 15,000 TEUs. There is every possibility that this level might be exceeded if transshipment activities increase more than expected. In fact, the island is ideally situated so as to capture more transshipment traffic bound for East Africa, India and other islands in the Indian Ocean. Even though the past transshipment traffic has not

been very significant in terms of volume, the possibility of such trade appearing on the scene in large quantities seems bright.

The facilities, particularly the Container Park, which were created during 1980/81 have become inadequate and the port Authorities have now embarked on many major development projects. One of the projects which is being taken up for execution is the expansion of the Container Park. The extent of expansion required and the design philosophy proposed are briefly discussed in the following sections.

## A Review of Design Method Available for Heavy Duty Pavement in Ports

### Structural Design

The design of the existing pavement was made at a time (before 1980) when no code specifically referring to heavy wheel/axle loading in a port environment was available. The code pertaining to "Design and evaluation of aircraft pavement<sup>1</sup> 1971" and Road Note 29—"A guide to the structural design of pavements for new roads", published by the Road Research Laboratory, London, were therefore used by the consultants for the design of pavement.

Over a period of time, through research and experimentation, design techniques have been perfected and the port planner is now better equipped to design the pavement on a more rational basis. The manual on the "Structural design of heavy duty pavements for ports and other industries<sup>2</sup>" developed by the British Ports Association, is a very useful document to the pavement designer. Even though there may be certain areas where the techniques require some more perfection (for instance, the proximity factors, according to D.C. Gray<sup>3</sup>), the manual is indeed a helpful tool for the design of heavy duty pavement. At first sight, the pavement system designed on the basis of the parameters suggested in the manual may appear thicker.

To this, Dr. Knapton<sup>4</sup> replies:-

".....you are correct in stating that it produces pavements which are thicker than are currently in use. This is because the pavements produced by the manual are maintenance free for the design life. It is common for ports to specify thinner pavements when they can tolerate a degree of maintenance.

".....We have now used the manual in many heavy duty pavement situations and when we are able to use it in a specific situation where we can evaluate the design situation accurately, we are able to provide cost-effective designs. Usually, for example, we are able to disregard dynamic effects and wheel interaction and this often saves 30% on base thickness. Also, we find that other users frequently under-estimate the field strength of lean concrete. Very rarely should there be a need to use curves for lean concrete weaker than 18N/mm<sup>2</sup>....."

D.C. Gray also confirms that "on the whole the manual appears to give realistic designs but perhaps on the conservative side."

Hydraulically pressed precast concrete blocks with certain structural properties are being widely used these days for port pavements.

D.C. Gray enumerates the advantages of block paving as under:-

"Although we have expressed serious doubts about the

load spreading ability of concrete blocks, we still see this kind of pavement as having many applications. In our opinion it has the function, solely, of a surfacing material and as such has the following well known advantages.

- good resistance to high contact stresses
- can be relaid after gaining access to underground services
- can accommodate differential settlement
- can be reused after making good local subsidence
- good appearance
- resistance to damage from oil spillage
- longer life compared with bituminous surfacing"

However, the wear and tear of tyres of the equipment operating over the surface is reported to be slightly more.

The design manual deals with the use of only 80mm thick blocks. Certain authorities<sup>5</sup> prefer using blocks even up to 120mm thick from practical and structural behaviour considerations. No doubt the construction of a thicker pavement will be expensive. However, in many ports, such a higher thickness pavement has been/is being adopted and the performance is reported as satisfactory.

### Estimation of Container Park Capacity

The main factors which determine the operating capacity of a container park are:-

- storage capacity (slots) and its utilisation; and
- dwell time of containers

H.K. Dally<sup>6</sup> reports:-

"The storage capacity in TEUs is a function of the area and type of stacking equipment used. The absolute capacity is clearly reached when all the slots are filled, but congestion would be intolerable long before this level is reached. In practice, the optimum level of storage utilisation has been found to be about 60 per cent of the slots available. This includes a peaking factor allowance to cover times when there are an above-average number of containers on the ground ..... the shorter the dwell time the greater the potential capacity"

Yard capacity C (in TEUs) over a given period is:-

$$C = \frac{L \times H \times W \times K}{D \times F} \times I$$

Where

L = Number of TEU container spaces on the ground

H = Mean profile height to which containers are stacked (L x H is the standing capacity of the Container Yard)

W = Working slots (TEUs) in the container storage area expressed as a proportion

K = Total number of days in the period (365 days)

D = Mean container dwell time in the container yard; and

F = Peaking factor

The author has extensively used this empirical formula on a variety of port situations relating to the planning of container terminals. No doubt the formula is extremely useful to the planner. However, in certain cases, the formula, if used in its present form, might give lower through-put values.

For instance, at the Port Louis Harbour, the containers are

partly handled by heavy duty forklifts and partly by a yard gantry crane. In addition to the existing fleet of equipment, there are proposals to purchase forklifts to stack containers up to 3-high (block stacking). To facilitate easy retrieval of containers, a stacking profile of 2-3-2 is followed, which would be equivalent to 2 1/3 high stacking. A peaking factor of 1.3 is generally adopted for developing ports until a more realistic figure is established on the basis of weekly throughputs. The working slot ratio is taken as 0.80. (For smaller throughputs, some port authorities prefer adopting a higher value, even up to 0.90). On this basis, the percentage of slot utilisation will be:-

$$H \times W \times \frac{1}{F} \text{ ----- II}$$

$$\text{i.e. } \left[ \frac{2-1/3}{3} \times 0.8 \times \frac{1}{1.3} \right] \times 100 = 48 \text{ per cent}$$

A port can go up to 60% of slot utilisation (including peak) without causing any undue congestion at the park. The formula apparently gives a low value of throughput. This means the park would remain under-utilised well before congestion had set in. In other words, against an acceptable level of 60 per cent slot utilisation (for no congestion condition), the slots are used to the extent of 48 per cent. A 60 per cent slot utilisation can be reached either by increasing the working slot ratio or by decreasing the peaking factor, or by both.

The author is of the view that in such a situation, it may be desirable to use the formula in a slightly modified form as under:-

$$C = \frac{T \text{ (Total number of available slots)} \times 0.60 \text{ (slot utilisation factor)} \times K \text{ (365 days)}}{D \text{ (dwell time of containers)}} \text{ ----- III}$$

In the expression II, if the working slot ratio is constant (at 0.8), the only variable is F (peaking factor). A 60 per cent slot utilisation will be reached when F is almost unity which would mean no peaks and troughs in the flow of container traffic. This is not a realistic situation. In such an event, Expression III appears to give fairly good results. The average stacking height (H) and the working slot ratio (W) must be merged so as not to end up in an over-conservative approach to slot utilisation. These two factors could be replaced by T (Total number of slots available) x 0.60 (slot utilisation factor) for the reasons explained above. For smaller throughputs, even if the percentage of slot utilisation reaches 70 per cent, the congestion is likely to be within tolerable limits.

The simplified Expression III may be more useful in a situation where

- the containers are mainly handled by forklifts and yard gantry cranes (which is generally the case)
- the stacking height varies between 2 and 3 high
- the throughput of containers is not large, and
- adequate experience on handling containers is already available

However, if the stacking height exceeds 3 high and the throughput is large and is subject to frequent peaks and troughs in the daily/weekly flow of containers at the park, the empirical Formula I would be handy for planning purposes. The modified Expression III could still be used to

reassess the capacity of the park on a more realistic basis in the light of the experience, if any, already available with the port.

In this analysis, an attempt is made to explore various possibilities with a view to achieving proper use of the available slots without inducing any operational problems. What is aimed at is an optimum design and not an optimistic design.

The container park capacity of the Port Louis Harbour has been calculated on this basis and is presented hereunder:-

## Port Louis Harbour Expansion—A Case Study

### Existing Facilities for Storage of Containers

The existing Container Park consists of 3 areas. Area 1 (2.2 ha) was developed during 1980/81 for the storage of laden containers. This area is divided into two parts to facilitate the deployment of heavy duty forklift trucks on one side and a yard gantry crane (transfer crane) on the other side (Annexure I).

Area 1 comprises a strong pavement made up of:-

- 40 mm thickness of wearing quality asphaltic concrete
- 60 mm thickness of base course asphaltic concrete
- 300 mm thickness of lean-mix concrete (6% cement)
- 150 mm thickness of sub-base of selected coral sand compacted to 95% B.S. Heavy on a formation of coral sand compacted to 90% B.S. Heavy

The surface has been designed adopting the method for the evaluation of aircraft pavement.

### Area 2 (1 ha)

The system of pavement provided in this area is suitable for the storage of empty containers. The pavement consists of:-

- 40 mm thickness of wearing quality asphaltic concrete
- 50 mm thickness of base asphaltic concrete

on top of a coral sand base.

### Area 3 (0.7 ha)

Area 3 has been designed as an over-flow area for very light traffic and is only chipped and sprayed.

### Capacity Calculations

#### Container Dwell Time

A free storage period of 6 days is normally granted to port users in Mauritius engaged in container trade. However, in practice, this time limit is often exceeded. The average dwell time of containers has been observed to be about 8 days during 1986. This is likely to reach 9 days in the near future. It would be rather difficult to insist on a 6-day dwell time as the traders are even prepared to pay the additional storage charges levied by the MMA due to lack of storage facilities at their yard. Furthermore, the dwell time happens to be longer as a result of more extensive customs examinations and procedures. The capacity of the park is therefore assessed on the basis of 9 day dwell time.

#### Peaking Factor

It is difficult, if not impossible, to reach a no-peaking condition in a port. The peaking occurs mainly due to

- a greater number of container vessels calling at the port at random intervals and causing bunching; this might

result in a temporary piling up of the containers at the quay and the park, which may come under more pressure

- inadequacy of the area of the Container Park to meet the above situation; and
- insufficient quality of container handling equipment (example: forklifts, transportation, trucks, etc).

These are several other reasons which can be added to the above list.

In the initial stage of planning, a peaking factor of 1.3 is generally adopted in developing ports. In Port Louis, it is difficult to predict the behavioural pattern of the container trade as the peaks are experienced during a certain period of operation. Also, lack of an adequate amount of container handling equipment has contributed to congestion, resulting in higher "peaks". However, the port authorities have taken timely steps to solve the equipment problem.

"The maximum peak experienced on certain occasions is not necessarily an appropriate measure since its occurrence could be relatively infrequent. The peak level selected should be sufficiently high so that it does not span over many weeks to allow a recovery period as the level experienced falls away".

As recommended by H.K. Dally, the peaking factor has been computed based on the analysis of weekly throughputs of containers. A discernible upward trend is noticed, as shown in Fig. 1. A cumulative description curve is drawn (Fig. 2). At about 99 per cent of the cumulative frequency (Y-axis), the curve appears to change its direction. The corresponding group frequency at this value is 115 per cent. The peaking factor is therefore 1.15.

### Working Slots

At present, the port has a fleet of forklifts of varying capacity which can handle containers 2-high. Another set of 3 forklifts for handling 40ft containers 3-high will be become available as from July/Aug 1987. The port will have a mixture of equipment capable of handling containers 2-high and 3-high.

While computing the number of working slots, the above facts have been kept in view and a working arrangement plan has been made. (For 3-high stack: 2-3-2; 2-high stack: 2-1-2.

In the area where the yard gantry crane operates, there is no problem in computing the working slots. The crane available here can stack one over two in three rows. The working slot profile is 3-2-2.

