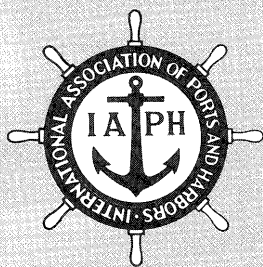


Ports & Harbors

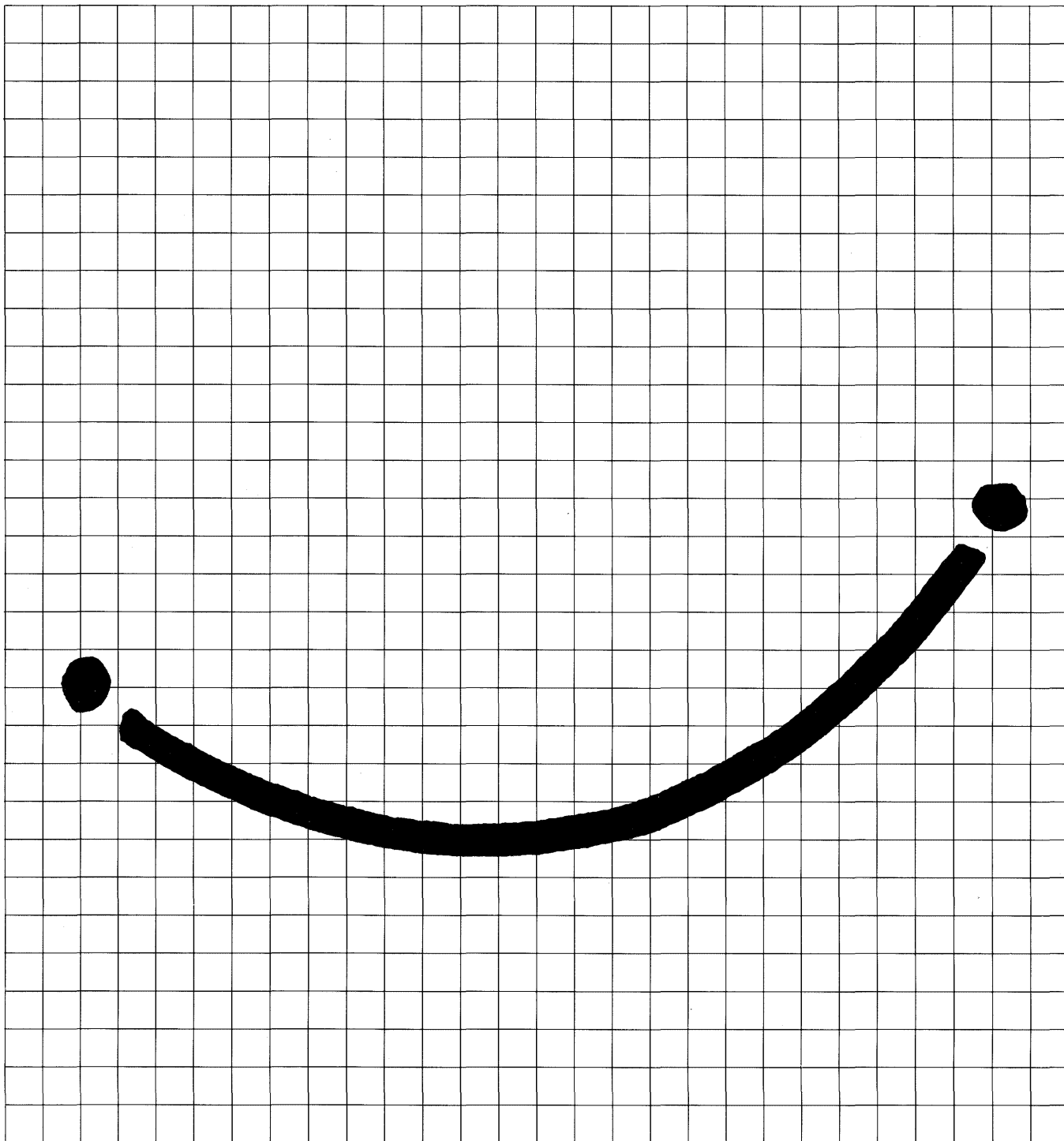
July-August
1994 Vol. 39 No. 6



The Publisher The International Association of Ports and Harbors

Mid-Term IAPH Exco Meeting in Copenhagen, June 1994





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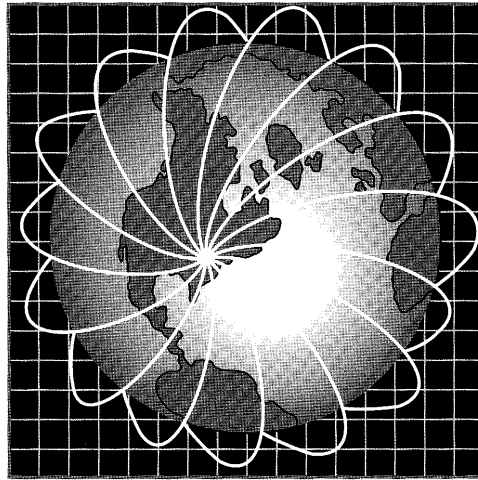
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IAPH ANNOUNCEMENTS AND NEWS

Mid-Term Exco Meetings in Copenhagen — IAPH Activists Geared Up for Continuing Joint Efforts Towards Seattle/Tacoma Conference —

The mid-term meeting of the Executive Committee of IAPH was held on Wednesday, June 1 and June 3 from 9:00 am in Copenhagen, Denmark, hosted by the Port of Copenhagen. Out of 30 Exco members, 24 members gathered together in Copenhagen to engage in deliberations. The meetings were attended the Chairpersons of IAPH Internal and Technical Committees, Liaison Officers, guests and observers as well as the Head Office

secretariat members. For the benefit of all members of IAPH, we summarize the major points covered by the Exco in its two days of sessions and the decisions resulting from the deliberations in Copenhagen as follows.



PORT OF COPENHAGEN



Participants at the first day's session of Exco gather for a group photo at the entrance of the Port of Copenhagen Building on 1 June

Exco Members Present

Carmen Lunetta, President & Exco Chairman
 Robert Cooper, 1st V-President
 Jean Smaghe, 2nd V-President
 Dominic J Taddeo, 3rd V-President (*Port Communities)
 Mic R Dinsmore, Conference V-President
 John J Terpstra, Conference Vice President (*Cargo Oper)
 John Mather, Immediate Past President

Port of Miami, USA
 Ports of Auckland Ltd, New Zealand
 UPPACIM, France
 Port of Montreal, Canada
 Port of Seattle, USA
 Port of Tacoma, USA
 Clydeport Ltd, UK
 Port of Halifax, Canada
 Keelung Harbour Bureau, China
 Port of Singapore Authority, Singapore
 Maritime Services Board of NSW, Australia
 Ministry of Transport, Japan
 Port of London Authority, UK
 Cork Harbour Commissioners, Ireland
 Port of Houston, USA
 Stockton Port District, USA
 Pusan District Maritime & Port Authority, Korea
 Kenya Ports Authority, Kenya
 Puertos del Estado, Spain
 Canaveral Port Authority, USA
 Pieter Struijs
 Shanghai Port Authority, China
 S Carolina State Ports Authority, USA
 Göran Wennergren (*Combined Transport & Distri) Port of Gothenburg AB, Sweden

In Attendance

Ian Baird
 Hanmin Bao
 Pamela Boynton
 Chen, Ching-Tzer
 Chen, Kuo-Quan
 Mike Fletcher
 Will Friedman
 Gary Grant
 Hwang, Kyu-Jin
 Kick Jurriens (**Constitution & By-Laws)
 Alex Kabuga
 Rod Koon
 C C Larsen Skat
 Dwayne G Lee (*Dredging Task Force)
 Fraser G McKenzie (**Sea Trade)
 Ng, Chee-Keong
 Ng, Philip (*Port Planning & Construction)
 Paik, Yun-Sup
 Jos Perrot (**Ship Trends)
 J E Quansah
 Erik Schäfer (**Membership)
 Per C Schmidt
 Alex J Smith
 Margo Spellman
 Erik Stromberg
 Paul Valls (*Legal Protection)
 P C Van der Kluit (*Port Safety & Environment)
 Carl Veng
 John Watson (*Marine Operations)
 Bob Watt
 (*Chairpersons & **Acting Chairpersons of Internal & Technical Committees)

IAPH Secretariat

Hiroshi Kusaka, Secretary General
 Rinnosuke Kondoh, Dy Secretary General
 Kohnosuke Onso, Managing Director (IAPH Foundation)
 Kimiko Takeda, Under Secretary
 Hiroyuki Nagai, Asst Under Secretary

Note: List of all the participants as supplied by the host is attached in the end of this report.

Day One – Wednesday, June 1

1 Opening Remarks by the President

The agenda for the first day's meeting of the Exco dealt with the work of the Association as undertaken by the respective Committees and Liaison Officers as well as the Head Office Secretariat since the Sydney Conference held in April 1993.

Mr. Lunetta, the President of IAPH and Chairman of the Exco, opened the meeting by welcoming all members and by thanking the host, the Port of Copenhagen Authority and in particular the Authority's Managing Director Mr. Erik Schäfer.

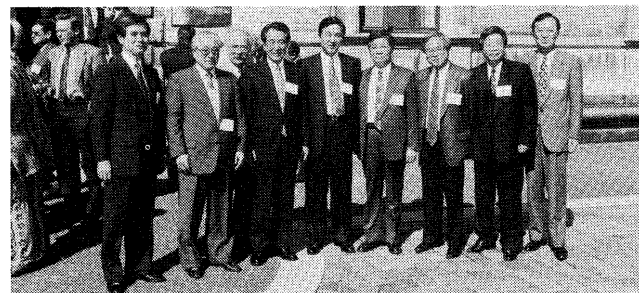


President Lunetta (center) opens the Session

He then referred to the documentation circulated for discussion, and expressed his deep satisfaction with the dedication and commitment evidently shown to IAPH activities by the Immediate Past President, Vice-Presidents, Technical Committee Chairpersons and respective Committee members. He was confident that their efforts would ensure that IAPH continued to progress along the right track.

2 Report by the Secretary General

Mr. Kusaka, the Secretary General, was invited to make his report, which is introduced below.



Secretary General Kusaka (2nd from left) with his Asian colleagues

Mr. President and colleagues:

It is my pleasant duty to report on the Association's activities since last year's Sydney Conference.

First, I would like to express IAPH's deep appreciation to the Port of Copenhagen Authority for hosting this year's mid-term Exco and other committee meetings. In particular, I wish to express my profound thanks to the Authority's Managing Director Mr. Erik Schäfer, and Deputy Managing Director Mr. Carl Veng for making the necessary arrangements for our meetings.