### Capacity of various areas

#### Area—I (adopting Expression III)

$$C = 950 \text{ (Total Slots)} \times \frac{0.60 \text{ (slot utilisation)} \times 365 \text{ days}}{9 \text{ days (dwell time)}}$$

$$= 23,116 \text{ say } 23,000 \text{ TEU}$$

#### Capacity of Area—1 (on the basis of Formula—I)

$$\begin{aligned} & 700 \text{ (average slots)} \times 0.80 \text{ (working Slot ratio)} \times 365 \text{ days} \\ & \quad \quad \quad \frac{9 \text{ days (dwell time)} \times 1.15 \text{ (peaking factor)}}{\text{calculated}} \\ & = 19,748 \text{ say } 20,000 \text{ (which is 3,000 less compared with the capacity of 23,000)} \end{aligned}$$

laden traffic to be handled by 1990/91 = 35,000 TEUs  
Gap to be bridged = 12,000 TEUs (35,000—23,000)

### Summary of Expansion Proposals for the Container Park

For want of space, detailed calculations for computing the individual capacity of all the 5 areas (Annexure I) behind the container berth are not included in this article. A summary of the results is as under:-

Area No	Area (ha)	Capacity (TEUs)	Proposed Development
1	2.2	23,000	Developed in 1981 for the deployment of heavy duty forklifts—The surface is still in good condition. However, with the proposed deployment of forklifts with axle loads ranging up to 90t, the longevity of the pavement is likely to get reduced. This will be monitored and appropriate decision for maintenance and/or providing a new pavement will be taken in due course.
2	1.0	8,000	The area was originally developed for the storage of empty containers. In practice, the pavement is being used for laden containers with the result that the surface remains extensively damaged. The pavement is to be designed now as a laden container park adopting the techniques included in the design manual.
3	0.70	5,000	This area is only chipped and sprayed and is not intended for any type of traffic. However, due to the shortage of space, this area is also being used for laden and empty containers. Extensive damage and settlement has occurred and the area is to be developed for the storage of laden containers on a par with Area 2.
Area No	Area (ha)	Capacity (TEUs)	Proposed Development
4	1.10	8,000	This is a reclaimed area: to be developed for the storage of laden containers.
5	0.48	3,000	This is like Area 4—The pavement will be designed as if for the storage of laden containers; initially the area will be used for empty containers and later on for laden containers, depending on the growth of container trade.
6	0.48	—	A mini-container freight station (a container verification centre) will be constructed in this land and the area surrounding the building will be provided with a pavement similar to those in other areas.

The total capacity of the park thus developed will be 47,000 laden TEUs against the requirement of about 35,000 TEUs. The excess available should be able to meet the additional demand, if any, generated by transshipment traffic and will also meet the area requirement for the storage of empty containers.

### Type of Pavement

The port Authorities would prefer a cost-effective and maintenance-free payment. At the time of writing, the authorities were in the process of selecting a competent consulting engineering firm for the design of the pavement system, preparation of tender documents and supervision of the work on the awarding of contract. The estimated cost of the project is US\$ 1.5m.

### Conclusion

The empirical formula discussed above is only a guideline to the port planner. There are many independent variables which cannot be evaluated in precise terms. If these could be established on the basis of one's own experience in the field, it would be possible to ensure optimum use of the available resources.

The use of precast concrete blocks for port pavement is becoming increasingly popular. Whether we have reached the stage of utmost perfection in design techniques is still a bone of contention. Further research and experimentation in certain areas of design features would definitely be helpful to the pavement designer.

### Acknowledgement

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# Trends and Future Developments in PSA

By Ng Chee Keong

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Port of Singapore Authority

*PSA recently participated in a seminar on Transportation Engineering and Management for Developing Countries at Pan Pacific Hotel, Singapore. The seminar was jointly organised by the Nanyang Technological Institute and the Chartered Institute of Transport from 23-25 Apr. 87. PSA's speaker, Mr. Ng Chee Keong, Deputy Director (Operations) presented a paper "Trends and Future Developments in the PSA."*

### Introduction

In the last few years, shipping has been plagued by excess capacity. While cargo carried had been on the rise, freight rates were low as there were just too many ships 'chasing' after cargo. Shipping lines were under tremendous pressure to lower cost of operation. Inevitably, the shipping community looks to the port authorities for lower terminal charges. In 1985 and 1986, PSA restructured and lowered its tariff on four occasions.

After more than 10 years of continuous growth in cargo tonnage, PSA experienced an unprecedented drop in general and bulk cargo of 6.5 million tonnes or 13.3% to 42.2 million tonnes in 1985. Corrective measures coupled with several favorable shipping developments saw a rebound in 1986. General cargo throughput handled by PSA gateways and Jurong Port went up 19% to 44 million tonnes. Our container throughput surpassed the 2 million TEU mark. The 2.2 million TEUs handled took Singapore a notch up the ranks of the world's top container terminals to fifth position (replacing Kobe). Trade in bulk cargo remained dismal at 4 million tonnes, a fall of 24.5%. PSA remains the largest single terminal operator in the world.

### Terminal Operations

Supply side factors such as adequacy of facilities, cost of operations and level of service have been primary concerns of most Asian ports as the majority had in the past ex-

perienced difficulties in keeping pace with demand. PSA is no exception. Exhaustive efforts were directed at trimming costs, improving facilities, upgrading service levels, streamlining procedures, expediting information flow and refining the tariff. Singapore's success appears to give credence to the philosophy that supply will create demand. There are several trends in the supply side that will affect PSA's operating policies:

### **1) Cheaper and better computers**

In the coming years, computers will have the greatest impact on terminal operations. It will not necessarily reduce operation costs but will improve planning, expedite information transfer, enhance terminal productivity and facilitate communication between PSA and port users. PSA is gearing itself to exploit information technology to the fullest. There will be greater integration of information among PSA, government bodies and the business community. Automatic identification and decision support systems will be more widely used. To give you an insight on the importance we place on computers and the likely changes, I list below some of the projects we are looking at:

#### **a) Tradenet**

This is a government-sponsored electronic data interchange system that will link traders, shipping lines, hauliers, PSA, Customs, TDB and other related government departments into an electronic network. Information on cargo and perhaps vessels can be extracted from the system. Documentation will be reduced drastically.

#### **b) Databox**

We are providing on-line information to some of our major port users. Port users have direct access to our mainframe on matters relating to their containers and vessels. PSA documentation can also be processed through the service.

#### **c) Prototype Expert System**

PSA is also developing an expert system for yard and ship planning with the National Computer Board. Graphic workstations will be used by our ship planners so that stowage profile, crane sequence and other inputs can be done graphically.

At present, PSA has about 500 computer terminals in operation. This gives an indication of the scale of computerisation in our organisation. The number will probably double within the next five years. We believe our efforts will push the shipping community to a higher level of computerisation. Port users are beginning to declare information and do their documentation through our databox service. Shipping lines are being persuaded to submit manifests in computer readable forms.

### **2) Improvements in Shipping and Handling Technology**

We expect technological changes in shipping up to the end of this century to be modifications rather than radical innovations. Improvements that will have an impact on PSA's terminal operations will be confined mainly to container vessels. To reap economies of scale, vessels will be larger and more fuel efficient. We envisage container vessels to have wider beams rather than deeper in draught. It is easier for port authorities to purchase bigger and better equipment than dredge shipping lanes and berths. Post-Panamax vessels will have widths of about 40 metres or 16 containers abreast (Panamax width is 32.5 metres). New vessels will have carrying capacities in the region of 4,000 TEUs which are about that of the present largest container vessels. Speed will be compromised if vessels are any larger. To improve turnaround time and reduce handling cost, there will be refinements in the lashing systems, cell guides, hatch covers, mooring winches etc.

The method of container handling and types of equipment used are also not expected to change drastically. Equipment will probably be fitted with wireless data transmission systems. Higher planning standards will necessitate direct data input so that information flow can be on a real-time mode. PSA will purchase quay cranes which are taller and with a longer outreach to accommodate broader vessels with high stacks on deck. Container handling equipment will have some semi-automation features.

### **3) Reduction in PSA's Workforce**

Since 1980, PSA has lowered its workforce by about 25% to just under 8,000. In accordance to a government directive, we will have to reduce the number of employees by a further 10% before 1990. We will probably better this target. The reduction was possible because of productivity improvements, the shift to container operations and the privatisation of labour-intensive operations such as stevedorage. PSA will continue to privatise areas which are better operated by the private sector, especially activities which require greater flexibility to users' requirements; for example, the supply of certain category of tugs and equipment. More berths will also be appropriated. PSA will concentrate on capital-intensive operations and high-skill level activities. Areas which yield economies of scale and require close coordination and planning should preferably continue to be performed by PSA staff. In the operation of conventional and bulk facilities, PSA may assume a more supervisory and administrative role.

PSA's obsession with improving productivity, lowering costs and upgrading service levels is not likely to be relaxed in the coming years. However, efforts are reaching a level of diminishing returns. Without a substantial increase in demand, improvements will be costly. We will have to give much greater emphasis to demand factors.

# *International Maritime Information* **WORLD PORT NEWS**

## **9th IMPA Congress: IMO Sec'y Gen'i To Deliver Speech**

The International Maritime Pilots Association (IMPA) was founded in Kiel, West Germany in June 1970, and was officially launched in Amsterdam, Netherlands in May 1971 under the Honorary Presidency of the Rt. Hon. James Callaghan, a former British Prime Minister. His Majesty Juan Carlos I, King of Spain, is the present Honorary President of IMPA.

The aims of the International Association are:

1. To provide machinery for consultation and exchange of information.
2. To collate and disseminate relevant technical information.
3. To make available advice and information to encourage the combined interest of Member Countries and the status of Pilots.
4. To seek representation on International Governmental and non-Governmental organisations.
5. To take any action which might be deemed desirable or expedient in the interests of Pilots or for the benefit of the profession.

The International Association, which presently consists of twenty-seven Maritime States, is governed by decisions of the General Meetings held every two years, and an Executive Committee which meets annually. There is also an International Technical Committee. All business and meetings are conducted in the English language.

The main purpose behind the formation of IMPA was to establish consultative status at the International Maritime Organisation (IMO) on behalf of all pilots worldwide on matters of a professional nature.

IMPA holds a Congress every two years in various locations around the world. The first Congress was in 1971 in Amsterdam, Holland; the second Houston, Texas; the third in Middlesbrough, United Kingdom; the fourth in Kyoto, Japan; the fifth in Mexico City; the sixth in Quebec, Canada; the seventh in Hong Kong; the eighth in

Paris in 1986; and Australia has won the ninth Congress to be held in Melbourne with a satellite Congress at the Gold Coast in February 1988.

Attendance at the various Congresses varies from 200 to 350 delegates and it is envisaged that we will attract 400 international guests to attend our meeting from Great Britain, USA, Canada, Germany, France, Italy, Scandinavian countries, the Middle East, China, Hong Kong, Singapore and of course Australia.

A major element in the work of IMPA has been to actively progress the safety aspect of pilotage by submission of papers at meetings such as these Congresses and by making available advice to the relevant committees of IMO and generally to disseminate information to the only specialised Agency of the United Nations concerned with maritime affairs.

The IXth Congress of IMPA together with the satellite conference is being co-hosted by the only two private pilot services in Australia—the Port Phillip Sea Pilots and the Queensland Coast and Torres Strait Pilot Service. Several hundred other Australian pilots employed by various Government Authorities will also be assisting with their moral support in our aims to ensure the two meetings in Australia will be an outstanding success.

The Secretary General of IMO, Mr. C.P. Srivastava, has honoured us in accepting an invitation to attend the Congress and deliver the first keynote address. The Governor General will open the Congress on Monday, 8 February 1988 and during the rest of that week of the Congress in Melbourne, there will be notable speakers from Australia, United Kingdom, Japan and United States of America. Subjects such as aspects of law relating to pilotage, navigation and maritime education and pilotage costs and their impact on Sea Transportation and Port Usage will be amongst the topics covered.

Post Conference Satellite Meeting Gold Coast—this meeting will be held

at the Jupiters Conrad International Hotel. Guests and delegates will arrive on Saturday afternoon when there will be a welcoming cocktail party.

The meeting is expected to cover Sunday 14 to Tuesday 16 February inclusive and will be in a less formal manner than the Melbourne Congress, which by nature of its restriction to members of IMPA and invited Government representatives, cannot embody a wide interest of participants in that forum.

This influenced the decision for the Queensland venue and the type of that meeting.

The technical programme for the Gold Coast is nearing finalisation and is expected to cover the following items:

“Helicopter operations in pilot transfers”: Speakers will cover such aspects as Viability in lieu of launches; Department of Aviation views and regulations; Department of Transport views and regulations; The requirements for helicopters suitable for inshore and offshore applications.

“The Design and Advancement of Automatic Telemetric Tide Gauges for ports and complex tidally restricted waterways”: Speakers from the Federal Department of Transport and The Queensland Department of Harbours and Marine.

“The Design and Development of Wharf Fendering”:

Speakers—Mr. Alex McKnight of McKnight and Associates and the Queensland Department of Harbours and Marine.

“The Great Barrier Reef”: Speaker—The Chairman of the Great Barrier Reef Marine Park Authority.

## **Difficulties Seen Over Compliance With Annex II**

A resolution urging Parties to the MARPOL 73/78 Convention to do their utmost to ensure that preparations for compliance with Annex II, including the provision of adequate reception



facilities, being finalized before 6 April, was adopted unanimously.

The resolution recommended that from 6 April—the date on which Annex II became effective—the stringency of measures to be taken by Parties in executing Port State Control, should be proportionate to the actual level of non-compliance. An annex to the resolution lists recommended actions to be taken which vary according to the condition of the ship and the extent to which it fails to comply.

The resolution was adopted following discussions about the implementation of Annex II, which deals with pollution by noxious liquid substances such as chemicals.

A paper from the Netherlands stated that by 1 December 1986 less than one third of world chemical tanker tonnage had so far been modified for compliance with Annex II. It feared that many ships could not be modified during the four months remaining and that they could not therefore be provided with the certificate of compliance required.

The Netherlands' paper said that only a few ports were provided with facilities adequate for the reception of liquid chemical wastes—another requirement of Annex II—although compliance by ships with Annex II discharge requirements was dependent upon the availability of port reception facilities.

As there was no period of grace for existing ships under Annex II, ships which had not been properly certified by 6 April could encounter difficulties when port state control was exercised, the Netherlands' paper said.

The Netherlands delegate told the Committee that his country was not seeking a delay in the implementation of Annex II but was seeking agreement on measures to expedite the modification of ships and the provision of adequate reception facilities for chemical wastes in ports, the lack of which would cause great difficulties for shipmasters endeavouring to comply with Annex II.

The Committee reaffirmed that any ship not in full compliance with Annex II after 6 April would be in violation of MARPOL. But it agreed that port state action should vary according to the degree of progress made towards full compliance. The resolution referred to above was adopted to help Governments put this into effect. The Commit-

tee will consider invalidating the resolution at its next session.

In stressing that compliance with the discharge requirements of Annex II was particularly contingent upon the availability of shore reception facilities, and noting that in many unloading ports it was unlikely that such facilities would be readily available by 6 April 1987, the Netherlands delegation offered to draft a Circular for consideration at the Committee's next session. It is anticipated that this will be similar to a circular adopted earlier when Annex I of the Convention was about to enter into force. It stated that, when contemplating action against those infringing the Convention, Parties should carefully consider the availability of reception facilities.

In noting that many delegations had stressed that the provision of adequate reception facilities was an essential element in the effective implementation of Annex II, the Secretary-General, Mr. C.P. Srivastava, drew the Committee's attention to the important contribution that IMO's technical assistance programme was making to the dissemination of information on this topic.

Thanks largely to the support provided by the Swedish International Development Authority, IMO was to hold a global symposium on Annex II reception facilities in May 1987, and a series of regional seminars on MARPOL 73/78 was currently being organized in Africa and Asia.

However, what was very much needed at this juncture was the opportunity to organize a greater number of national seminars, at which local problems faced by Governments and industry in dealing with the reception and disposal of Annex II waste could be addressed in some considerable depth. The Secretary-General appealed to delegations to the Committee to convey to their Governments his request that funds be allocated to the Organization for this purpose. *(IMO News)*

### **UNCTAD Seminar on Port Economics, Pricing in Le Havre**

The United Nations Conference on Trade and Development (UNCTAD) will hold the Port Economics and Pricing Seminar in Le Havre from Tuesday, September 1 to Friday, September 11.

The purpose of the seminar is twofold. The first aim is to place the decision-making process involved in port-pricing in its original context of port economics and management. The second aim is to present the different ways in which port dues and tariffs and their applications to all the major aspects of port activities can be determined.

The seminar will be led by a team of senior port executives, all specialists in their own fields. The lectures will be followed by a discussion in which participants will be able to raise specific problems relevant to their own ports.

The program of the seminar will be:

#### **Tuesday, September 1:**

Opening address

Presentation of participants in the seminar

#### **Wednesday, September 2:**

Financial and economic objectives of port organizations

The concept of profitability:

economic and financial aspects

Tools of management: financial and accountancy terminology

#### **Thursday, September 3:**

Tools of management (continued)

#### **Friday, September 4:**

Forecasts and budget control

Statistical measures and forecast of port traffic

Tariffs, general considerations

Question time and round table

#### **Monday, September 7:**

General tariffs for ships and cargo

Handling and warehousing charges for conventional goods

#### **Tuesday, September 8:**

Specific charges: equipment

Rates for container handling

#### **Wednesday, September 9:**

Exercises and case studies

Rates for the bulk trades (crude oil)

Rates for other bulk commodities

#### **Thursday, September 10:**

Real estate policy and management of port properties

Ancillary services: pilotage, towage

Pricing—Commercial policy

#### **Friday, September 11:**

Round table

Evaluation and close of the seminar

## **VTS Symposium at Gothenburg Next May**

The last few years have seen a rapid increase in VTS (vessel traffic services) systems with standards ranging from solely VHF radio based information systems, to systems relying on advanced surveillance radar and other information technology.

The discussion now centres on the standardization of the procedures in VTS, cooperation between local and regional systems, training of VTS operators and future applications of new technology.

The aim is to increase safety for shipping and the environment.

The sixth international symposium on VTS will give a global overview of trends and activities in the developing field of VTS. The symposium will be held at Congress Centre, Gothenburg, Sweden from May 17 to 19, 1988.

The Symposium, which by now has become an institution, will gather specialists involved in the development of VTS from all over the world. The keynote speech will be held by Mr. C.P. Srivastava, Secretary-General of IMO.

Session 1: "State of the art"

Session 2: "Traffic functions and problems"

Session 3: "Definitions and concepts of VTS functions"

Session 4: "VTS implementation and legal aspects"

Session 5: "Future prospects"

Session 6: "Conclusion and recommendations"

For further information, please write to:

"Sixth International Symposium on Vessel Traffic Services"

The Secretary, S-403 38 Gothenburg, Sweden

## **New Publications**

Publications

**"IMDG Labels and Placards": IMO**  
Sales No. 250.87.04.M, price £3.00  
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IMO Secretariat,  
Publications Section,  
4, Albert Embankment,  
London SE1 7SR, U.K.

## **The Americas**

### **Efforts Urged to Make Port-of-Spain Attractive**

**By Keith Anatol**

**General Manager, Port Authority**

The year 1986 proved to be quite traumatic for both port employees and port users with respect to dues and rates, management-labour relations and cargo throughput at the Port Authority of Trinidad and Tobago.

Our rates which were under review were finally determined by the Public Utilities Commission by Order No. 50 dated December 19, 1986 for the period January to June 1987.

### **Shift System**

Several meetings were held with the representative Union, the Seamen and Waterfront Workers' Trade Union, relative to the Authority's proposals that a shift system be implemented at an early date. This suggestion was not readily acceptable by the Union who wished to secure compensatory benefits for the employees because of the proposed elimination of overtime. The Authority, however, maintained that the implementation was necessary in order that retrenchment of any of its workers may be avoided. In addition, the system will make the Port Authority attractive and thus, it will be in a position to retain its existing customers and attract new ones. Unfortunately, the end of 1986 saw no agreement to this proposal.

### **Cargo Throughput**

During 1986 the number of container vessels calling at Port-of-Spain increased from 318 in 1985 to 411 in 1986 although the number of containers which moved through the port declined by approximately 11%, that is, from 58,000 TEUs to 52,000 TEUs. Total cargo tonnages also declined from 1.2M to 1.1M during the relative period. As a consequence of this reduction in cargo traffic during 1986, a number of gangs although being paid a guaranteed 40-hour week were not utilised.

In spite of the reduction in cargo as enumerated above, our revenues moved from \$89M to \$99M for the period. This figure, however, would

have been substantially lower without the rate increases recently approved by the PUC.

### **Port Development**

In preparation of an anticipated aggressive marketing programme to be implemented in 1987 several development projects were undertaken, among them being:

- a. Electrical Revamp Scheme, which improved the lighting generally and relocated all overhead power cables underground.
- b. Extension of the Container Terminal, which will improve our container marshalling facilities tremendously.
- c. Refurbishing LPG Filling Station. This important safety measure was expedited during the year.

### **Perspectives for 1987**

The economic environment under which the organisation and indeed the whole country is operating makes it imperative that in 1987 we embark upon programmes to change the tarnished image of the port of Port-of-Spain. In order to make our organisation a viable financial enterprise, the assistance and co-operation of the representative Union, the Seamen and Waterfront Workers' Trade Union, and indeed, all employees of the Authority are required.

It is necessary that our financial austerity measures be widened and every effort be made to make this port an attractive one. The shift system needs to be implemented; productivity has to be increased; and wastage in all port activities eliminated.

The Authority has the infrastructure, the equipment and the manpower necessary to bring about this change.

All that is now required is the will of every employee to ensure that we are successful.

*(Port Authority of Trinidad and Tobago)*

### **Memorandum Signed On Improvements of Ports of LA, Long Beach**

The signing of a memorandum of understanding to assure cooperative expansion plans at the Ports of Los Angeles and Long Beach was recently witnessed by Congressman Glenn Anderson (D-CA) and Brig. Gen. Patrick Kelly, Commander of the South Pacific Division of the U.S. Army Corps of Engineers.

Signing the memorandum was Mr. Ezunial Burts, Executive Director, Port of Los Angeles; Mr. James McJunkin, Executive Director, Port of Long Beach and Col. Dennis F. Butler, Los Angeles District Engineer for the Corps.

The memorandum calls for the completion of a Feasibility Study and Environmental Impact Statement/Environmental Impact Report (EIS/EIR) to identify problems and needs associated with anticipated cargo throughput increases. It will also determine the desirability and extent of federal participation in harbor deepening and disposal of dredging material at the two ports in accordance with the project described in Public Law 99-662, the Water Resources Development Act of 1986.

Channel deepening should improve the safety of the ports by minimizing surge at berths and navigation hazards while enhancing the environmental quality of San Pedro Bay.

The study, to be completed by August 1989, is part of Phase I of the 2020 Plan, designed to determine future land, water and facility requirements in the ports into the 21st century.

Congressman Anderson, who has been instrumental to the ports' development, also announced that the House of Representatives approved legislation for funding for the feasibility report as well as maintenance of the San Pedro Bay Hydraulic Model. The model, constructed by the Corps Waterways Experiment Station and located in Vicksburg, Miss., analyzes the potential effects of proposed harbor improvements.

Mr. Anderson said that the Corps projects "will not only help us meet our future needs at the Ports of Los Angeles and Long Beach, but it will enable us to make needed improvements in a manner that will protect our fragile marine environment."

## Canada, US Port Container Traffic '86

Canada	TEUs	Metric Tons
Halifax	270,984	2,265,000
Montreal	531,525	4,900,000
Saint John	60,176	546,000
St. John's	47,538	251,000
Vancouver (BC)	222,781	2,000,855
Windsor	10,332	105,780
United States	TEUs	Metric Tons
Anchorage	142,710	1,042,458
Baltimore	567,000	4,357,440
Boston	143,534	874,380
Charleston	480,819	3,347,440
Chicago	608	n/a
Cleveland	476	5,293
Freeport (TX)	38,786	186,423
Galveston	42,593	376,761
Gulfport (fy)	n/a	504,218
Hampton Roads	436,022	3,137,095
Houston	402,972	3,088,056
Jacksonville	78,375	793,325
Long Beach	1,394,453	20,353,749 (mrt)
Los Angeles	1,324,547	n/a
Manatee	2,261	20,350
Miami (fy)	219,524	2,184,243
Milwaukee	425	3,789
Mobile	14,249	118,097
New Orleans	424,116	3,099,907
New York	2,340,000	14,031,000
Oakland	900,017	11,300,000 (mrt)
Palm Beach (fy)	138,219	1,760,490
Philadelphia	91,412	912,822
Port Everglades	110,364	698,602
Portland (OR)	105,097	1,272,265
Portsmouth (NH) (fy)	1,200	11,000 (est)
Richmond (VA)	20,948	156,142
San Diego	5,688	58,994
San Francisco	97,704	2,130,000 (mrt)
San Juan	430,000	2,700,000
Savannah	501,445	3,572,239
Seattle	851,000	6,800,000
Tacoma	666,155	4,000,843
Tampa (fy)	3,341	32,942
Toledo	250	n/a
Vancouver (WA)	1,017	15,113
Wilmington (DE) (fy)	39,162	252,598
Wilmington (NC)	111,552	606,249

NOTE: Data are for calendar year except where noted.

Data reported in short tons were converted by AAPA to metric tons at  
1 short ton = .9078 metric ton.

(fy) = fiscal year

(mrt) = metric revenue ton

### **Income, Tonnage Up For 1st Quarter at Port of Houston**

The Port of Houston Authority posted a net income of \$536,410 for the first quarter of 1987, up substantially from the same period a year ago. Port Authority tonnage was also up, totalling 2.5 million tons for the first three months of 1987.