I would also like to thank all delegates for attending this important meeting of our Association and for the continuing cooperation afforded our Head Office staff in carrying out their day-to-day duties for Association members. As in Spielberg's Academy Award-winning "Schindler's List", a list of IAPH activists has been a secret weapon for my staff to obtain wise and timely advice whenever required.

As for details of Association activities, we have kept our members informed of all developments through "Ports and Harbors, letters and faxes. As you will find in my report, the scope of our activities has been wide-ranging. To give you a picture of the numerous tasks and activities of our members and committees, the major events are listed in chronological order in my report.

As you know, in accordance with the decision reached at the Sydney Conference, 12 different Technical Com-

mittees have been grouped under "Port Affairs", "Trade Affairs" and "Human & External Affairs", with the Vice-President of each acting as co-ordinator. I wish to thank all chairpersons for their leadership and the respective members for their dedicated service under the new arrangement.

Particular mention is made of the **IAPH Membership Survey 1994**, conducted early this year on President Lunetta's initiative. It sought member perceptions of major issues and challenges facing ports, their evaluation of IAPH activities, and recommendations for enhancing the benefits derived from participation in IAPH and its various work programs.

The survey's results have been prepared as an interim report. As you can see, membership responses have been so wide-ranging that further work is required to draw out its full implications. Already important finding is that IAPH's current organizational arrangement — Technical Committees, Liaison Officers and representation on outside bodies — do make best use of resources available. Later, Exco will hopefully provide wise guidance in determining which major issues ought to be given priority.

Now I would like to discuss membership. As outlined in my report, our Association had 237 Regular Members and 107 Associate Members from 81 different countries or economies on 30 April 1994. This represents a net increase of 12 members since 1993. Actually 18 members joined and six left the Association. The new members were from Cape Verde, Guinea, Norway, Russia, China, Hong Kong, Indonesia, Korea and Malaysia.

This is the most impressive annual increase in IAPH Regular Membership since its foundation year. Over the past 10 years the annual net increase has been one member per year. A key strategy of our membership campaign should be directed at attracting non-member ports into the Association. Particular attention should be focused on such countries undergoing vigorous reconstruction or rehabilitation and those experiencing rapid economic growth. Another goal should be to the recruitment of lapsed IAPH members.

When membership dues units are considered, there was an increase of 38 units in 1993 compared with the previous year. This has obviously contributed to the strength of IAPH's finances.

As for our organization's financial situation, we will be hearing later from the Finance Committee's Chairman. Please scrutinize the document and offer constructive guidance concerning management of the Association's finances.

As regards the Association's journal "Ports and Harbors", the Head Office staff have been responsible for its production since its inception. While the journal may not be comparable to commercial publications, it is produced as part of the secretariat's work and within the Association's budget.

A guiding principle has been that every Exco member must contribute papers for the journal's "OPEN FORUM" section at least once during the two-year term. The Head Office urges all members, and particularly Exco members, to use the space available in its journal as actively and frequently as possible. Also, it seeks the positive support of members for its advertising efforts.

Generally, I am very proud of the way in which members have collaborated over many years and over-

come language, distance and financial barriers. Hopefully, the mutual respect, the friendly working relations and the spirit of mutual assistance which have characterized our dealings will continue.

Finally, I am convinced that this week's mid-term gathering in Copenhagen will be of the utmost significance for our Association, as it strives to meet the varied needs not only of its members but the interests of all ports and port communities throughout the world. Thank you!

3 Report by the Liaison Officer on International Affairs and International Organizations

Mr. Mather introduced his report, previously circulated, and outlined a series of preliminary impressions which had given him cause to suggest possible lines of action to be followed by IAPH in consolidating its position as the principal authoritative international association of ports worldwide.

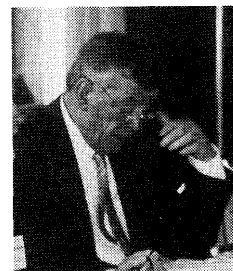
He referred, in particular, to the need for IAPH members to support the efforts of their personnel engaged in Technical Committee business. He said their work was most important in developing coherent and agreed IAPH policies.

Noting the importance of IAPH's relationships with UN agencies and IMO in particular he supported proposals in a paper circulated by Mr. Pieter Struijs which were designed, amongst other things, to provide some support to IAPH's Representative in Europe in his capacity as IMO Liaison Officer.

He felt that more could be made of IAPH relationships with national/regional associations of Ports and would be looking at this subject in more detail.

Mr. Cooper agreed that from the standpoint of his remit of responsibility for the Port Affairs Group of Committees, Mr. Mather's assessment of the difficulties facing the Committees was in no way exaggerated. He underscored their importance to IAPH.

The President then thanked Mr. Mather for his report and, with Exco's approval, invited him to develop more detailed proposals for consideration at the Seattle/Tacoma Conference.



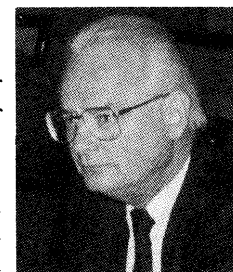
Mr. Mather gives his report

4 Reports by Internal Committees

4.1 Membership

Mr. Erik Schäfer, Vice-Chairman of the Membership Committee, reported on the current situation of IAPH's membership, on behalf of Mr. Ron Brinson, Chairman of the Committee, who was unable to come to Copenhagen. Mr. Schäfer referred to the membership campaign efforts made at the initiative of Chairman Brinson. He reported that there were 237 Regular members (with the number of units subscribed totalling 729) and 107 Associate Members (with 109 units) from 81 different countries or economies as of April 30, 1994.

Mr. Schäfer proposed reviewing the Temporary



Mr. Schäfer reports on the membership situation.

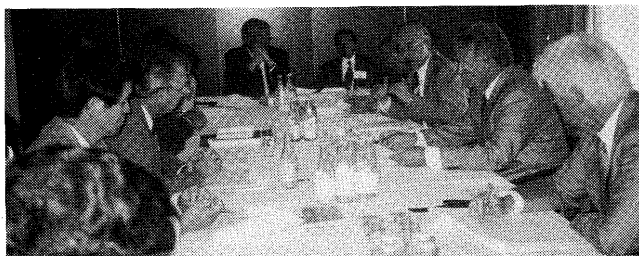
Membership terms with a view to allowing the members in this category to stay with IAPH longer than the current one-year experimental period before they had to join as full-fledged Regular Members, as currently required. Exco requested the Membership Committee to study the appropriate changes in the terms and to come up with a recommendation to the 19th Conference in Seattle/Tacoma next year.

He commented that the immediate goal of the membership recruitment efforts, as confirmed at the Committee meeting held the previous day in Copenhagen, should be to convince those organizations which used to be IAPH members to rejoin, and to take every opportunity to have non-member ports join IAPH.

In this connection, Mr. Schäfer, who is Vice-Chairman of the Board of the Baltic Ports Organization (BPO), of which 38 ports in 9 countries around the Baltic Sea are now members, was determined to do his utmost to invite members from the individual ports in BPO to join IAPH.

4.2 Finance

Mr. Welch spoke next for the Finance Committee. His Committee had met the previous day and, in general, reported that the financial position of IAPH was generally satisfactory. However, as a result of the Committee's scrutiny of a series of financial forecasts prepared by the Head Office



Mr. Welch (2nd from right) chairs the Finance Committee on 29 May.

secretariat, the Committee felt the need for an increase in the dues and recommended raising the dues by 5% with effect from 1 January 1995. Exco approved his report and his recommendation of a 5% increase in membership dues and also requested the Finance Committee to re-examine the current dues structure to determine whether a more equitable system of dues payment could be developed.

Mr. Welch's recommendation to Exco also included the continuance of the Association's policy established in 1981, of having 40% of the expense budget as a compulsory reserve fund. The Committee believes this contributes to strengthening IAPH's financial base in the light of IAPH's unique position in being without any qualified individuals who can guarantee bank loans if and when the Association faces such an emergency.

4.3 Constitution and By-Laws

Chairman Kik Jurriens then gave the Constitution and By-Laws Committee report. He referred to the major subjects his Committee had discussed at its meeting held the previous day in Copenhagen.

The Committee considered the recommendation of the IAPH Legal Protection Committee chaired by Mr. Paul Valls who, in his report, had drawn Exco's attention to the need to produce recommendations for the protection of the legal position of IAPH and its membership from possible liability in legal disputes.



The Constitution and By-Laws Committee meets on 31 May. Pictured from left, Mr. Hooctor, Chairman Jurriens, Ms. Sirat and Mr. Veng.

It was agreed by the Committee to undertake the required task in cooperation with the Legal Protection Committee and in consultation with the Chairman of Legal Counselors.

The second item the Committee deliberated concerned the Constitution of IAPH. The Committee was reminded by the Secretary General of the fact that a suggestion had been made by the late Viscount Simon (former chairman of the Port of London Authority and 6th President of IAPH), who passed away recently, on the occasion of the Nagoya Conference in 1981.

Viscount Simon, in his speech commemorating the 25th anniversary expressed his views concerning the Constitution and voiced regret that some words had been removed from the original version of it. He referred to the following wording in the original Constitution at the end of Article II — Objects and Purposes: "thereby promoting peace in the world and the welfare of mankind".

Exco supported the message of the late Viscount Simon and requested the Constitution and By-Laws Committee to take the necessary steps to revise the Constitution for submission to the Seattle/Tacoma Conference next year.

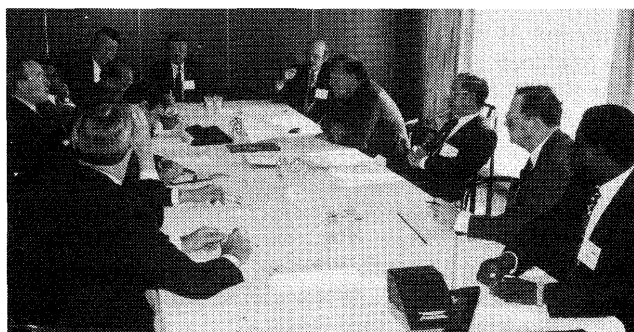
5 Reports by the Technical Committees

5.1 Ports Affairs Group

As Coordinating Vice-President for the Port Affairs Group, Mr. Cooper referred briefly to the work of the Committees and highlighted the range of topics which they had addressed. He said that particular attention would be given to clearer demarcation of Committee responsibilities. He also emphasized the need for port managements to support the efforts of their personnel involved in the work of the Committees.