PHA Executive Director James Pugh attributed the earnings increase for the first quarter of 1987 to cost-cutting measures the port began implementing in 1986.

"By trimming operating costs, the Port Authority has remained financially sound without affecting its service to port users," Mr. Pugh said.

PHA operating revenues for the quarter were \$10.4 million. Revenues for the first three months of 1986 totalled \$10.5 million, and the Port Authority finished that period with a \$114,897 loss in income.

The first quarter tonnage figures reflect a 5 percent increase from the Port Authority's total of 2.4 million tons for the same period in 1986.

PHA's Barbour's Cut Container Terminal handled 796,000 tons for the first three months of this year, up 18 percent from the first quarter of 1986. The terminal posted a 109 percent increase in bulk shipments alone, which exceeded 27,500 tons.

Containerized cargo handled at Barbour's Cut and the Turning Basin Terminal was up 32 percent, to 116,400 TEUs (20-foot-equivalent units).

### **Mr. Hauser Pres. of Long Beach Commission**

Mr. David L. Hauser has been elected president of the Board of Harbor Commissioners of the Port of Long Beach for fiscal 1987-88, succeeding Mr. C. Robert Langslet, who served for the previous twelve-month period.

In an action taken at the July 6 board meeting, Mr. George F. Talin, Sr. was voted vice president for the coming fiscal year. Ms. Louise M. DuVall will serve as Board Secretary, with Mr. Langslet named Assistant Secretary.

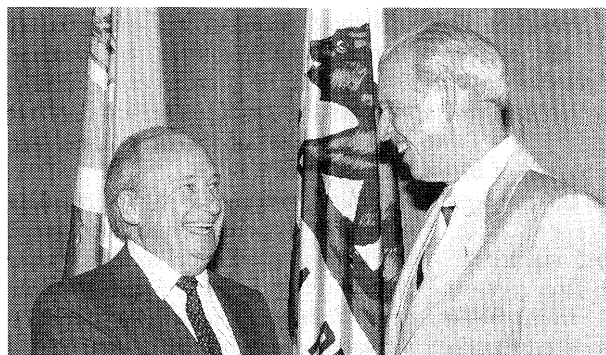
In taking over the presidency for the next 12 months, Mr. Hauser noted that current tonnage figures indicate Long Beach Harbor is experiencing another record year as West Coast cargo leader.

### **Massport to Study Feasibility of CCRS**

The Massachusetts Port Authority's (Massport's) board of directors has begun the process of studying the feasibility of a Community Cargo Release System (CCRS) for Boston's airport and seaport facilities, with the recent award of a six-month requirements study contract to Booz, Allen & Hamilton, Inc.

A number of U.S. ports have already instituted computerized documentation service centers for the exchange of information pertaining to the movement and clearance of import and export cargo. Massport, however, has chosen to investigate the costs, the desirability, the potential configuration, and the effect on competitive position of a CCRS before following suit. Massport's six-month contract, which was awarded as the result of a request-for-proposal issued in January 1987, will provide the background needed for an informed decision on possible implementation of such a system.

"This evaluation," pointed out Mr. David W. Davis, Massport's executive director, "is an important first step in exploring whether our air and sea cargo facilities can benefit from a CCRS and, if so, what technology we should be targeting. Before discussing implementation of a system, we need to go through this requirements study and competitive analysis to guarantee a thoughtful allocation of our resources."



*Mr. Hauser, new president (right), and Mr. Langslet*

"Metric revenue tonnage increased by 6.3% during the first three quarters of the current fiscal year, while the number of containers handled during this same period shows a 15.5% gain. I am confident that the year ahead will be a productive one both for the Port

### **\$194.6 Million Budget For Port of Los Angeles**

The Port of Los Angeles Board of Harbor Commissioners approved the Port's \$194.6 million 1987-88 budget at its meeting on June 24. The approved budget represents a \$5.9 million or 2.9 percent decrease in receipts from the previous fiscal year, with no proposed tariff increases for the coming year.

"The budget reflects the Port's efforts to carefully weigh the trade-offs between implementing new, creative ideas and containing spending growth," said Mr. Ezunial Burts, Executive Director, Port of Los Angeles. "We are especially pleased that we were able to present a budget that did not increase tariffs to our tenants."

Approximately \$66 million have been allotted for continued progress in the Port's \$500 million capital development program, allowing the Port to maintain its prominence as a leading competitor in international trade.

Capital projects include the World Cruise Center, featuring a new passenger terminal building at Berth 91 and a refurbished Berth 93AB facility; a container facility for Mitsui-O.S.K. Lines in joint service with East Asiatic Company at Berths 136-139; facilities for steel handling at Berths 174-176; and Pier 300, a 190-acre landfill project.

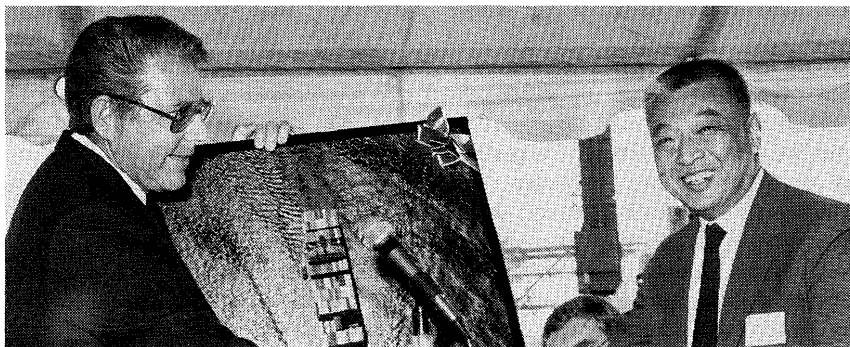
The budget is for the fiscal year beginning July 1, 1987 and ending June 30, 1988.

and for the City of Long Beach. I am particularly pleased to have the honor of heading the Harbor Commission during the City of Long Beach Centennial Celebration."

Mr. Hauser, a mortgage broker, and his wife Mary Lu live in Long Beach.

## Long Beach Container Terminal Dedicated

Dedication ceremonies recently held at the new 88-acre Long Beach Container Terminal on Pier A in the Port of Long Beach found Mr. C.H. Tung, Chairman and Chief Executive Officer of Orient Overseas Holdings, Ltd. of Hong Kong on hand to officiate. Mr. Tung, who heads up one of the world's largest ship fleets, is pictured at right as he was presented with a color photograph of the maiden voyage arrival in Long Beach of the MV Oriental Friend-



ship. The vessel is one of four new 22-knot, 2,829-TEU capacity ships just completed for Orient Overseas Container Line for use in an eastbound round-the-world service operated in conjunction with "K" Line and Neptune Orient Line. Making the presentation on behalf of the Port was Mr. Charles F. Connors, Deputy Executive Director. OOCL presently operates a fleet of 31 vessels, calling at 104 ports in 55 countries and has been a tenant at Long Beach since the days of breakbulk cargo. An estimated 1,300 guests participated in the dedication.

## Oakland Port Board OKs 'Harder, Smarter' Budget

Oakland's Board of Port Commissioners approved a budget of \$68.5 million for the fiscal year 1987-88, beginning July 1. The figure is some \$3 million more than last year's budget, reflecting modest upturns in both seaport and airport revenues.

"Greater profitability in the coming 12 months, of course, is a welcome prospect," said Board President G. William Hunter. "Still," Mr. Hunter cautioned, "this is a budget that has to work harder and smarter to obtain that result."

The budget reflects a payroll of 570 employees, 28 more than the previous fiscal year.

Increased personnel costs are primarily responsible for the five percent increase in expenses, from \$30.5 million to \$32.9 million, occurring in the new fiscal year. More than half of the new positions will be at Oakland International Airport, with the Port's engineering, personnel and insurance departments accounting for the balance of the new hires.

Also contributing to overhead is the need to lease office space for Port offices pending completion of a new

headquarters building in Jack London Square in the fall of 1989.

Some \$5.9 million is budgeted by the Port for payments to the City of Oakland for contractual services, such as police and fire, delivered within the Port area, and for reimbursement for City bonds whose proceeds were spent on Port improvements.

Seaport revenues are projected to increase by \$2.4 million, or 8 percent, as a result of greater cargo traffic, forthcoming tariff increases and the new services of Senator Line and Maersk Line.

Airport revenues are up by \$1.4 million, or six percent, due to expanded service by passenger airlines, lease payments by Federal Express on its new 23-acre sorting facility and increased operations by United Parcel Service.

The Port's real estate division, despite increased revenues from the Jack London Square expansion and redevelopment, projects \$46,000 less in income as a result of the transfer of certain office building rentals to the Maritime Division.

## New Logo Reflects Dual Responsibility

The Jacksonville Port Authority announced the selection of its new logo, "Jaxport." The logo was designed by Carraway Kemp Communications of Jacksonville and is intended to reflect the dual responsibility of the Jacksonville Port Authority to operate both aviation and maritime transportation facilities in Duval County.

Both a ship and airplane are part of the logo design. Traditional colors—blue, gold, and white—are used for the logo. Jacksonville Port Authority Managing Director, Paul D. deMariano stated, "It was time for a 'new look.' We have discovered that the public is sometimes confused about the Jacksonville Port Authority—what we do. The new logo is a step toward educating people about the authority and its importance to Northeast Florida."

The logo is being implemented on business cards and stationery as current supplies diminish. The logo will also be added to buildings, facilities, equipment, and signage in the near future.

The Jacksonville Port Authority owns and operates the Blount Island and Talleyrand Docks and Terminals maritime facilities, as well as Craig Airport, Herlong Airport, and Jacksonville International Airport.

## Strategic Plan for Baltimore Announced

Governor William Donald Schaefer announced a Strategic Plan for the Port of Baltimore that includes nearly 50 action steps to improve operations in the port.

"These changes—which include improved customer service, a new high-speed rail yard, and dedicated transcontinental train service—will make Baltimore easier, faster, and cheaper to use," Governor Schaefer said.

In announcing the plan, the Governor said that the Maryland Port Administration will:

- Reorganize its Trade and Promotion Division to provide more specialized service to shipper and carrier customers and to upgrade its market analysis capability.
- Initiate development of a 70-acre Intermodal Container Transfer Facility incorporating the latest technology in ship-to-rail cargo movements in con-

junction with the construction of the Seagirt Marine Terminal.

- Jointly promote with CSX a new high-quality, transcontinental train service, to be known as the "Baltimore Clipper," that will connect the port with the Pacific Northwest.

- Target cargo movements that can provide new work for the International Longshoremen's Association in Baltimore.

- Work with the City of Baltimore to identify a site for a new cruise passenger facility.

- Implement a rail brokerage program so as to consolidate shipments and obtain volume discounts.

- Install double-trolley cranes to handle larger than Panamax vessels cost-effectively at Seagirt Marine Terminal.

"These steps are being taken so that we can meet our goal of increasing general cargo tonnage by 50 percent over the next five years," said Governor Schaefer.

The MPA's Strategic Plan was developed by the agency in conjunction with

an outside consultant and an advisory panel drawn from the private sector.

The plan includes a core strategy and eight supporting strategies to strengthen the port's labor relations, marketing, administrative activities, inland transportation network, operations, facilities, information systems, and financial position.

"The MPA's overall strategy is to integrate the Port of Baltimore into an international ocean shipping system by providing and/or promoting high-throughput marine terminals and logistical services so as to maximize the returns to port users through cost reductions and the creation of new business opportunities," said Maryland Port Administrator David A. Wagner.

"The MPA will work to ensure the port's continuing role as part of a successful transportation pipeline for moving international cargo in an efficient and effective manner," he added. "This includes the MPA's promotion of both private and public terminals within the Port of Baltimore."

## Steam Turbine Generator Bound for Egypt

The fourth steam turbine generator unit of a project move to Egypt recently came through the Port of Charleston.

Like its three predecessor units, the most recent one was bound for the Shoubrah El-Kheima power plant on the Nile River near Cairo. The 950-megawatt generating plant is a key component of the Egyptian Government's electrification program.

Made by Westinghouse Corporation, each unit in the project consists of 200 packages totaling 1,500 tons and 100,000 cubic feet. The largest single part of a unit is the generator starter, weighing 360 tons and measuring 35' long, 15 1/2' wide and 15' high (photo).

The stator comes from Westinghouse's Pittsburgh plant to the Port of Charleston's Columbus Street Terminal

on a special 22-axle Schnabel rail car. The car is equipped with a hydraulic jacking system that can shift the load vertically or laterally to provide needed clearances while in transit.