(a) Port Planning and Construction

Mr. Philip Ng, Chairman, reported that his Committee's Guidelines on Port Planning and Design had been adopted and circulated to IAPH members. Two or three papers relating to the Guidelines would be published for the 19th



Port Planning & Construction Committee meeting

IAPH Conference. The Guidelines themselves however would only be reviewed in 1999.

IAPH members had been asked to comment on the Guidelines from the point of view of their usefulness and how they could be improved. Responses so far had been poor and were being assessed. Mr. Ng also submitted the first report of a joint IAPH/PIANC/IMPA Working Group on Approach Channels - a guide for concept design, and commended its acceptance for general circulation to IAPH members. This was agreed.

(b) Dredging Task Force

Mr. Dwayne Lee, Chairman, introduced his circulated report. He had continued to represent IAPH, together with Dr. Willis Pequegnat (see below) and Mr. Joe LeBlanc at various meetings relating to the London Convention, 1972. He stressed that IAPH was held in the highest regard as an expert contributor to these deliberations.

He reported, with regret, the death of Dr. Pequegnat in April 1994 and spoke of the great loss of his expertise which had for so long been available to IAPH. He then welcomed the appointment of IAPH's new Scientific Adviser, Dr. Richard Peddicord, with effect from July 1994.

Mr. Lee said that the continuum of meetings from July 1994, will deal, inter alia, with the process of amending the London Convention 1972. The revision of the 1986 Dredged Material Guidelines would begin in July 1994.

Mr. Lee then spoke of an informal advice he had received that IAPH would be formally asked to co-sponsor a seminar on dredging aspects of the London Convention 1972, together with PIANC and CEDA. Were this to be the case, he felt that the importance of the seminar in underlining IAPH's technical competence in this area of activity, merited a positive response which might entail IAPH in a cost not exceeding US\$10,000. Mr. Lee's views were endorsed by Exco.

(c) Port Safety and Environment

Mr. Peter van der Kluit, Chairman, introduced his circulated report. He reflected on the importance of effective IAPH contributions to the work of UN Agencies, such as IMO and made a strong plea to port managements to allow their experts to participate actively in the work of the Committees. He then referred to specific issues on which work was being progressed in many cases jointly, with other international organizations.

Committee members had also been requested to present papers to authoritative seminars, symposia and conferences. Efforts were being made to respond positively wherever possible.

Attention was drawn to two matters. Firstly, a request received from the 3rd International Conference on Safety in the Port Environment, that IAPH should cover the travel and accommodation costs of up to five persons from developing countries.

Secondly, the Chairman referred to IAPH's activities in preparing a document on the financial and organizational aspects of reception facilities. The Secretariat was asked to circulate a first draft of the document among Exco members for their comments. He further indicated that this document would need to be edited to make it suitable for discussion in IMO and for this purpose he would seek Exco's approval to obtain the necessary fund from IAPH's Technical Committee Support Fund.

(d) Marine Operations

Mr. John Watson, Chairman, introduced his circulated report. He felt it to be both opportune and helpful to outline his philosophy on the beneficial effect of a restructured approach to his Committee's work. He was now convinced it would be possible to develop truly port representative viewpoints and policies on relevant issues.

He next referred to the on-going work of the Committee which was, in large part, directly related to the need to provide authoritative port-related input to IMO deliberations.

He identified with the Chairman, Port Safety and Environment Committee, in stressing the importance of getting IAPH's contribution to IMO activities on the right lines in so far as IMO's Resolutions/Recommendations can be taken up for enactment in national legislation as experience in Europe has shown.

He referred to the work of his Committee, jointly with IALA, IMPA and other bodies, in developing revised Guidelines for Vessel Traffic Services, which had been circulated with his report, and commended these to Exco for joint submission to IMO.

He then introduced Committee member, Captain Ian Baird to speak to his circulated paper on problems associated with the translocation of unwanted aquatic organisms in ballast water.

Though by no means a new phenomenon the problem had become acute with the increase in ship size, increase in maritime trade and faster turn-arounds. Local marine environments and ecology were now at serious risk and ports could well be faced with heavy consequential costs of remedial action.

The problem was currently on IMO's agenda and Captain Baird with the support of his Committee, felt that a reasoned IAPH input should be made to the on-going debate.

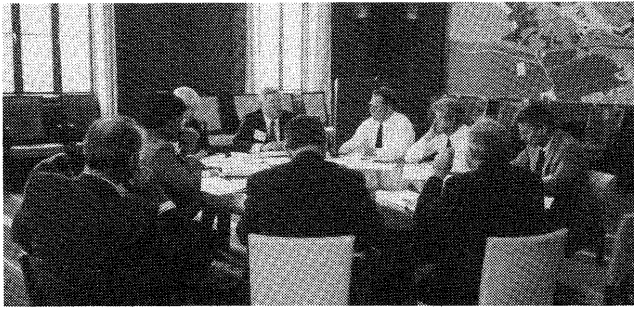


Committee chairmen and guest speakers prepare for their presentations.

(e) Cargo Operations

Mr. John Terpstra, Chairman, introduced his circulated report. Attention had been focussed on the analysis of responses to the 2nd IAPH Survey on the penetration of non-ISO standard containers into the port system worldwide. A preliminary report on the survey was tabled at the meeting.

In summarizing the findings of the survey, Mr. Terpstra confirmed that the handling of non-ISO containers was not, thus far, a global problem. The variety of problems associated with the handling of these containers, however, suggested that his Committee should continue to keep the matter under close review. His Committee had compiled educational material on Automatic Equipment Identification Technology, the detail of which could be made available, on request, from the IAPH Head Office in Tokyo.



Cargo Operations Committee meeting

Work had begun on the development of a survey to establish trends in specifications, numbers, age groups, operational life expectancies and broad capabilities of gantry cranes at ports.

Port Affairs Group Conclusions

Mr. Cooper summed up the remarkable extent of the valuable work being carried out by the Group. He stressed that it was important not to underestimate the value of the work being carried out by IAPH. He also emphasized the need for port managements to give every support to their personnel engaged in IAPH activity.

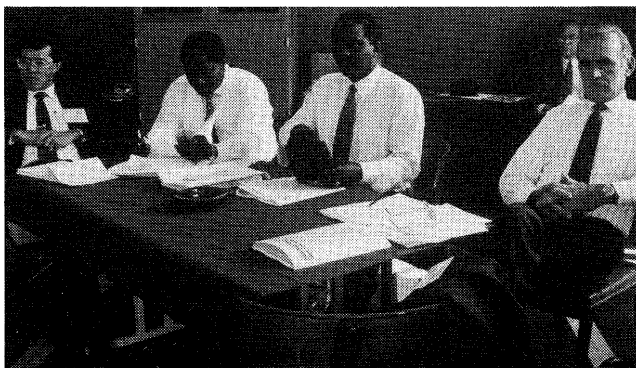
Mr. Cooper then moved that:

- i) the reports of the Port Affairs Group be adopted;
- ii) the initiatives proposed by Mr. Dwayne Lee, at 5.1(b), be supported;
- iii) the document on Approach Channels, 5.1a(b), be circulated;
- iv) the revised Guidelines on VTS, 5.1(d), be approved for joint submission to IMO; and
- v) the allocation of IAPH funds as proposed in 5.1(c) should be considered as a matter of principle in the first instance, by the Finance Committee.

The proposals were seconded and duly adopted.

5.2 Trade Affairs Group

As Coordinating Vice-President, Mr. Jean Smaghe explained that the Committees of the Group were oriented on economics, logistics and traffic flow exchanges information on which was vital to ports when considering the implications for them of major changes in world and regional trading patterns. In introducing respective Chairmen, or their representatives, he expressed his pleasure at their collective intent to diversify Committee meeting venues within the IAPH regions.



Mr. McKenzie (right) reports on the Sea-Trade Committee's affairs.

(a) Sea Trade

Mr. Fraser McKenzie introduced the tabled report in the place of Ms. Lillian Liburdi, Chairperson, who was unable to be present. He said that the Committee had undertaken three tasks.

The first of these, the establishment of consistent cargo definitions for port data collection, had been largely completed. Proposed definitions had been exposed to a broad spectrum of IAPH members and amended as a result of comments received. Their final adoption would be realized at the Seattle Conference after which it would be expected that they would be adopted by other organizations.

The second task involves the provision of IAPH members with a standardized forecast of sea trade in the major trade lanes. A draft review of forecast procedures is currently being carried out by the Committee.

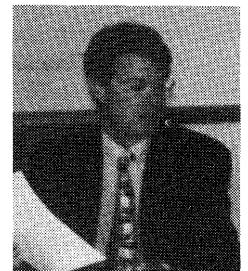
The third task is the development of a database of Port Capacity which could be used to indicate trade lanes with potentially insufficient port capacity. In this regard, the Committee is currently cultivating possible data sources. Mr. McKenzie next reported that consideration was being given to a proposal that the Committee should become identified with an attempt to standardize procedures used in the development of economic impact models in an attempt to lessen the apparent variability between models. It had also been suggested that it might be appropriate to consider the impact of the GATT Agreement on world trade flows, and on the grain trade in particular.

He then referred to a proposal to develop a more uniform approach to statistics on transport by sea through the ports. In that regard, note had been taken of European Commission proposal for a directive on statistical returns in respect of sea trade. It described minimal port-to-port needs and might be of use in the discussion of how to proceed on a worldwide scale.

(b) Ship Trends

Mr. Jose Perrot introduced the Committee's report on behalf of Mr. J.M. Moulod, Chairman, who was unable to be present.

He reported that it was the Committee's intention to update the report presented to the Sydney Conference. Relevant data is now being collected and assessed for preliminary consideration at a meeting later in the year at which he hoped more activists could be induced to participate.



Mr. Perrot reports on behalf of the Ship Trends Committee Chairman.

(c) Combined Transport and Distribution

Mr. Goran Wennergren, Chairman, introduced his report, previously circulated.

He reported that responses to a questionnaire had been analyzed in respect of trends, obstacles and scenarios, in furtherance of the Committee's objective to develop and disseminate knowledge helpful to ports in the creation of efficient and cost-effective operations, before and after transport and distribution facilities, to the customer's satisfaction. A series of meetings had already been held in the various IAPH regions and more had been arranged.

He then summarized the detail of his circulated report. Conclusions would be drawn and recommendations made for consideration at the 19th IAPH Conference.

(d) Trade Facilitation

Mr. David Jeffery, Chairman, introduced his circulated report and highlighted certain aspects, with particular reference to the IAPH Information Technology Award.

He noted that the first of the awards (Gold, Silver and Bronze) would be presented to the representatives from the winning ports (Gabon, Helsingborg and Shanghai) by the IAPH representative in Toronto, Canada, on the occasion of the gala dinner of the Fifth Ports Canada International Computer Conference scheduled for June 8, 1994. He also referred to the first awards' sponsorship by the Canada Ports Corporation and expressed his Committee's view that future annual awards should be similarly sponsored so that no cost would be incurred by IAPH.

Trade Affairs Group Conclusions

Mr. Smagghe reflected on the range of work of the Committees and expressed satisfaction with the positive results achieved to date. He was grateful to the respective Chairmen for their great efforts. He then moved that the reports of the Committees be received for adoption. That was seconded and duly agreed.

5.3 Human and External Affairs Group

As Coordinating Vice-President for the Group, Mr. Dominic Taddeo, introduced the respective Chairmen of the Committees and invited them to submit their reports.

(a) Human Resources

Mr. Goon Kok Loon, Chairman, reported on the activities since the Sydney Conference and in particular the meeting held in Singapore on November 3, 1993, where the Committee reviewed the conditions for entry to the Award (an essay contest) and Bursary Schemes. The Committee considered if the title of the essay contest should be linked to the theme of the biennial conference of IAPH. However, the Committee, after extensive consideration, decided to retain the current focus of the essay contest, namely "How Could the Quality of Port Service be Improved?". It was also agreed that the languages for the essay contest would remain English, French and Spanish. Mr. Goon expressed his appreciation to Mr. J.P. Lannou of the Port of Le Havre for his efforts in making assessment the entry papers submitted in French.

He then reported on the financial status of the IPD fund and noted that during the term July 1992 - May 1994, a little over US\$45,000 had been collected, representing approximately 65% of the targeted amount of US\$70,000. The Committee agreed not to request Exco to take any immediate action for a new fund-raising campaign until it feels the need to do so, but affirmed that further contributions by members and individuals would always be welcome.



Mr. Goon (seated at the extreme right) reports on the activities of the Human Resources Committee.

The Chairman reported that the Committee's continued efforts should be directed to administering the IAPH Bursary and Award Schemes and the UNCTAD/IAPH monographs on port management.

(b) Legal Protection

Mr. Paul Valls, Chairman, introduced his report, previously circulated.

He referred to the detail of the work which had been reported and thanked all those who had been directly associated with the Committee's efforts.

He then drew Exco's attention, in particular, to three main points.

- (1) As regards Guidelines and Recommendations developed from time to time by IAPH Committees for dissemination to members, the Committee felt that their legal implications should always be considered and precautionary language used whenever possible. A proposal had therefore been included in the report for Exco's consideration.
- (2) IMO intended to convene a Diplomatic Conference early in 1996 to adopt a Hazardous and Noxious Substances Convention (HNS Convention). Exco's approval is sought for the submission of a paper by IAPH to the next meeting of IMO's Legal Committee reiterating the views expressed by the Committee in pages 2 and 3 of the report.
- (3) It was indicated that the Diplomatic Conference early in 1996 should also revise the 1976 Convention on Limitation of Maritime Claims. Exco's approval was requested for the submission of a paper by IAPH reiterating the points made in pages 3 and 4 of the report. The proposed matters were endorsed by Exco.

The Secretariat was also asked to circulate members with a view to their providing examples of accidents/incidents in their respective port areas which resulted in serious injury to personnel, or loss of life or damage or property in some way, where compensation was payable from the shipowners liability, and where remedial costs were far higher than compensation received.

(c) Port Communities

Mr. Dominic Taddeo reported that Mr. David Bellefontaine, President and CEO of the Port of Halifax, had taken over from Mr. Taddeo as Chairman of the Committee.

The Committee, among other things, will look into:

- 1) the possibility of establishing a documentation center for the exchange of information and the preparation of a catalogue which could be distributed to IAPH members in printed form or on a diskette;
- 2) the possibility of conducting a survey to see how the respective port authorities are reaching markets and what their media plans are; and
- 3) the possible need for a study to find out the programs conducted in the respective ports to protect the



Mr. Bellefontaine, new chairman of the Port Communities Committee

environment.

Human and External Affairs Group Conclusions

Mr. Taddeo warmly thanked all those who had been associated with the work of the Group's Committees. He then moved the adoption of their reports and endorsement of the proposals therein. This was seconded and duly agreed.

6 Presentation by the President of AAPA

Mr. Erik Stromberg, President, American Association of Port Authorities (AAPA), was invited by the President of IAPH to be present and to give his report on the following initiatives which AAPA is currently undertaking which were of interest to IAPH members.

- * AAPA is working for the adoption of a "National Dredging Policy" that recognizes the pivotal role of ports and the need for dredging to ensure it keeps its navigation channels open to trade.
- * AAPA supports initiatives that encourage good environmental management of ports and related development activities. However, environmental regulation should aim to achieve maximum environmental benefits at minimal cost. For example, port activities should not be subjected to rigid and expensive mandates, compromising its mission to promote trade and economic growth, while achieving little if any significant environmental benefit.
- * AAPA continues to implement its public awareness initiative, as well as related education programs. A widespread understanding of the ports' role in supporting increased trade and economic opportunities is essential if it is going to be successful in accomplishing the first two objectives.

Mr. Stromberg expressed AAPA's hope that IAPH could support similar initiatives on the international level. Exco assured him of IAPH's utmost efforts to cooperate and coordinate with AAPA in participating in the relevant deliberations.

Day Two: Friday, 3 June

7 The 19th World Ports Conference of IAPH

The delegation from the co-hosting ports, Seattle and Tacoma, made presentations on the plans for the 19th Conference. The outline of the Conference as presented by the host officials is introduced later in this issue in its 19th Conference special section.



Mr. Bob Watt, Deputy Mayor, City of Seattle, promotes the 19th Conference.

Concerning the Conference Co-chairmen and Registration Fees, they being subject to the Board's approval after Exco's endorsement, the Secretariat was asked to place the two issues before the Board and for this purpose the Secretary General called a meeting by correspondence of the Board of Directors on June 10, 1994 setting the voting date on July 25, 1994.

8 Report by the IAPH European Representative: A.J. Smith

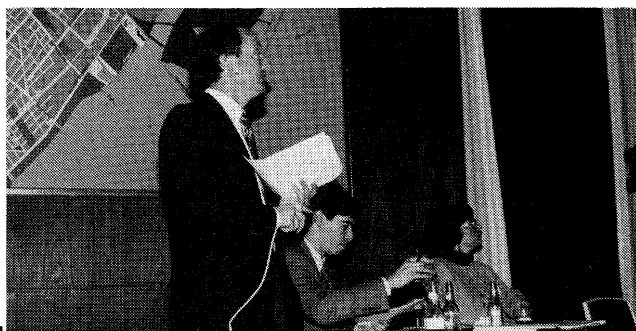
Mr. Smith introduced his circulated reports on Liaison with IMO and the IAPH/BPA Agreement on Representation with a general comment relating to his belief that UN Agencies such as IMO are becoming more insistent that organizations like IAPH should become more proactive within their respective spheres of activity in the development of internationally acceptable policies.

That approach can be an advantage in so far as industry-oriented advice is accepted. It is also a disadvantage however in so far as the absence of advice from, for example, IAPH will leave a gap which other organizations, acting perhaps against the best interests of ports, will seek to fill.

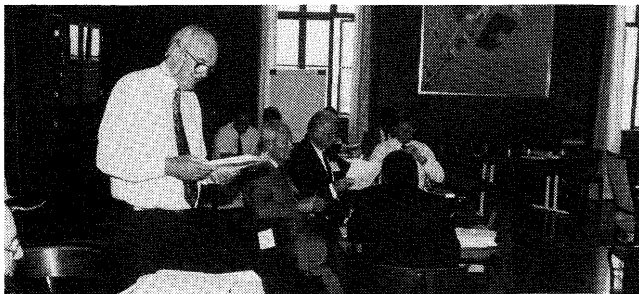
The reports indicate that IAPH could become involved in many of IMO's activities. IAPH's resources for so doing, however, are scarce. An effective system should therefore be established by Exco to make the best possible use of IAPH resources. A proposal to that effect made by Mr. P. Struijs of Rotterdam should be given every consideration later in the agenda.

Mr. Smith said that the detail of his report on IMO activities provided an alert to Technical Committee Chairmen of significant matters which ought to be taken up by their Committees. He referred to some topics which he felt merited particular attention, namely Reception Facilities for Wastes from Ships, Unwanted Aquatic organisms in

Mr. Rod Koon, Port of Tacoma, outlines the Conference program



Conference Co-Chairmen Mr. Terpstra (left) and Mr. M. Dinsmore present IAPH President Mr. Lunetta (center) with a trainer with the 19th Conference symbol marked on it to end their invitation addresses.



Mr. A.J. Smith reports on his liaison activities.

ballast water and IMO's adoption of a so-called "Precautionary Approach" in dealing with perceived threats to the marine environment.

He then referred to an application for consultative status which had been made by the European Harbour Masters Association (EHMA). The application in the event had been turned down by two IMO Committees. It nevertheless raised doubts in the minds of some IMO delegates as to the reality of IAPH's claim to be the representative voice of ports worldwide.

Exco discussed the implications of the EHMA application at length and in particular, how best to make use of the professional expertise of EHMA members who were, in the main, employees of IAPH members in the European region.

It was agreed that Mr. J. Mather in his capacity as IAPH's co-ordinator of liaison with international organizations should arrange to meet the President, EHMA to agree a mutual understanding and acceptance of the best way of achieving the aspirations of the members of IAPH and EHMA respectively.

Mr. Smith then summarized his report on the Agreement on Representation and drew Exco's attention, in particular, to para 4.1 dealing with an aspect of the 1969 Tonnage Measurement Convention which was giving some shipowners and some port authorities some concern.

A draft IAPH/International Chamber of Shipping (ICS) paper, outlining the problem and suggesting a possible solution, had been prepared following a meeting convened jointly by Mr. Smith and ICS officials with participation by representatives of IAPH member ports and shipowners associations.

Exco considered Mr. Smith's proposal that a joint statement be issued by IAPH and ICS to respective members on the implementation of the 1969 Tonnage Measurement Convention. It was agreed however that it would be preferable for the Secretary General of IAPH to write directly to IAPH members informing them of the implications of the coming into force of the 1969 Tonnage Measurement Convention 18 July 1994. The Secretary General, IAPH, undertook to do so and to inform ICS accordingly.

9 Paper by Mr. Struijs, Rotterdam on IAPH/IMO Relations

In introducing his circulated paper Mr. Struijs reminded the meeting that earlier reports by Technical Committee Chairmen and by IAPH's Liaison Officer with IMO had all pointed to the importance to port marine operations of a widening range of matters currently under discussion within IMO.