Columbus Street Terminal, which Westinghouse officials chose for the consolidation of material, has a 475-ton capacity heavy lift crane, dockside rail system and the needed backup space at dockside to accommodate project shipments. The dock apron at Columbus Street is 150' wide and the linear berth at the terminal stretches 3,875 feet.

The 475-ton crane, lovingly dubbed "The Monster" by project shippers, easily and precisely lifts the units onto Lykes Line vessels for their trip to the Nile, where they are barged to the power plant.



## Saint John Eyes Labor Intensive Business

In the face of reduced port calls by major shipping lines all over the world and the financial troubles of shipping companies in general, Mr. Edward (Ted) Reevey takes a realistic look at the growth potential of his port. Mr. Reevey, a Saint John businessman, is the newly elected Chairman of the Saint John Port Development Commission and former President of the Saint John Board of Trade.

He assumed the Chairmanship from Mr. Harry L. Gaunce, who was elected Chairman of the new Local Port Corporation. Mr. Gaunce remains Vice Chairman of the Port Commission.

"We have some of the most sophisticated facilities in the world right here in Saint John, a more than \$200 million investment over the last 15 years. We know that the economic survival of New Brunswick is closely tied to the economic viability of the port and the international trade of our country," he said.

"A look at Saint John will show that it is, indeed, growing very well. There is a great deal of tonnage moving through and the figures grow each year," he said. Noting that the port has specialized terminals for the handling of potash and forest products, as well as oil, sugar, breakbulk, and a state-of-the-art container terminal, Mr. Reevey added, "We are poised for even more growth—but we have to be realistic and look at the short term, rather than the long term in some areas."

The long-term look includes the specialized cargo facilities. The short term, he noted, must include the labor intensive business to properly utilize the productivity for which Saint John has become famous. "Container traffic growth is inhibited. It is not the vibrant entity it once was and much of that has to do with the sheer economy of fewer port calls and bringing the cargo to meet the ship," said Mr. Reevey, noting frankly the withdrawal of many of the container lines that once made Saint John a direct port of call.

"In addition, the further development of intermodalism and the ability of the West Coast ports to draw away much Pacific Rim business has also hurt many East Coast ports and we are not immune to this," he said.



Saint John's solution might be de-emphasizing calls by third generation container vessels, and looking at feeder services and smaller ships carrying labor intensive cargoes, said Mr. Reevey. He also said that Saint John must take a "long hard look" at restoring the trade that gave rise to the port of Saint John in the 1800s—the booming cargo movements between the Northwest United States and Eastern Canada via Saint John.

"The task of all of us involved with the port of Saint John today is to stay on top of trade patterns and take a new look at the way we are doing things." Saint John, he noted, is still the major Eastern Canadian gateway for the Central and South American trades. "We are aware of our strengths in the North/South trades and must work to keep this business strong."

The recent granting of Local Port Corporation status for Saint John by the Federal Government allows the port to be run as a business entity by local business persons. "The ability for flexibility and the control of our destiny will be pivotal in our future growth," said Mr. Reevey. He also said that the results of an intensive marketing study, due this summer, "will allow us the luxury of looking at ourselves through expert eyes and plan for the realistic goals we should have."

Lastly, he added, "more so than ever, the province of New Brunswick has taken an interest in the port and has granted generous financial support to our marketing efforts." The province has also supported the Port Commission efforts by appointing Deputy Minister of Commerce and Technology Larry Armstrong to the Commission.

"The message is that Saint John has been an important Canadian gateway for more than 400 years but has also been the Port of New Brunswick. That message is getting across," Mr. Reevey said.

### **Program for Enhancing Portland's Position**

In the next five years, the Port of Portland is proposing to invest \$180 million in a building program aimed at enhancing Portland's position as a major international trade, distribution, and transportation center.

"No question this is an aggressive capital improvement program," admits Mr. Lloyd Anderson, executive direc-

tor of the Port of Portland. "It is this level of investment that the Port of Portland Commission has reviewed over the last few months and feels it necessary if the Port is to take advantage of its natural transportation assets and encourage community economic growth and employment opportunities."

The five-year plan requires an investment of nearly \$106 million in aviation alone. Approximately \$95 million is envisioned for expansion and improvements at Portland International Airport (PDX), which is a self-sufficient Port operation not requiring property tax revenues. Capital funds are derived from the sale of airport revenue bonds. These are bonds negotiated directly with the airlines and retired through fees paid by them. The remaining \$11.2 million will be used to improve Troutdale and Hillsboro general aviation airports and to build a third one at Mulino.

In addition, \$74 million will be directed toward developing additional industrial land, improving road access to Port facilities and business properties, expanding marine terminals and upgrading the ship repair yard complex.

"This investment program has two very specific goals," Mr. Anderson underscored. "It is to take advantage of business opportunities that create an economic vitality for this community and state. Second it is to serve our customers well."

"The capital program envisioned brings the Port's land resources and transportation assets together to make our maritime facilities unique on the West Coast," Mr. Anderson said. "Developing land adjacent to modern marine facilities with direct access to truck, rail and water transportation offers our customers distribution advantages few other ports can match. No other port can match the quality and quantity of this combination on the West Coast."

(PORTSIDE)

## **Africa/Europe**

### **Structural Changes In Shipping Business Affect Gothenburg '86**

**By Per Bjurström**  
**President of Port of Gothenburg AB**

In contrast to 1985, which was an uneventful year with satisfactory growth, the past year has been more difficult despite higher than ever volumes of traffic. The loss of the South African traffic, the chronic recession in Australia and the loss of parts of the West Africa traffic give a good indication as to how traditional port activities can be expected to develop in the future. Despite these setbacks the results for the year were considerably better than expected. The positive results cannot, however, be attributed to the success of the port's basic, traditional activities.

During 1986 the port suffered, for the first time for many years, from the effects of labour disputes. These disputes resulted in considerable economic and psychological damage, not only to port activities but also to industry as a whole. The problem deserves considerable attention since the increased possibilities for rail transport reduce industry's dependence on any particular port. Should the ports once again become centres of conflict there is every chance that their traditional importance in the transport infrastructure of Sweden and Scandinavia will very quickly become a thing of the past.

The Shipping business is undergoing structural changes which are of direct relevance to port activities. Rerouting of traffic and changes in tonnage lead to planning difficulties and subsequent negative consequences for payload availability which, in turn, results in poor productivity and profitability. In an attempt to overcome these difficulties a concentration of port activities to considerably smaller areas was undertaken during the year. Alvsborg Harbour and the Inner Harbour were the areas primarily affected. In these locations areas were released to be used for other purposes.

Technical changes have also taken



place in port operations. During the year a new operational structure (the straddle-carrier system) has been introduced. The system will be extended continuously and is expected to be fully implemented in Skandia Harbour by the beginning of the nineties. Further investments in Skandia Harbour include two new container cranes to replace the older combination cranes. The problem of the railway-goods loading area will be solved by means of two new transtainer cranes. These investments will be carried out during 1987.

The emphasis of basic port activities changed during 1986. New investments were undertaken and it is hoped that these will lead to a diversified and intensified participation in the general transport sector. A new sphere of business, the Land Terminal, was set up and thereby an integration into the general transport system was achieved. The company handles 90% of trans-oceanic goods through Swedish ports. The introduction of an increased number of rail-ferry links will, in all probability, result in a decrease of the total volume of goods handled in Gothenburg. This will, to some degree, be compensated by our rail-ferry link

between Gothenburg and Fredrikshavn. This new service is expected to start operations in August 1987.

Within the data sector developments have proceeded according to plan. HT Data has achieved good results for the year and the addition of Transport Data Link (TDL) has been of considerable importance to the information flow within the transport sector. The Port of Gothenburg owns, at the present time, 37.5% of the equity of TDL. Svensk Hamndata AB was also set up during the year and the Port of Gothenburg AB owns 10% of the Equity. The purpose of Svensk Hamndata AB is to coordinate computer development in other Swedish ports.

The export of services can prove in time to be of considerable significance to Sweden. The Port of Gothenburg AB sells services internationally and on the domestic market through Port of Gothenburg Consultancy AB and the affiliated company SwedPort. Other partners in SwedPort are, Scandiaconsult, Trans Consultants and SSPA Maritime Consulting AB. The main area of operations at the present time is Tanzania where a large project is being undertaken for SIDA.

The Port of Gothenburg AB has had its best year ever but this cannot be attributed to the basic activity of the port where return on capital employed continues to be unsatisfactory. The positive results for 1986 can instead be attributed to income from sources other than the company's primary field of activity. Activities involving real estate, construction, computers, consultancy and finance have contributed to a very significant extent to the successful results achieved during the year.

Generally speaking port operations in Sweden are undergoing considerable structural changes and this process leads inevitably to a change of emphasis where traditional boundaries between port activities and the rest of the transport industry are becoming less and less clearly defined. If we can remain one step ahead there is reason to believe that Gothenburg can continue to develop as a port well into the future. The potential for progress is considerable especially since we are, at the present time, in the process of realigning our objectives and are pledged to a greater commitment to the transport sector as a whole.

*(Port of Gothenburg AB 1986)*

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## Port Data Processing For Smooth Cargo Handling at Antwerp

In order to facilitate ships' calls and cargo-handling in the port of Antwerp and speed up administrative procedures related to a ship's stay in the port, both the Port Authorities and the private sector have taken steps in the field of Port Data Processing.

As for the automation of ships' guidance the initiative was mainly taken by the Municipal Authorities, as port administrator. In the late seventies automation of shipping administration was started. The EDP system which was mainly geared towards the administrative processing of data concerning incoming vessels, such as statistics and the calculation of port dues etc., is now being totally revised and extended so that it can also be used for operational support. Hence the denomination APICS (Antwerp Port Information and Control System).

A direct connection with the EDP system incorporated in the extended shore radar chain—which will be operational by 1990—will therefore be provided. The system will also enable Antwerp to guarantee better ships' guidance within the port itself.

During the session of 25 November 1986, the City Council of Antwerp approved the specifications for the delivery and the starting up of APICS.

As far as cargo-handling is concerned, the initiative was mainly taken by the private sector. Port companies quickly realized that, owing to the specific activities within the ports where both cargo flows and information flows concerning vessels and cargoes carried are brought together, a direct exchange of data between the systems of the various companies offers considerable possibilities with a view to simplification and speeding-up of transport guidance.

In Antwerp the aims were realized by the SEAGHA project. Since September 1984, the Study Centre for the Expansion of Antwerp has started a thorough preliminary survey in which the existing data and document flows between the various operational functions in the Antwerp port area were examined and laid down in structured flow charts.

The process was further analysed in various specialized study groups and possible computer solutions were inves-

tigated.

On October 28, 1986, SEAGHA was set up as an independent co-operative company in which various professional associations take part. In the short term an initial pilot project, limited in scope, will be started. The first objective of the project will be to make data exchange faster and more accurate by making full use of the potential of the available EDP systems of the companies.

At the outset the exchange will be restricted to the port companies concerned. Direct data exchange with the customs services on the one hand and APICS on the other is being planned as a first extension towards the outside world.

According to plans SEAGHA will be built up in 1987 and tested in a number of pilot companies during the same year. The horizontal extension can then be started as from early 1988.

(Hinterland)

## Cargo, Passenger Traffic Up at Helsinki

(Extracts from "Annual Report 1986, The Port of Helsinki")

The general outlook for the Finnish economy weakened in the early months of 1986. There was little or no growth in exports from among the most important industrial sectors, such as the forest industry and metals and engineering. On the import front the trend was moderate, even restrained, and only consumer goods imports marked up some growth. Towards the end of the year the export situation improved rapidly, and overall the figure for the year was practically up to the 1985 level.

The value of foreign trade stood at nearly one quarter of total supply and demand. Imports of merchandise totaled 77,600 M FIM, while exports accounted for 82,600 M FIM. The trade account thus posted a surplus on the year of some 5,000 M FIM.

Maritime traffic continues to hold a dominant position in the transporting of Finland's foreign trade. Measured by tonnage, some 85% of all shipments are carried by sea, accounting for 77% of the total value of foreign trade. The quantity of goods transported to and from Finnish harbors was down slightly on the previous year, at 50.2 million tons. Import shipments declined some-

what, to 30.0 million tons, while exports were almost unchanged at 20.2 million tons.

In terms of the volume of traffic passing through the Port of Helsinki, 1986 was once again a highly successful years and both cargo and passenger traffic figures rose to record levels, with the latter showing a particularly pronounced increase. The growth in utilized traffic in containers, lorries, and trailers also accelerated sharply. The aggregate goods traffic total reached a new record high of slightly more than 7.6 million tons. The most positive development was the recovery in export shipments in the second half of the year, and the fact that general cargo imports came close to matching the 1985 figure, at a time when the national trend had already turned noticeably downwards. In terms of tonnage, general cargo imports and exports through Helsinki were almost exactly in balance.