He felt strongly that the influence which IAPH was currently bringing to bear on IMO's decision-taking processes was not as effective as it should be. The importance

of IMO activities should not be underestimated by ports. He therefore proposed that a mechanism should be agreed by Exco to ensure that IAPH's input to IMO deliberations would henceforth be at a higher and more authoritative technical level.

Mr. Struijs further proposed that the present IAPH Working Group on IMO Activities should be reformed and strengthened to monitor all of IMO's ongoing and projected activities which might be port related and to which IAPH would be expected to make a positive contribution. The new Group should decide on priorities for action by Technical Committees, as might be necessary to ensure that the best use is made of IAPH's scarce resources. The new Group would also be expected to support the efforts of IAPH's Liaison Officer with IMO in presenting agreed IAPH opinions at the various IMO meetings.

Exco discussed the proposal at length and in some detail.

Mr. Mather then proposed that a Group such as had been proposed by Mr. Struijs should be formed for IAPH/IMO co-ordination purposes under the chairmanship of Mr. Jean Smaghe, 2nd Vice-President.

The proposal was seconded and duly adopted.

After discussion of the Group's membership it was agreed that it would include Mr. J. Mather, Mr. P. Struijs, Mr. Goon Kok Loon (or his representative with delegated authority to act on his behalf) and Mr. A. J. Smith, IAPH's Representative in Europe and Liaison Officer with IMO.

The Group would be expected to meet not less than twice a year and to keep the President, Officers and Exco fully informed of the developing situation.

10 Expression of Appreciation to the Host

A resolution of thanks to the host of the mid-term Exco was read by Mr. Kik Jurriens as introduced below. Mr. Lunetta thanked everyone involved to the Port of Copenhagen Authority, including their spouses and staff members.

Mr. Lunetta concluded the meeting with his closing remarks. The meeting adjourned at noon.



President Lunetta presents Mr. Schäfer with an IAPH gift.

The International Association of Ports and Harbors Executive Committee Resolution Expressing Appreciation

RESOLVED that the Executive Committee of the International Association of Ports and Harbors does hereby

express its deep appreciation to the officials and staff of the Port of Copenhagen for their kindness and generosity in hosting the Mid-term Executive Committee meetings of our Association here in Copenhagen, Denmark, from Monday, 30th May to Friday, 3rd June 1994.

Our particular thanks go to:

Ms. Anne Marie Nielsen, Board Chairperson
Mr. Erik Schafer, Managing Director
Mr. Carl Veng, Director
Mr. Per C. Schmidt, Marketing Director
Mr. C.C. Skat Larsen, Director
Ms. Eileen Moore, Executive Secretary
Ms. Gyde Fremlev, Secretary
Ms. Karin Hvass Rasmussen, Secretary,
Ms. Birgit Hansen, Secretary and
Ms. Helle Hornhaver, Secretary

for their kind assistance and cooperation afforded us 2during the meetings and for making our stay comfortable and enjoyable.

Last but not least, our gratitude goes to those who in various capacities supported us during the meetings. Without their help, the meetings would not have been such a success.

List of Participants to the IAPH Mid-Term Exco meetings Copenhagen, Denmark

May 31 - June 3, 1994

(in alphabetical order)

NAME	PORT/ORGANIZATION	COUNTRY
Baird, Capt. Ian	Port Hedland Port Authority	Australia
Bao, Hanmin	Port of Shanghai	China
Bellefontaine, D.F.	Halifax Port Corporation	Canada
Boynton, Pamela	Port of Miami	U.S.A.
Buchanan, Robert	Marine & Harbors Agency (South Australia)	Australia
Butah, K.A.	Ghana Ports & Harbours Autho.	Ghana
Chaudhry, Farooque*	Karachi Port Trust	Pakistan
Chen, Ching-Tzer	Keelung Harbor Bureau	China
Chen, Kuo-Quan	The Association of Ports and Harbors, Taipei	China
Cheng, Pen-Chi*	Keelung Harbor Bureau	China
Cooper, Robert*	Ports of Auckland Ltd.	New Zealand
Dinsmore, Mic R	Port of Seattle	U.S.A.
Fletcher, Mike*	Port of Tacoma	U.S.A.
Frawley, Tim J.*	Jardine Transport Services	Hong Kong
Fremlev, Gyde	Port of Copenhagen	Denmark
Friedman, Will	Port of Seattle	U.S.A.
Goon, Kok Loon*	Port of Singapore Authority	Singapore
Grant, Gary*	Port of Seattle	U.S.A.
Halling, John M.*	Port of Tauranga Ltd.	New Zealand
Hansen, Birgit	Port of Copenhagen	Denmark
Hayes, John	Maritime Services Board of N.S.W.	Australia
Hirota, Takao*	Overseas Coastal Area Development Institute of Japan	Japan
Hector, Michael J.*	Limerick Harbour Commissioners	Ireland
Hornhaver, Helle	Port of Copenhagen	Denmark
Hvass Rasmussen, Karin	Port of Copenhagen	Denmark
Hwang, Kyu-Jin	Korea Container Terminal Authority	Korea
Jeffery, David J.*	Port of London Authority	U.K.
Jurriens, Kick*	Port of Rotterdam	Netherlands
Kabuga, Alex	Kenya Ports Authority	Kenya
Kayahara, Hideo	Ministry of Transport	Japan
Keenan, Patrick*	Cork Harbour Commissioners	Ireland

Kondoh, Rinnosuke	IAPH Secretariat	Japan
Koon, Rod	Port of Tacoma	U.S.A.
Krygsman, Alexander*	Stockton Port District	U.S.A.
Kusaka, Hiroshi	IAPH Secretariat	Japan
Larsen Skat, C.C.*	Port of Copenhagen	Denmark
Lee, Dwayne G.*	Port of Los Angeles	U.S.A.
Lee, Hang-Kyu	Pusan District Maritime & Port Authority	Korea
Le Garrec, Pamela	European Sea Ports Organization (ESPO)	Belgium
Lunetta, Carmen	Port of Miami	U.S.A.
Mather, John	Clydeport Limited	U.K.
McKenzie, Fraser G.*	Port of Tauranga Ltd.	New Zealand
Moore, Eileen	Port of Copenhagen	Denmark
Mumba, Albert C.	Kenya Ports Authority	Kenya
Nagai, Hiroyuki	IAPH Secretariat	Japan
Ng, Chee-Keong*	Port of Singapore Authority	Singapore
Ng, Philip*	Port of Singapore Authority	Singapore
Onso, Kohnosuke	The IAPH Foundation	Japan
Paik, Yun-Sup	Korea Container Terminal Korea Authority	
Palao, Fernando	Puerto des Estado	Spain
Palu, Peeter	Ministerio de Obras Publicas Baltic Ports Organization(BPO) (Port of Tallinn, Estonia)	Denmark
Perrot, José	Port of Le Havre	France
Priso, André	Cameroun National Ports Authority	Cameroun
Quansah, J.E.	Kenya Ports Authority	Kenya
Rowland, Charles M.*	Canaveral Port Authority	U.S.A.
Schäfer, Erik*	Port of Copenhagen Authority	Denmark
Schmidt, Per C.*	Port of Copenhagen	Denmark
Sirat, Maimoon*	Johor Port SDN BHD	Malaysia
Smagghe, Jean*	French Ports Association (UPPACIM)	France
Smith, Alex J.*	IAPH European Representative (c/o British Ports Association)	U.K.
Spellman, Margo	Port of Seattle	U.S.A.
Stromberg, R. Erik	The American Association of Port Authorities	U.S.A.
Struijs, Pieter*	Port of Rotterdam	Netherlands
Sumardi, Ir.*	Public Port Corporation IV	Indonesia
Taddeo, D.J.	Port of Montreal	Canada
Takeda, Kimiko	IAPH Secretariat	Japan
Terpstra, John J.*	Port of Tacoma	U.S.A.
Tu, Deming	Port of Shanghai	China
Valls, Paul*	Direction des Ports Maritimes	France
Van der Kluit, P.C.	Port of Rotterdam	Netherlands
Veng, Carl*	Port of Copenhagen	Denmark
Visser, Leo*	DHV Environment & Infra- Structure	Netherlands
Watson, John	Dundee Port Authority	U.K.
Watt, Bob*	City of Seattle (Deputy Mayor)	U.S.A.
Welch, Don*	South Carolina State Ports Authority	U.S.A.
Wennergren, Göran	Port of Gothenburg AB	Sweden
(* accompanied by spouse)		



IAPH President reception was held at Royal Yacht Club on the evening of June 1. President Lunetta presents an IAPH gift to Mrs. Anne Marie Nielsen, Board Chairperson of the Port of Copenhagen.

Bull Session

Prior to the Executive Committee meeting, a bull session was held on the afternoon of Tuesday May 31 in the Port of Copenhagen Authority's boardroom.

President Lunetta opened the session and encouraged participants to speak on the subjects they are facing now in their own ports or regions. The President emphasized the significance of this style of free-talking session, which had been planned with the aim of eliciting the opinions of participants on hot topics in a more casual way.

This is because it had been difficult to hear participants' direct opinions at our biennial conferences or mid-term Exco meetings, at which pre-arranged speakers and agendas had to be dealt with within the limited time available in their day-to-day conference programs.

In line with the nature of bull sessions, no official records of the meeting were made. Nevertheless, the points made at the session can be found in the following notes, which Mr. Peter van der Kluit from Rotterdam made available to the Head Office secretariat for later reference.

1. GATT

Mr. Smaghe addressed the consequences of GATT on ports. He stated that, apart from the many good things that GATT will bring, it will lead to a decrease in the export of grain from French ports. In general, those present agreed that GATT will prove to be a good instrument in the long run, in spite of teething problems in the immediate future.

2. Environmental issues

Mr. Cooper addressed a number of important environmental issues in ports such as:

- dust
- noise
- how to cope with the activities of environmentalists
- the principle of compensation

Elements of port-city relations were discussed by the participants from the viewpoints of:

- PR aspects of port development
- lobbying
- port access to the public
- public awareness of what the port does
- (national) importance of the port in generating income
- importance of the port as a provider of jobs

3. EDI

Regarding EDI the following statements were recorded:

- Regulating and commercial information need to be combined.
- Regulations on hazardous goods could endanger facilitation.
- The proper implementation of regulations requires the use of EDI.
- It is important that interfaces between systems work properly: between port users, between local and national systems and with international systems.

The complexity of the transport system is one of the

reasons why EDI in this sector is way behind compared with other industrial sectors. Too many stand-alone systems have been developed, which frustrates the formation of interlinking networks.

European regulations provide a further drive for the implementation of EDI.

Why port-to-port exchange of data?

- e.g. for the declaration of dangerous cargo
- for the exchange of MARPOL data to detect possible illegal discharges

Note 1: This last example may not be primarily in the interests of ports. However, the existing EDI infrastructure should/can be used for conveying information which is of importance to other authorities.

Note 2: EDI facilities in ports should be laid out in accordance with local needs: small ports may find a personal computer and a modem sufficient for their requirements.

4. Public Awareness, PR

Mr. Stromberg (AAPA) described a public awareness campaign on dredging. It was meant to inform the public and the political decision-makers about the importance and necessity of dredging to ports.

The framework of the campaign will be used to serve as a basis for similar campaigns on other subjects.

Ports put a lot of effort towards convincing their (potential) customers. It is equally necessary to inform and convince those who make the decisions on the political level of the needs of ports.

5. Economic Impact of a Port

Mr. Taddeo spoke on the economic impact of a port. He called it a two-sided sword: the more important a port becomes, the more people tend to interfere with its business. He stressed the importance of good communications with city officials: what is quite normal for a port official may require extensive explanation to relative outsiders.

He further introduced the initiative to talk to the 'customers of the customers' of the port. These are the cargo owners, who are in control of the logistic chain and as such have a more important role in the choice of a port than the ship owner, who traditionally chooses the port(s) of call.



A scene from a Bull Session

Welcoming Address by Bente Frost, Mayor of Copenhagen

at the reception at the Copenhagen City Hall
13:00, Wednesday, 1 June 1994

President Lunetta, Honoured members of the International Association of Ports and Harbors, Ladies and Gentlemen:

As a representative of the Copenhagen local government I am pleased to welcome you to the Copenhagen City Hall. My name is Bente Frost and I am the Mayor of the Fourth Municipal Corporation of Copenhagen. In addition, I am a member of the board of Port of Copenhagen.

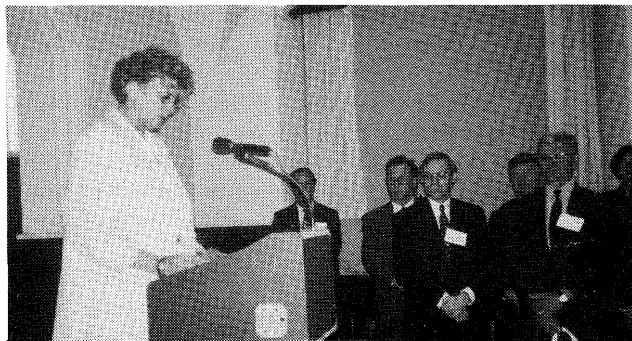
I understand that you are right in the middle of a comprehensive agenda. I hope that you will have time to take a look at our wonderful city. Anyway, you have probably already had the opportunity to look at the port and its surroundings.

You have probably noticed that, geographically, the port is centrally located in Copenhagen. Until the middle of this century the port was centrally placed in a financial sense too. Our port is gradually resuming this position. At any rate we see that the volume of goods passing through the Port of Copenhagen is on the increase.

Our belief that this development is continuing well documented. Generally, sea transportation is growing due to increasing capacity problems on the roads, the railways, and in the air. Also, well-founded concern about the pollution caused by overland and air transport favours sea transport and thus creates a potential for the growth of ports and harbors. Finally, another contributory factor is that world trade is growing.

One major reason for the optimism in Copenhagen is that the breakup of Eastern Europe has created new markets around the Baltic Sea. In this sense Copenhagen is centrally located. At the same time we are working on improving the infrastructure around Copenhagen. This will provide a much larger catchment area for the port.

In this connection I would point out that we have just started constructing a bridge between Copenhagen and the Swedish city of Malmö, located at the other side of the Sound, about 20 kilometers from here. Once the bridge has been built the whole of the south of Sweden will become a potential



Mayor of Copenhagen Mrs. Frost welcomes the IAPH delegates.

customer base for our port.

Culturally the port is assuming a central position, too. In 1996 Copenhagen is to be the Cultural Capital of Europe. It is part of the concept that the port in this connection should function as a centre for music, the theatre and the arts, featuring a museum, studios and the suchlike. The port is already being used daily as a recreational area by the citizens of Copenhagen, and it forms the framework for major cultural events such as music festivals.

A ferry will be the centre for information and activity and will be sent as a floating sign and symbol to cities in Europe. Among these cities will be those in the countries around the Baltic ports.

Both the port authority and the local government are actively contributing to making the port part of the cultural life of Copenhagen. And that is no problem — although, of course, the port is primarily a business enterprise.

At this point in time we are mainly concentrating on the areas which are no longer used for operations of the port due to its ongoing renovation and expansion.

In these areas we intend to construct buildings matching the best anywhere in the world as far as architecture is concerned. The buildings are to be used both for residential and commercial purposes and, moreover, they are to accommodate a concert hall and a library.

The constructive collaboration between the city and the Port of Copenhagen is of benefit to both parties. The work you are carrying out in your organization I see as yet another indication of a bright future for port operations and thus for Copenhagen, despite the sometimes threatening darkish clouds overhead.

With these words I wish you good luck in your further work. I hope you will enjoy your stay and am looking forward to seeing you again.

IAPH Submits 2 Papers To 17th LD Meeting

Mr. Dwayne G. Lee (Port of Los Angeles), Chairman of the IAPH Dredging Task Force, has recently sent two IAPH position papers for submission to the 17th Consultative Meeting of the Scientific Group to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and

Other Matter, which is scheduled for 18-22 July 1994 in London.

In his letter dated May 18 addressed to Dr. Manfred K. Nauke, Head, Marine Science Section, IMO's Marine Environment Division, Mr. Lee confirms that he is attending the meeting as head of the IAPH delegation which includes Dr. Richard K. Peddicord, who has recently been appointed as IAPH's new scientific adviser succeeding Dr. Willis E. Pequegnat (who passed away in April 1994). The papers submitted by Mr. Lee on behalf of IAPH are reproduced later in this issue.

IAPH Information

Technology Award 1994

— Gabon, Helsingborg and Shanghai Win the Awards —

As a result of the selection panel's assessments of the entry papers to the IAPH Information Technology Awards Scheme 1994, the following three ports won the Awards selected from among the 11 entries:

Gold: L'Office des Ports et Rades du Gabon
Silver: The Port of Helsingborg, Sweden
Bronze: The Port of Shanghai, China

In addition to the three Award winners, the following

two ports were awarded "Highly Commended" certificates.

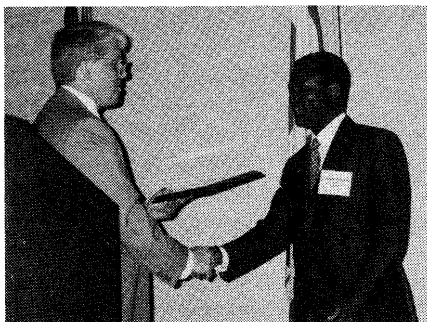
The Port of Cotonou, Benin

The Port of Santander, Spain

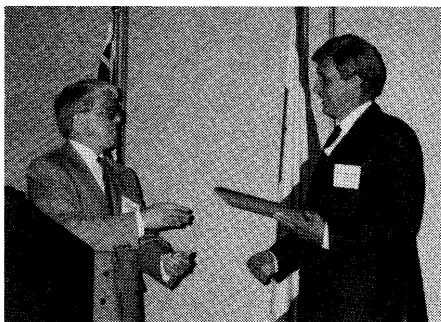
Mr. David Jeffery, Chairman of the IAPH Trade Facilitation Committee and Chairman of the Selection Committee, reported on the results to the Executive Committee in Copenhagen on 1 June 1994. The Exco expressed its deep appreciation to the Canada Ports Corporation for sponsoring this year's awards and offering free registration to the recipients of the first three awards (Gold, Silver and Bronze) to attend the gala dinner of the Fifth Ports Canada International Computer Conference in Toronto on June 8, 1994.

In his letter of May 23, 1994, Secretary General Kusaka, jointly with Chairman Jeffery, expressed their deep appreciation to all the entrants for their participation in the Award Scheme.

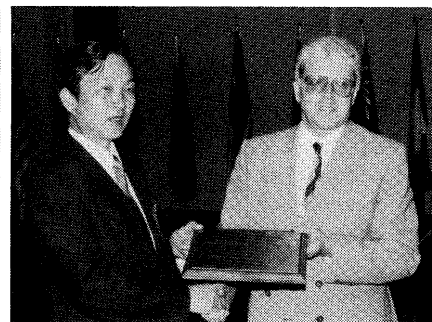
The prize-winning papers will be introduced in "Ports and Harbors" in a series starting with the next issue.



In Toronto, Mr. David Jeffery (left) presents the Award to Mr. Philibert Andzember, Director General, PORAG, Gabon (Gold)



Mr. Goran Hammar skjold, Manager, Tehnical Department, Port of Helsingborg (Silver) (right)



Mr. Tu Deming, Director, Port of Shanghai (Bronze) (left)



WORLD MARITIME UNIVERSITY

Established under the auspices of the International Maritime Organization specialized agency of the United Nations

The World Maritime University (WMU) is located in Malmö, Sweden, and has a student population of 200 - primarily from developing countries - engaged in full-time specialized maritime studies leading to the award of M.Sc. WMU is committed to policies of "equal opportunity" in employment and "quality" in its operations. The working language of the University is English.

PROFESSORSHIP IN PORT MANAGEMENT

The primary responsibility of the incumbent will be to lead, coordinate and ensure delivery of the University's programmes in port management studies. Inputs to other relevant programmes and to the academic management of the University will also be required.

The successful applicant will have had extensive experience at senior management level in port operations and, preferably, also teaching experience at post-graduate level. Appropriate professional/academic qualifications and fluency in the English language are prerequisites; and the ability to work in an international organisation, in a multi-cultural setting, is also an important consideration.

The appointment will be on a two-year fixed-term contract basis, commencing in January 1995. The annual salary, which is exempt from Swedish taxation, will be on a scale US\$ 72,900 to US\$ 86,000 by annual increments of US\$ 2,187. An amount equivalent to two months salary will be placed in a Provident fund after the completion of each twelve-month period.

Applications must be received by 31 August 1994 and should be addressed to World Maritime University (Personnel), P.O. Box 500, S-201 24 Malmö, Sweden. Further information on conditions of service may be obtained, on request. Queries on the duties and responsibilities of the position may be directed to the Rector, Tel: +46-40 35 63 00.