The popularity of travel by sea has been increasing from year to year, ever since the introduction in 1971 of regular all-year passenger ferry services. Passenger traffic leaped up by 14% on the year, in response to an increasingly extensive and high-quality supply of services in the sector.

## Key Facts

Finances (M FIM)		1986	1985
Total revenue		195.6	186.9
Total expenditure		183.2	172.9
Gross margin		85.1	78.0
Result		12.4	14.0
Financing surplus		49.0	36.7
Return on fixed assets		4.4%	4.5%-points
Investments		36.3	41.3
Value of fixed assets		941.1	910.4

Traffic		1986	1985	Change %
Cargo traffic, million tons		7.63	7.62	+0
Imports		4.33	4.22	+2
—bulk cargo		2.23	2.08	+7
—general cargo		2.10	2.14	-2
Exports		2.19	2.13	+3
—bulk cargo		0.10	0.08	+17
—general cargo		1.58	1.48	+7
Coastal traffic		1.11	1.26	-12
Containers, TEU-units		173,039	143,913	+17
Lorry and trailer traffic		96,030	89,369	+7
Vessel traffic, vessels nrt		22,004,130	17,576,114	+25
Passenger traffic, passengers		2,481,364	2,183,902	+14

## Container Greetings From Port of Rotterdam Traveling the World Over

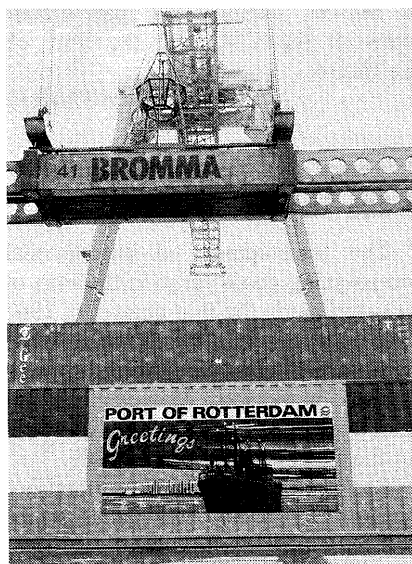
The Port of Rotterdam together with the Rotterdam-based company CAS International have developed a new advertising method to promote container traffic via Rotterdam.

The idea of using fast-moving shipping containers for advertising purposes was initiated by CAS International.

Together with the Rotterdam artists group Kunst en Vaarwerk and the container-leasing company Textainer the idea was worked out in detail.

Two hundred enormous logos will be manufactured for decoration on 100 containers finally resulting in container greetings from the Port of Rotterdam travelling all over the world (photo).

The first 100 containers are being used on a trial basis for a period of twelve months. More units will be used for a longer period in the event of a good response.



Container traffic is very important for Rotterdam since it is one of the fastest growing activities in the port and transport industry. Rotterdam never stops developing new methods of container handling and distribution (e.g. the regular container barge services over the River Rhine) and is very eager to promote itself as one of the world's leading container ports. They are proud to be the first port communicating with target groups through containers.

## Record Limerick Trade

Total tonnage of goods moved through Limerick Port in 1986 achieved a record level of 4.23 m tonnes compared with the previous highest of 3.4 m tonnes in 1985—an increase of almost 24%.

Mr. M. J. Hctor, General Manager, Limerick Harbour Commissioners told "Shannon Shipping News" that the satisfactory returns largely arose from an increase of coal shipments to Moneypoint power station and from better-than-expected returns at Tarbert power station.

The overall throughput exceeded budget (3.5 m tonnes) by 700,000 tonnes.

"Current indications are that cargo throughput for 1987 will exceed 4.5 m tonnes," said Mr. Hctor.

(Shannon Shipping News)

## Princess Margaret Opens Hull's Ferry Terminal

The new £5 million ferry terminal at ABP's Port of Hull was officially opened on 15th July by Her Royal Highness the Princess Margaret.

Built by Associated British Ports and to be used by North Sea Ferries, the New "Princess Margaret Terminal" is the third building of its kind to have stood on the site. The opening of the terminal, which provides a high standard of accommodation for passengers in transit from Hull to Rotterdam and Zeebrugge, coincides with the introduction of North Sea Ferries' new luxury vessels "Norsea" and "Norsun" to serve the route. At 31,000 dwt, the new vessels are the largest ships serving in the North Sea, and represent a four-fold expansion of North Sea Ferries' passenger capacity.

Inviting Her Royal Highness to open the terminal, the Chairman of Associated British Ports, Sir Keith Stuart, said:

"The impressive growth in business which has now led us to a complete redevelopment of the terminal is also important in two other respects. First, we are highly encouraged by the confidence which is being shown in the Port of Hull by our important customers North Sea Ferries who have spent some £80 million on their splendid new vessels. Second, the growth in the trade which is passing through this terminal is part of a general expansion throughout the Port of Hull, whose

fortunes have changed dramatically in recent years."

North Sea Ferries' General manager, Mr. Remi Speld, said that 1987 had been a "landmark year" for the company:

"The launch of the new ships, the expansion of our capacity on the Zeebrugge route, the new terminal and the new North Sea Ferries corporate identity have all been very important events for us this year, which all add up to a significantly better deal for travellers to Europe."

## Plans for Southampton Retail Park Proposed

Associated British Ports Holdings PLC and the Provincial Gallagher Partnership submitted plans for a major retail park in Southampton city centre to the City Council.

The scheme, which will occupy a prominent position on the main western approach to the city centre, is expected to provide jobs for between 550 and 600 people as well as making substantial environmental improvements to the area.

Under the plan the 17-acre site at Mountbatten Way—next to the port's number 10 Gate—will contain a food store, a drive-in fast food restaurant and five retail warehouses. Total floor space will be approximately 200,000 square feet and free surface parking will be provided for over 1,100 cars.

The developers believe that their proposals will help bring many more shoppers into Southampton and bolster the attraction of the city, which has recently been campaigning against a multiplicity of major retail proposals along the M27 motorway.

Following major groundworks and site stabilization completion of the new development is anticipated in 1989/90. The finished scheme will represent an investment of approximately £18 million by the Provincial Gallagher Partnership.

Associated British Ports Holdings PLC, owners of the port of Southampton, already have a number of successful property development schemes completed and underway. Their position in the property development business was greatly strengthened earlier this year by the acquisition of Grosvenor Square Properties Group PLC.

## **"Gunfleet" Joins PLA's Harbor Service Fleet**

In a ceremony on 23rd June at Tower Pier the latest addition to the Port of London Authority's harbour service fleet was named "Gunfleet" (photo) by Lady Kellett, wife of PLA Chairman, Sir Brian Kellett.

"Gunfleet," a 44ft twin-screw GRP launch, will be based at PLA's Thames Navigation Service headquarters at Gravesend. It will operate mainly on the 55-mile stretch of the Thames between the outer Estuary and Thamesmead.

"Gunfleet's" duties will include the inspection of licenced river works, river traffic control, advice and assistance to river users, river byelaw enforcement and response to marine and riverside incidents. The launch has equipment for oil pollution clearance and main engine driven pumps to pump out

flooded craft and for fighting minor fires. "Gunfleet" is also fitted with a transom ladder for recovering casualties from the river and a system of bollards and fairleads for towing small craft.

"Gunfleet" has a crew of three: master, coxswain and deckhand, and

will operate on a 24-hour 7-day week basis in all but the most severe weather conditions.

With all these capabilities and a top speed of 21 knots, "Gunfleet" will be a valuable addition to the PLA's Thames Harbour Service fleet in the busy lower reaches of the river.



## **Le Havre Satisfied With Tariff Reform**

The port authority is primarily concerned with reducing port costs, but they are far from being the only thing affected by the need to be competitive. The second point of major concern is inland transport, the port being a sort of interface between sea and land transport.

An important meeting to discuss the movement of containers by rail was therefore held last November with the French Rail subsidiary concerned, the CNC (Compagnie Nouvelle de Conteneurs), which resulted in new measures being announced that make the movement of goods through the Port of Le Havre still more competitive. The CNC Chairman, Mr. Querleux, and Commercial Manager, Mr. Tartier, announced changes in the tariff structure effective from January 1st 1987. As Mr. Smagghe, General Manager of the Port Authority, put it, "A port cannot exist without a fast-moving and competitive rail service of high quality, and every link in the transport chain is right up in the front line."

The CNC representatives then announced a number of measures which will be highly beneficial to the port of Le Havre. Mr. Querleux stated first that, in view of certain tariff distortions prejudicial to the port, and provided more or less similar distances were

being compared, he undertook that the CNC would apply to containers traveling to or from Le Havre rate per kilometre lower than, or at least equal to that applied on an international rail route.

Mr. Tartier then gave detailed and valuable information about the existence in the reference tariff of special dispositions which result in a lowering of rates in certain cases, particularly reductions of 10 to 30% for block trains. But above all he disclosed that a further tariff reform would take effect on January 1st 1987 with the twofold aim of simplifying rates and increasing competitiveness. He announced a lowering of the rates between Le Havre and ten CNC terminals, with a special price included in the tariff. The towns concerned are Nancy and Reims for the East, Chalon and Dijon for Burgundy, Lille for the North, Morlaix, Rennes and Nantes for the West, and Tours and Orleans for the Centre. Between Le Havre docks and these ten terminals the tariff reductions applicable to both loaded and empty containers could be as much as 20% for empties and 33% for full containers. Mr. Tartier indicated that the CNC was ready to make a similar effort on other routes to and from Le Havre, if the need arose. Special rates can also be worked out in the light of a customer's particular needs. Not long ago, for instance, the CNC won for the railways and Le

Havre a traffic that previously had gone to Antwerp by road.

Mr. Smagghe spoke of his great satisfaction at the news of the tariff reform, a perfect example of partnership between the CNC and the Port of Le Havre.

*(Port of Le Havre Flashes)*

## **Cargo via Amsterdam Up 11% in 1st Quarter**

The transshipment of international ocean-going goods cargo in the Port of Amsterdam in the first quarter of 1987 was up by nearly 11% compared to the year-earlier period. According to figures of the Port Management, the port handled 7.7 mln. tonnes of goods in the first three months of 1987.

Because of a decline in coal and ore shipments, the dry bulk goods sector fell back by 1.7% to a total of 3 mln. tonnes. Liquid bulk shipments were up by 24% to 23.7 mln. tonnes, while general cargo was up by 4.6% to 689,000 tonnes.

In the first quarter of this year, 1,128 ocean-going vessels were handled in the port, as against 1,067 in the same period of 1986. Their total gross tonnage increased by 523,491 tonnes to 7,821,976 grt.

## Asia/Oceania

### Record Year for Port of Gladstone

The Port of Gladstone handled a massive 26.8 million tonnes of cargo during the year ended 30 June 1987. This was a record tonnage and was 10.3 percent higher than the previous year.

Councillor Alf O'Rourke, M.B.E., Chairman of the Gladstone Port Authority, said that to have such a huge tonnage passing through the port could only be achieved by the great co-operation of all associated with it.

The shipping industry is of enormous importance to Gladstone, and its effects are not only felt in the city but reach far into the hinterland, where much of the cargo is produced and mined.

It was pleasing to the Port Authority that its planning was facilitating the shipping of ever-growing tonnages.

Coal exports through Gladstone have continued to expand at a steady rate, with just about 15 million tonnes being shipped from the port during the year.

Mr. O'Rourke said that skillful marketing by the various coal companies had ensured that where reductions in tonnages to traditional markets had occurred, the securing of new markets had increased the overall tonnages.

A few years ago virtually all coal shipped from Gladstone was destined for Japan. Now Japan's share has fallen to about 45%. On the other hand, Europe's share has grown to 26%. In all, coal was shipped from Gladstone to 27 countries.

Queensland Alumina Limited's cargo had increased by 23% during the year to 10.1 million tonnes. This included 6.7 million tonnes of bauxite brought in from Weipa, and shipment of 2.4 million tonnes of alumina.

For the first time, cement clinker shipments from Queensland Cement's plant at Fisherman's Landing passed the half million tonne mark with 538,000 tonnes leaving the port.

Other significant cargoes were grain and oil seeds (577,000 tonnes), aluminium (161,000 tonnes), and imports of petroleum products (368,000 tonnes).

The record 1986/87 tonnage was handled in 552 shipments.