Osaka to Host Combined Transport & Distribution Meeting in October

Mr. Goran Wennergren (Port of Gothenburg), Chairman of the IAPH Committee on Combined Transport & Distribution, has recently accepted the invitation from Mr. Akira Sakata, Director General, Port & Harbor Bureau, City of Osaka, to hold a meeting of his Committee in Osaka on October 20 and 21, 1994.

For the convenience of participants, Chairman Wennergren has arranged for his Committee to meet in the three different regions so that every member of his Committee will be able to attend at least one meeting. In fact, the Committee met at Amsterdam in October 1993, at Singapore in November 1993 and at Atlanta in April 1994. Prior to the planned meeting in Osaka on October 20 and 21, the Committee plans to meet at Gothenburg on September 8 and 9 1994.

There are two Japanese members who are serving on the Committee, namely Mr. Takao Yanagihara, President, Osaka Port Terminal Development Company, and Dr. Yoshikazu Kawasaki, Senior Executive Director, International Port Cargo Distribution Association in Tokyo. The host port is expecting to be able to welcome as many participants as possible to Osaka for the meeting.

Report by Bursary Recipient

10th International Program in Port Planning and Management, 11-22 April 1994, New Orleans, U.S.A.

Mr. N. Dawoodary
Secretary
Mauritius Marine Authority

I had the privilege of participating in the above program promoted by the Board of Commissioners of the Port of New Orleans, the World Trade Center of New Orleans, the Louisiana State University, National Ports and Waterways Institute of New Orleans.

This rigorous two-week program consisted of a curriculum designed to help port executives sharpen practical skills and strengthen their conceptual understanding in a total learning atmosphere away from the demands of their administrative responsibilities. The program focussed on the general management of port operations in an international environment and sought to provide participants with a background which would enable them to make those decisions.

The curriculum covered three broad areas: port systems, port authority management and administration, and port planning and operations. In fact, the courses included:-

- Cargo Handling
- Container Terminal Operations and Management
- Dredging

- Port Environmental Considerations
- Industrial Development
- Introduction to developments in Ship Types, Size, Characteristics and Cargo Transfer
- Labor Relations
- Overviews of Cargo Transportation — Modes and Economics
- Personal Behavior and Management Techniques
- Accounting and Finance
- Port Administrative Functions and Management Techniques
- Port Authority Marketing
- Port Computerization
- Port Pricing and Economics
- Port Engineering and Maintenance
- Port Planning and Development
- Port Investment
- Port Pilotage
- Port Terminal Operations

The instructors were both public and private sectors' maritime officials from the United States, experts from the World Bank, the staff of the Louisiana State University National Ports and Waterways Institute, faculty from the University of New Orleans, Port of New Orleans personnel and members of the local maritime community.

The IPPPM's individual program courses were structured into interactive sessions which draw upon the skills and experience of both participants and lecturers. The participants became part of a small group in problem-solving sessions, while the instructors served as catalysts and moderators in summarizing the material covered. In addition to the problem-solving sessions, participants learned about specific management and operational topics through exercises, lectures, case discussions, films and site visits.

The successful completion of IPPPM resulted in the award of the diploma in port planning and management which is hereto enclosed. As a result of my participation to the 10th International Program in Port Planning and Management in New Orleans I was also made an International Honorary Citizen of the City of New Orleans.

I offer my profound gratitude to IAPH which promptly accepted the financing of the program and made possible my participation in this Program.

In conclusion, the Program was very useful, topics covered being highly specialized and technically very advanced. Of critical importance was the wide experience of the speakers.

I acquired a considerable amount of useful information which will be of paramount importance to the Mauritius Marine Authority.

Report on the Exco Meetings In Copenhagen Circulated

The Head Office has recently sent all members of IAPH a 21-page report on the mid-term Exco meetings in Copenhagen held on June 1 and 3, 1994. The report covers the major points of discussions and the decisions resulting from the deliberations as well as an outline of the 19th World Ports Conference of IAPH to be held in Seattle/Tacoma from June 10 to June 16, 1995 on the basis of the presentations made by the hosting ports' representatives in Copenhagen.

The IPD Fund: Contribution Report

The contributions from members to the Special Port Technical Assistance Fund ("the IPD Fund") as of July 11, 1994, are listed in the box below. The amount received in contributions in the 24 months from the start of the campaign for the 1992-1994 totalled US\$50,299, 72% of the targeted amount of US\$70,000.

Mr. Goon Kok Loon (Singapore), Chairman of the Human Resources Committee, gave his report to the mid-term Exco with particular reference to the financial status of the IPD Fund. The Committee affirmed that further contributions by members and individuals would always be welcome so as to increase the resources to be used for bursary money for an increased number of qualified trainees from developing ports.

Contributions to the Special Fund For the Term of 1992 to 1994 (As of July 11, 1994)

Contributors	Amount
Paid:	(US\$)
ABP (Associated British Ports), U.K.	3,000
Abu Dhabi Seaport Authority (Mina Zayed)	3,000
Akatsuka, Dr. Yuzo, Univ. of Saitama, Japan	230
Akiyama, Mr. Toru, IAPH Secretary General Emeritus, Japan	1,000
Auckland, Ports of, Limited, New Zealand	500
Barcelona, Puerto Autonomo de, Spain	1,000
Bintulu Port SDN BHD, Malaysia	200
Cameroon National Ports Authority, Cameroon	480
Cayman Islands, Port Authority of, the Cayman Islands	250
Clydeport Ltd., U.K.	1,000
Constanta Port Administration, Romania	250
Copenhagen Authority, Port of, Denmark	1,000
Cotonou, Port Autonome de, Benin	100
Cyprus Ports Authority, Cyprus	1,000
Delfzijl/eemshaven, Port Authority of, the Netherlands	350
de Vos, Dr. Fred, IAPH Life Supporting Member, Canada	150
Dubai Ports Authority, U.A.E.	500
Dundee Port Authority, U.K.	250
Empresa Nacional de Administracao dos Portos, E.P., Cabo Verde	250
Fiji, Ports Authority of, Fiji	100
Fraser River Harbour Commission, Canada	250
Fremantle Port Authority, Australia	250
Gambia Ports Authority, the Gambia	250
Ghana Ports and Harbors Authority, Ghana	250
Hakata, Port of, (Fukuoka City) Japan	1,705
Halifax, Port of, Canada	250
Helsingborg, Port of, Sweden	500
Hiroshima Prefecture, Japan	523
Irish Port Authorities Association, Ireland	1,000
Japan Academic Society for Port Affairs, the, Japan	267
Japan Cargo Handling Mechanization Association, Japan	259
Japan Port and Harbor Association, the, Japan	493

Japanese Shipowners' Association, the, Japan	516
Johor Port Sdn. Bhd., Malaysia	500
Kawasaki, City of, Japan	1,702
Klang Port Authority, Malaysia	200
Kobe, Port of, Japan	3,665
Kobe Port Terminal Corporation, Japan	924
Korea Container Terminal Authority, Korea	100
KSC (Kuwait Oil Company), Kuwait	1,000
Kudo, Dr. Kazuo, Tokyo Denki University, Japan	4,000
London Authority, Port of, U.K.	500
Maldives Ports Authority, Maldives	100
Marine and Harbours Agency of the Department of Transport, South Australia, Australia	150
Marine Department, Hong Kong	500
Maritime Services Board of New South Wales, Australia 367	
Mauritius Marine Authority, Mauritius	200
Melbourne Authority, Port of, Australia	1,000
Miri Port Authority, Malaysia	100
Montreal, Port of, Canada	500
Nagoya Container Berth Co., Ltd., Japan	518
Nagoya Port Authority, Japan	3,564
Nanaimo Harbour Commission, Canada	250
Napier, Port of, Limited, New Zealand	100
New York & New Jersey, Port Authority of, U.S.A.	1,000
Niigata, Port of, (Niigata Prefecture), Japan	860
Okubo, Mr. Kiichi, Japan	274
Osaka Port Terminal Development Corp., Japan	570
Pacific Consultants International, Japan	243
Penta Ocean Construction Co., Ltd., Japan	500
Point Lisas Industrial Port Development Co. Ltd., Trinidad	100
*Primer Concurso Internacional de Memorias Portuarias: Carlos Armero Sisto, Anuario de Puertos: Buenos Aires, Argentina	300
Public Port Corporation I, Indonesia	180
Pusan East Container Terminal Co.Ltd., Korea	200
Qubec, Port of, Canada	250
Shipping Guides Limited, U.K.	500
Solomon Islands Ports Authority, Solomon Islands	100
South Carolina State Ports Authority, U.S.A.	1,000
Tauranga, Port of, New Zealand	500
Toyama Prefecture, Japan	254
UPACCIM (French Ports Association), France	1,905
Vancouver, Port of, Canada	500
Total:	US\$50,299

**1st International Contest of Port Annual Reports sponsored by the Yearbook of the Port of Buenos Aires (Editor, Mr. Carlos Armero Sisto)*



19TH IAPH WORLD PORTS CONFERENCE

Hosted by the Ports of Seattle and Tacoma • Westin Hotel, Seattle, Washington, U.S.A. • June 10-16, 1995

Message from Mr. M.R. Dinsmore & Mr. John J. Terpstra Host for the 19th World Ports Conference

May 20, 1994

Executive Committee Members
International Association of Ports and Harbors
Copenhagen Admiral Hotel
Copenhagen, Denmark

Dear Executive Committee Members:

It seems like just yesterday when representatives of the Ports of Seattle and Tacoma were in Sydney, Australia at the 18th IAPH Conference promoting our upcoming IAPH Conference. The theme for our presentation and exhibit was "Picture Perfect." As part of our promotion, we gave special cameras to all IAPH delegates, and took pictures of them in front of a large photo of one of our area's greatest landmarks—Mount Rainier.

Since then, we have been hard at work making preparations for IAPH's 19th World Ports Conference, to make sure it will indeed be a "Picture Perfect" experience for all IAPH delegates and guests.

Our goal is to offer the best in terms of thought provoking speakers and business program topics, as well as giving our visitors ample opportunities to explore the Seattle-Tacoma area, and to take advantage of the beauty and majesty of the entire Pacific Northwest. This booklet presents the overall outline of our proposed conference plan.

The theme we have chosen for the conference is "New Challenges—New Partnerships." We think this overall theme is very suitable for world ports today, and one that will allow us to explore a wide range of vital topics.

We believe we are well on the way of producing a very productive conference, one that is particularly fitting for IAPH's 40th anniversary year. We look forward to making a formal presentation to you on Friday, June 3.

By getting your ideas and input, we can ensure that the 19th IAPH World Conference will indeed be "Picture Perfect."