### 600-Berth Marina Planned at Gladstone

A Marina of the finest standard will soon grace the foreshores of the Port of Gladstone.

In this exciting venture, the Authority is playing a different role to its usual one—that of controlling and operating its international import/export facilities.

The City of Gladstone holds a record as having one of the highest ratios of smallcraft per head of population in Queensland.

The Gladstone Port Authority saw the necessity to not only make available safe anchorages to this large local fleet, but to actively encourage tourist development by constructing a Marina, with a possible capacity of up to 600 berths. The Marina will be developed around a fully enclosed and protected water site of 50 hectares adjacent to Auckland Inlet. A further 27 hectares is available for associated shore-based services.

Initially stage one of the project, expected to cost \$5.7 million, will provide 100 floating mooring pens for public use. It will also feature 30 pens, a service wharf and fuelling pontoon for Gladstone's booming charter boat industry. These pens will be available as either a temporary or permanent rental proposition.

Onshore facilities will be catered for initially by two buildings—a marina building and a charter vessel terminal building.

(Port-Talk)

### Freeze on NSW Port Charges Extended

The shipping and export industries in NSW had saved in the vicinity of \$100 million over the last four years as a result of cost containment in the State's ports, the Maritime Services Board said.

MSB General Manager Les MacDonald was commenting on the extension of the freeze on NSW port charges, announced by the Minister for Public Works and Ports, Mr. Laurie Brereton.

The Maritime Services Board met shipping and export industry leaders in Sydney to outline the factors behind the indefinite extension of the freeze.

"In the 3 1/2 years since the beginning of 1984, NSW port charges have risen by only seven percent, compared to about 30 percent growth in the Consumer Price Index," Mr.

MacDonald said.

"That represents a saving to our commercial customers of over \$40 million."

Mr. MacDonald said the coal-loading charges at the Port Kembla and Balmain coal loaders, which are operated by the Maritime Services Board, had risen only once in the last 4 1/2 years. That was an 8% increase in January 1986.

"The freeze in our coal-loading charges between January 1983 and January 1986 represented a saving to the coal industry of some \$35 million," he said.

"As a consequence of the cost containment by the MSB, the commercial coal-loading charges at the MSB-operated loaders are now lower than at the industry-operated loaders in Newcastle."

Mr. MacDonald said the MSB last year reduced the license fees paid by the coal industry in Newcastle by \$1.25 million. "This was the second reduction in the fee over the last four years, adding up to a continuing gain by the industry of \$4.4 million a year."

At the Port of Newcastle, where the MSB has become a full partner with the coal industry in the Newcol leader group, coal-loading charges have been frozen for 12 months.

The Maritime Services Board also reduced charges to the wheat export industry at the Glebe Island Grain Terminal by approximately \$300,000 a year, he said.

"The freeze on port and coal loading charges is estimated to be worth about \$20 million a year to MSB customers at the present CPI rate," Mr. MacDonald said.

"These savings to our customers are the result of a determined drive by the MSB since its restructuring in 1984 to increase efficiency and contain costs.

"This is a continuing process under the direction of the Minister for Public Works and Ports, Mr. Laurie Brereton.

"We are now involved in a series of projects, in consultation with our unions, to identify and overcome inefficiencies.

"At the same time, we will continue to increase the levels of facilities and service within the ports.

"We consider the MSB to be the premier ports authority of Australia, and we are determined to maintain our position."

## Financial Results of Port Operations 1977-1986, NZ

The table below shows the net surplus (deficit) from port operations for each harbour board for the 10-year period of 1977 to 1986 in then year dollars. This particular aspect has been chosen because it reflects the historic results of those commercial port operations of harbour boards which, it is envisaged, will be taken over by the port companies. The results comprise income from port operations less expenditure on port operations, and exclude income from investments, farming, rentals, rates and other sources. As indicated, some 1986 results are still subject to audit.

Only two harbour boards, Bay of Plenty and Marlborough, have made a consistent annual profit on port opera-

tions over the period, while Greymouth, Gisborne, Wanganui and Westport have made a loss each year. Some boards have already undertaken major restructuring to improve efficiency and reduce costs.

It should be noted that up until 31 March 1987 harbour boards have been exempt from rates, land tax, and corporate tax, yet without the income from rentals, investments, and in some cases farms and rating, a number of harbour boards would have been in serious financial difficulties from the outcome of port operations alone.

The intended imposition of rates, land tax and corporate income taxes will have the effect of increasing expenditure. Consequently, unless harbour

boards are able to make major reductions in port operating expenses, or achieve substantial increases in trade, it can be expected that many will have to increase charges to compensate.

In the year ending 30 September 1985, 10 of the 15 harbour boards and Westport (operated by the Ministry of Transport) made a loss in their port operations. Results for the year ended 30 September 1986 reflect the decrease in trade with several major harbour boards making substantial losses in port operations. Although not all results are available, it is anticipated that a similar pattern will occur with the large majority of boards again making a loss on port operations.

### NET SURPLUS (DEFICIT) FROM PORT OPERATIONS 1977—1986

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Auckland	896,075	1,716,712	3,585,523	(157,888)	(1,746,502)	3,691,440	3,365,399	3,907,171	4,113,888	(3,104,003)
Bay Of Plenty	2,715,856	2,423,127	2,365,000	1,829,332	403,301	1,735,830	1,255,158	1,053,592	2,086,143	728,966
Gisborne	(263,525)	(237,550)	(44,604)	(408,433)	(467,901)	(399,743)	(237,129)	(787,061)	(627,417)	(600,010)*
Greymouth	(189,474)	(184,945)	(159,765)	(202,131)	(461,349)	(536,521)	(470,747)	(458,441)	N.A.	N.A.
Hawke's Bay	(12,135)	(257,772)	(372,186)	(531,440)	(1,081,481)	(954,491)	(669,019)	(612,693)	(1,137,465)	770,271
Lytelton	(340,107)	(167,718)	1,066,590	77,289	(435,092)	653,358	1,012,622	2,986,125	(1,004,504)	(3,529,102)
Marlborough	329,000	299,000	503,186	548,291	532,051	904,841	437,115	344,502	770,019	927,952*
Nelson	91,919	25,051	227,377	481,727	56,606	224,347	(302,627)	66,290	(337,280)	(905,066)*
Northland	640,150	(614,669)	646,759	826,538	223,431	686,395	(2,364,672)	(534,001)	(622,993)	(1,456,112)*
Otago	(425,707)	1,088,280	2,610,250	902,194	1,211,270	820,487	1,298,987	(524,008)	385,836	(3,284,325)
Southland	946,426	671,071	222,037	(191,549)	(1,249,347)	(352,637)	(47,967)	820,169	(1,277,677)	128,175
Taranaki	203,848	52,776	(657,418)	(197,119)	(157,390)	201,537	1,094,763	413,312	(1,165,803)	2,755,826
Timaru	573,746	372,744	(99,382)	556,709	(355,571)	54,188	862,719	120,187	446,735	(412,753)
Wanganui	(118,227)	(110,253)	(216,602)	(285,715)	(444,825)	(350,670)	(559,801)	(457,528)	(409,086)	(455,961)*
Wellington	571,731	(754,763)	272,698	730,684	1,267	871,518	(2,331,611)	(1,160,573)	(1,968,530)	(4,616,000)
Westport #	(862,266)	(630,107)	(864,836)	(1,325,697)	(1,773,646)	(1,840,963)	(1,899,479)	(1,608,082)	(2,337,566)	(2,017,288)
Total	\$4,757,310	\$3,690,984	\$9,084,627	\$2,652,792	\$(4,874,994)	\$5,408,916	\$443,711	\$3,568,961	\$(3,085,700)	\$(15,069,430)

\* Unaudited.

# Includes assessed interest on capital.

### Port Klang One Step Closer to Becoming FTA

In response to proposals by the KPA, the Treasury and Ministry of Transport have agreed to accord Free Trade Area (FTA) status to Port Klang.

KPA's General Manager En. Hashir Abdullah said that a task force has been formed and it is looking into the various procedural bottlenecks in order to clear the way for conversion of Port Klang into an FTA.

Under the Free Trade Zone Act, 1971, an FTA is deemed to be an area outside Malaysia in which duties on goods can be deferred, reduced and, in some cases, eliminated.

Imports can enter an FTA to be processed, repacked and shipped out again without Customs formalities. The Customs will be involved only if the importer takes the goods out for use within the country. Even then, documentation will be significantly reduced.

For example, five types of documents are now required to be submitted to the Customs for imports and payment for duty must be made on the whole consignment even if only part of the consignment is taken out at one time. Under the FTA, the documents will be

reduced to only one and the importer pays duty only on the amount he takes out of the FTA into the country.

Similarly, exports which enter the FTA are deemed to have left the country, duty having been paid at the entrance. Documents required by customs too will be reduced from the present four to two (of which one, relating to port clearance, is only a formality for submission at the next port of call).

(Warta LPK)



## **World's Largest Semisubmersible Floatel**

"Polyconfidence," the world's largest floating hotel (floatel), built at the Tamano Works of Mitsui Engineering & Shipbuilding Co., Ltd. (an Associate Member of IAPH) to the order of K/S Rasmussen Offshore A/S of Norway, was completed on May 29, exactly on schedule, 21 months after the signing of the contract.

The floatel will propel itself to the North Sea, where it will be delivered to its owner. It will be used to accommodate workers engaged in drilling and production at the Oseberg subsea oilfield now under development.

Based on the "Aker H-3.2E" semi-submersible platform design of Aker Engineering A/S of Norway, MES has developed the floatel's design entirely incorporating the fruits of MES expertise and technology. It has various comfortable hotel facilities for 800 persons,

## **Wellington Chairman Opposed to Universal Privatization**

Debate on the future direction of New Zealand harbour boards has been going on for some time.

Pressures arising from the need for greater efficiency, and from Government policy which favours reorganization of boards' activities, have ensured that change must take place.

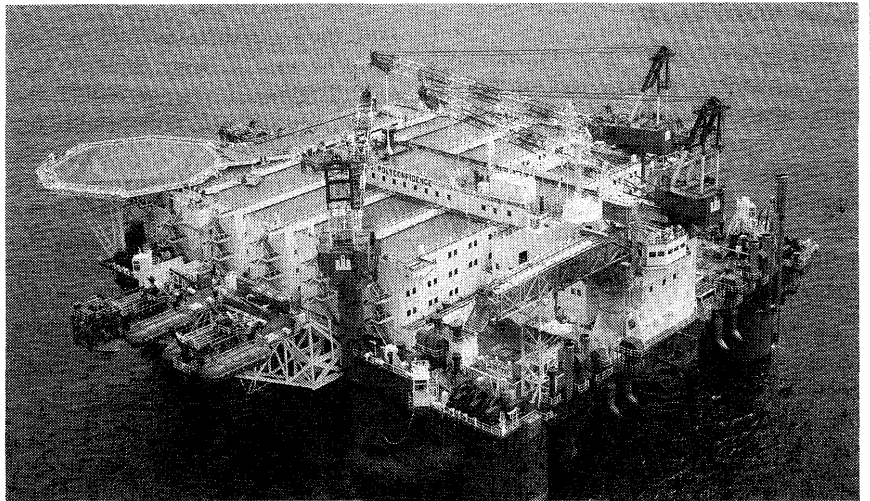
Wellington Harbour Board Chairman Nigel Gould recently presented to other Board members his personal perspective on the issues involved in change. Mr. Gould said that he hoped that an airing of the issues would assist in getting the board to commit itself to some broad principles of direction. This in turn would lead to a broader discussion with all the principal stake holders concerned with the Board's responsibilities.

He says that concern about the Board's future has been around at least since the beginning of this decade, particularly in relation to "...a cost-plus non-market philosophy...with too little attention ... to the commercial purposes of the Board's functions."

In recent years the Wellington Harbour Board has moved to restructure the operations of the port towards a more commercial orientation. Government favours this approach

meeting the highest Scandinavian standard. Since it is intended to operate on the rough North Sea, the floatel is designed to withstand winds of up to 100 knots (about 50 meters per second) and a maximum wave height of 30

meters, and has many safety features. "Polyconfidence" is the second floatel built by MES for the same owner, the first being the "Polycastle," delivered in March 1982, which accommodates 616 persons.



*"Polyconfidence, 'the world's largest floating hotel'"*

nationally, but many barriers stand in the way.

Harbour boards are still hobbled by a complex legislative maze. At least six Acts of Parliament restrict harbour boards in their operation of commercial ports. Mr. Gould favours Government proposals which would allow the Board to establish an independent Port Company to operate under the Companies Act and the Commerce Act, thus simplifying the legal tangles.

However, Mr. Gould argues for the retention of harbour boards as he believes that full corporatisation and commercialisation of boards would ignore the broader responsibilities of harbour boards. "Put in simplistic terms, the role of harbour boards should be to ensure that they fulfill the role of being guardians of a (usually) natural defined resource as well as being the providers of effective port facilities. Their task must be to ensure that an appropriate balance is maintained between the commercial port responsibilities and the protection of that resource for the benefit of all stakeholders: commercial port users, recreational users, and the interests of environmental protection and general community requirements."

Given that the Board's guardianship of the prized natural resource of Wellington Harbour implies considera-

tions other than profit, there is still a need to recognise that a return on investment is required. Mr. Gould says that in the past investment decisions have been undertaken with little attention to ultimate economic benefit, "... in Wellington's case, and probably all other boards in New Zealand, there has been a level of internal subsidisation of investment."

Mr. Gould poses a question of an appropriate return on port investment for the Wellington Harbour Board. He notes that the current replacement value for Wellington's essentially debt-free port-related assets would be about \$100 million. At present the return in normal economic terms is dismal. For the six months to March 1987 these assets produced a net return of \$600,000 from a gross revenue of \$13 million, representing an annual return of just 1.2 percent. When taxation applies from the beginning of October 1987 the return will be even smaller.

He points out that if a 10 percent return on assets was required then the current annual net return of \$1.2 million would have to be increased to a pre-tax \$20 million. With port revenue only currently producing an annualised \$26 million, unless costs were to be reduced from the current \$24.8 million to \$6 million, then obviously revenue

*(Continued on Page 48)*



from existing sources would have to be significantly increased.

Another way of looking at the issue would be to accept a lower valuation of port assets—considered unacceptable in that it would result in ongoing future hidden subsidisations.

Government policy is to encourage local authorities to take part as additional shareholders when port companies are formed. Mr. Gould dislikes this policy, fearing that should the local authority sell its holding, a particular port user might be able to accumulate sufficient shares to freeze out its competitors.

"If it is agreed that ports should remain community assets capable of being used by all commercial users, then concern must exist with any policies which introduce the possibility of compulsory privatisation.

"I am for corporatisation, but equally I am against universal privatisation," he says. Mr. Gould believes that principal Port users should have closer identity with the Port because "...it is widely acknowledged that one of the problems...is the lack of direct commercial involvement of user participation."

The successful operation of the Wellington Container Terminal on land leased from the Board by a company owned by shipping interests is seen by Mr. Gould as a model for other areas in the Port.

Mr. Gould concedes that some ports in New Zealand may benefit from some degree of private equity participation. "Some ports are so debt-ridden that new capital is probably essential and others are clearly allied with one particular user (or common group of users) so that direct equity participation could be justified."

Accordingly he proposes that legislation should provide for local flexibility with autonomous boards being able to determine, probably under some constraints, the level of any local equity participation in port companies.

Labor relations are also seen as being pivotal in developing more efficient ports. The current fragmented labour structure with the Waterfront Industry Commission and the Harbour Board independently working side by side, is no

longer appropriate, and prevents a more efficient use of labour.

"At least 80 percent of Port costs are labour-related. If boards are to be held accountable for their activities, then they must be given full responsibility for all local resources, labour included."

Stevedoring structures and pricing policies he sees as being similarly outdated. Traditional pricing within the port industry has paid little heed to the extent or cost of service provided by the Port, but rather has existed under a "taxation mentality ... the greater the value of the commodity the higher the level of wharfage paid—the higher the ship the greater the level of berthage paid." As a result anomalies and hidden internal subsidisation have been encouraged.

The Board in determining its policies to improve the efficiency of its Port has subsequently agreed to the early establishment of a Port Company, the directors of which are intended to be appointed by the Board.

The current Government policy of gifting shares to local authorities is to be opposed, but support will be given to any legislative proposal which provides for individual boards to be given freedom to permit extended shareholding participation. The Board remains committed to encouraging relaxation in central Government control on boards and to promoting the establishment of closer local labour management practices.

The Board will be initiating discussion with all of its principal stake holders on the proposed industry changes and will be encouraging further debate on the options available to the industry.

*(Beacon)*

### **Saudi Arabian Ports Pay Their Way**

The Saudi Arabian Ports Authority can now pay its own operations and maintenance costs from its own revenues, Mr. Fayed Badri, its chairman, has announced.

The ports of Jeddah and Yanbu, both on the Red Sea, are managed by Gray Mackenzie & Co., Ltd.

### **Restructure of NZ Ports: Healthy Competition**

The restructure of New Zealand Ports as outlined by the Minister of Transport Hon. Richard Prebble, in March, shows similarities to that of submissions from the Southland Harbour Board sent to the Ministry in response to the original on shore cost study back in 1985.

At that time the Board proposed a return to the initiative in Port Management and Operations to local interests and the government now acknowledges the Ports are local assets and hence believes that shareholding of Port Companies should be allotted to local people.

In 1985, the Board submitted that regional thrust and promotion of healthy competition between Ports would be to the customers' benefit whilst the Minister commented recently that he has every confidence in the regional Ports of New Zealand and reforms proposed will remove impediments and encourage regional Ports to perform at greater levels of efficiency.

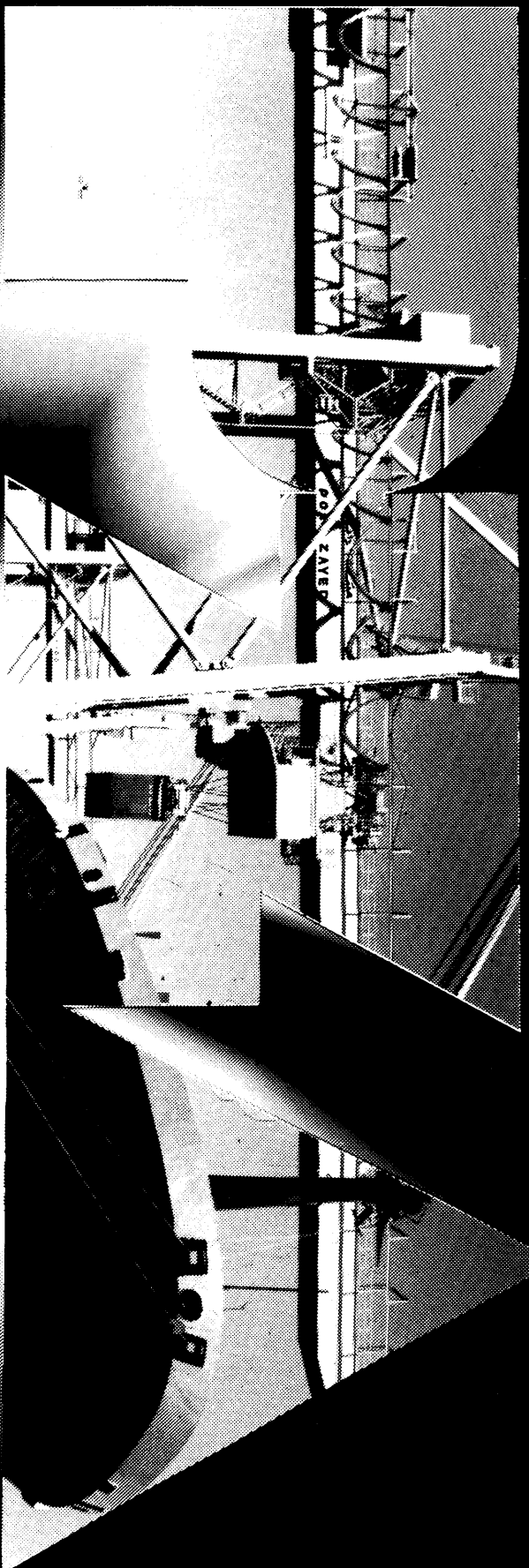
The Board in its submissions proposed a local Harbour Authority and a Port Operations Company whilst the government's policy is for a Port Company for the commercial activities whilst the elected Harbour Boards retain responsibility for non-trading and local authority functions.

The Board questioned the need for the New Zealand Ports Authority and the Government now intends to repeal the New Zealand Ports Authority Act.

The Board questioned the need of the Waterfront Industry Commission, stating that each Port should bear the costs of the National Administration Fund, government policy should be to place the National Administration Fund on a Port by Port basis and the Waterfront Industry Commission's role should be kept under review.

With the Board's involvement in a Stevedoring Partnership now well established and proving highly successful at the Port of Bluff, other changes as outlined above will fall into place rather more easily at Bluff than other Ports as it's basically what the Board has been saying and preparing to do for two years anyway.

*(Bluff Portsider)*



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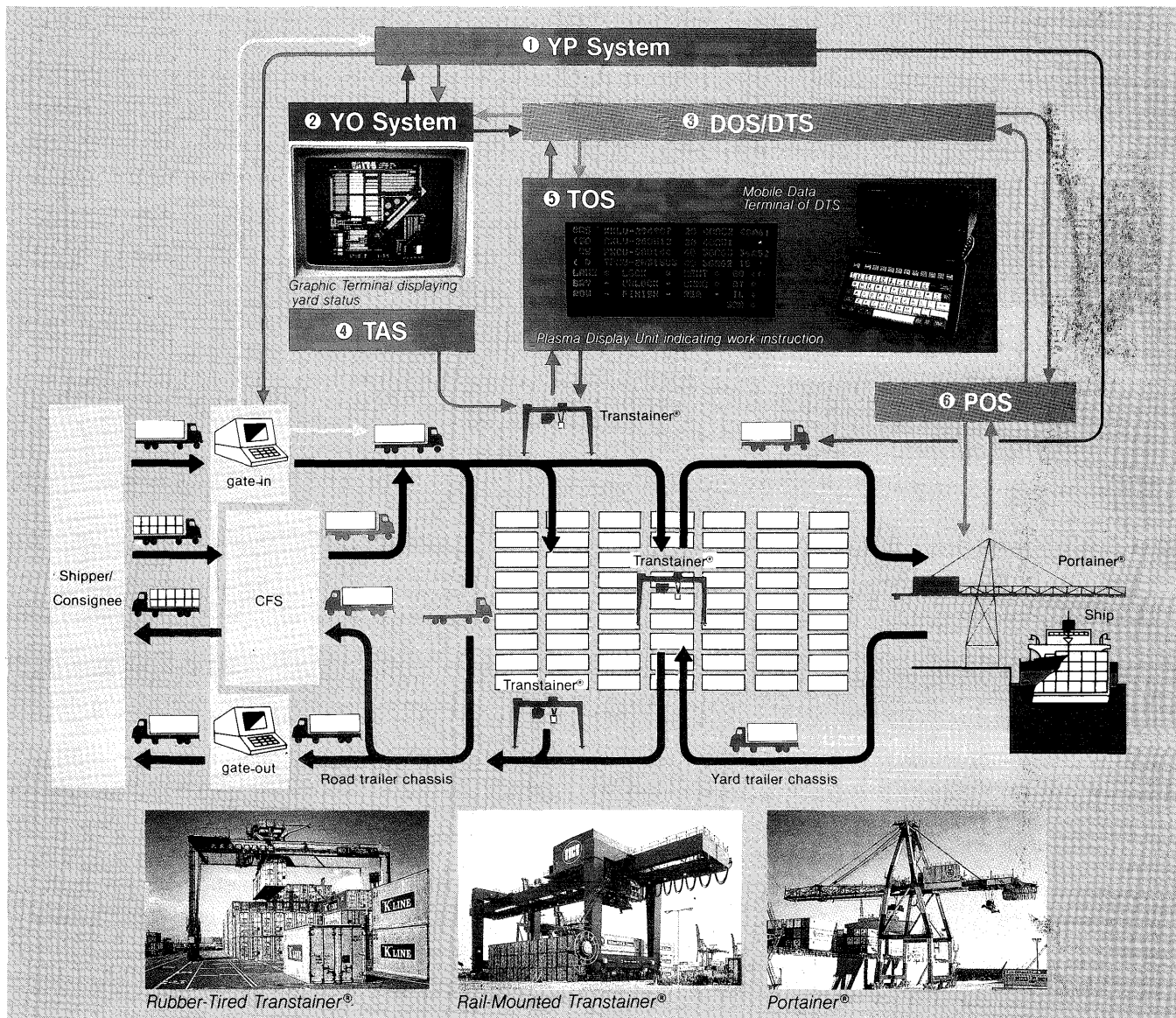


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