Sincerely,

M.R. Dinsmore
Conference Vice-President
Executive Director
Port of Seattle

John J. Terpstra
Conference Vice-President
Executive Director
Port of Tacoma

VENUE

RATES:

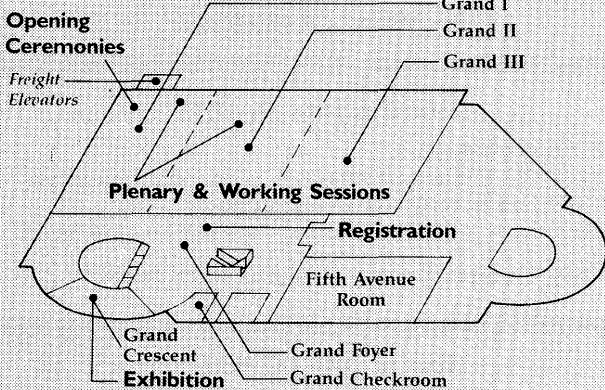
Accommodation held by the Host Secretariat has been secured for Conference delegates. These rates are available from June 6, 1995 through June 20, 1995 for conference attendees at the:

The Westin Hotel, Seattle
\$157. USD per room per night

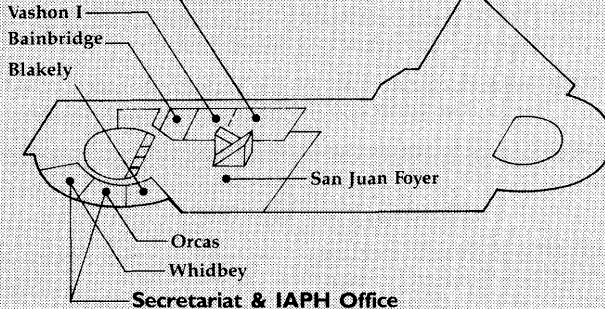
This rate is for a standard double or single occupancy room. Deluxe, superior, view rooms and suites are available on request for an additional charge. (Alternate hotels and prices are not listed at this time. Information can be provided on request)

CONFERENCE ROOMS:

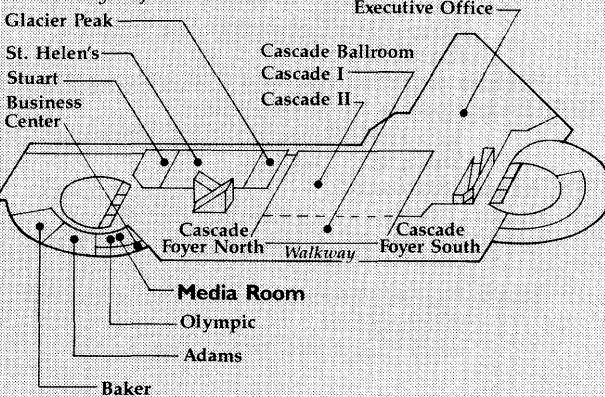
Grand Ballroom Level Fourth Floor, North Tower



San Juan Level Third Floor, North Tower



Mezzanine Second Floor, North & South Towers Wallway adjoins towers



Invitation to US President

May 12, 1994

President Bill Clinton
The White House
1600 Pennsylvania Avenue N.W.
Washington, D.C. 20500

Dear Mr. President:

During the week of June 11-16, 1995, the Ports of Seattle and Tacoma will be co-sponsoring a major international conference in the Pacific Northwest. The conference is the International Association of Ports and Harbors (IAPH), and over 700 delegates are expected to attend, representing major ports from around the world.

The purpose of this letter is to officially invite you to be the keynote speaker of the opening ceremonies of this conference. Currently, the opening ceremonies are planned for Sunday afternoon, June 11. If you are unable to appear in person, but could provide welcoming remarks via satellite TV or taped remarks by video, we would be most anxious to explore those options as well.

We will be traveling to Copenhagen, Denmark at the end of May for a meeting of the executive board of IAPH, where we will present a preliminary agenda and list of guest speakers for our conference. Because of this, we would appreciate your early consideration on this matter.

If your schedule does not allow participation in this conference, we would be grateful if you could suggest another member of your Administration who may be able to address the group on your behalf.

We thank you in advance for your time and consideration.

Sincerely,

M.R. Dinsmore

M.R. Dinsmore
Executive Director
Port of Seattle

John J. Terpstra

John J. Terpstra
Executive Director
Port of Tacoma



Honorary Committee

Chairman: The Honorable Mike Lowry, Governor, State of Washington

Members

The Honorable Norm Rice Mayor, City of Seattle
The Honorable Harold Moss Mayor, City of Tacoma

The Honorable Bob Watt Deputy Mayor, City of Seattle
The Honorable Doug Sutherland Pierce County Executive

The Honorable Gary Locke King County Executive

Jack Block Commissioner, Port of Seattle
Robert Earley Commissioner, Port of Tacoma

Patricia Davis Commissioner, Port of Seattle
Jack Fabulich Commissioner, Port of Tacoma

Gary Grant Commissioner, Port of Seattle
Mike Fletcher Commissioner, Port of Tacoma

Paige Miller Commissioner, Port of Seattle
Patrick O'Malley Commissioner, Port of Tacoma

Paul Schell Commissioner, Port of Seattle
Jerry Thorpe Commissioner, Port of Tacoma

Conference Organizing Committee

Co-Chairmen: IAPH Conference Vice Presidents & Conference Co-Chairmen

Mic Dinsmore, Executive Director, Port of Seattle
John Terpstra, Executive Director, Port of Tacoma

Conference Committee Co-Chairpersons

Margo Spellman Assistant Director Port Communications Port of Seattle
Rod Koon Director of Port Relations Port of Tacoma

Conference Committee Members

Will Friedman Manager, Communications Marine Division Port of Seattle
Evette Bailey Port Relations Coordinator Port of Tacoma

JoAnne Lee Marketing Specialist Port of Seattle
Jill Childs Communications Consultant Port of Tacoma

PROVISIONAL PROGRAM

Duration: June 10-16, 1995

Venue: The Westin Hotel, Seattle, Washington, U.S.A.

Conference Theme: New Challenges—New Partnerships

Conference Co-Chairmen: Mr. Mic Dinsmore, Executive Director, Port of Seattle
Mr. John Terpstra, Executive Director, Port of Tacoma

Registration Fees:

IAPH Members:

US\$1,000 (when received by April 10, 1995)

US\$1,200 (after April 10, 1995)

Non-IAPH Members:

US\$1,500 (when received by April 10, 1995)

US\$1,650 (after April 10, 1995)

Program (Tentative)

Saturday, June 10, 1995

0800/1700 Registration

0900/1200 Pre-Conference Meetings of various committees

1200/1400 Lunch for Committee Members

1400/1700 Pre-Conference Meetings of various committees

1800/1900 Cocktails for early arrivals (Westin Hotel)

Sunday, June 11, 1995

0900/1200 Pre-Conference Meetings of various committees

1200/1400 Lunch for Committee Members

1400/1700 Pre-Conference Meeting of the Board and Exco

1730/1930 Opening Ceremonies (Westin Hotel)

1930/2130 Welcome Reception (Pacific Science Center)

(Hosted by IAPH and the Ports of Seattle and Tacoma)

Monday, June 12, 1995

0800/0900 Committees' meetings

0900/1030 First Plenary Session

1045/1200 Keynote Address Session

Session Chairman: Carmen Lunetta, IAPH President

Topics: Ports—New Challenges for Global Development

Ports—New Partnerships for Economic Growth

Speaker: Invitation extended to President Clinton

1200/1400 Lunch: Speaker (To be determined)

e.g., Frank Shrontz, CEO & Chairman, The Boeing Company

1400/1700 Working Session No. 1: Human Resources and External Affairs

Session Chairman: D. Taddeo, Port of Montreal (IAPH Vice President)

Topics: Human Resources (Goon Kok-Loon, Port of Singapore)

Legal Protection (P. Valls, Bordeaux)

Port Communities (D.F. Bellefontaine, Port of Halifax)
Speakers: To be decided

Tuesday, June 13, 1995

0800/0900 Committees meetings

0900/1200 Working Session No. 2: The Challenges of Global Policy Changes

Session Chairman: To be decided

Topics: ☐ NAFTA's Impact in the Western Hemisphere

☐ The Challenges of the APEC Countries & Economies

☐ African Ports Look to the 21st Century

☐ European Economic Community—An Update

Speaker: To be decided e.g. Robert Coleman, Director General of Transportation, European Economic Community

1200/1400 Luncheon Speaker: To be decided, e.g. Bill Gates, Chairman & CEO, Microsoft Corporation

1400/1700 Working Session No. 3: New Port Challenges and Partnerships: A West Coast Update

Session Chairman: To be decided, e.g. Jane Frost, Commissioner, Port of Vancouver, Canada

Topics: ☐ The Environmental Port Development Challenge

Speaker: John Terpstra, Port of Tacoma

☐ New Partnership of Port Development
Speaker: Mic Dinsmore, Port of Seattle

☐ Helping Ports Meet the Intermodal Challenge

Speaker: to be decided, e.g. John Vickerman, President Vickerman, Zachary, Miller

☐ Partnerships for Infrastructure
Speaker: to be decided e.g. Gil Hicks, Executive Director, Alameda Corridor Transportation Authority

Wednesday, June 14, 1995

Noon/1630 Seattle and Tacoma Harbor Tours

1700/2100 Tacoma "Chowdown Event"

Thursday, June 15, 1995

0800/0900 Meetings of Committees

0900/1200 Working Session No. 4: Trade Affairs

Session Chairman: J. Smagghe, UPPACIM, France

Topics: ☐ Sea Trade (Lillian Liburdi, Port Auth. of NY & NJ)

☐ Ship Trends: J.M. Moulod (Port of Abidjan)

☐ Combined Transport & Distribution (G. Wennergren, Port of Gothenburg)

☐ Trade Facilitation (J. Jeffery, Port of London Authority)

Speakers: To be decided

1200/1400 Luncheon Speaker: To be decided, e.g. Minoru Arakawa, President, Nintendo of America

1400/1700 Working Session No. 5: Emerging Markets
Session Chairman: To be decided

Topics: ☐ Vietnam (Speaker: to be decided)

☐ Russia (Speaker: to be decided, e.g. W.W. Middleton Executive Vice President, Atlantic Service Sea-Land Service, Inc., or e.g. Gergi Vlaskin Consul General, Russian Consulate)

☐ South Africa (Speaker: to be decided)

☐ South America (Speaker: to be decided, e.g. Jaime Chacano Sr., Vice President, Bank of America, Latin America or, e.g. Patricio Silva, Chilean Ambassador to the U.S.)

Friday, June 16, 1995

0800/0900 Meetings of Committees

0900/1200 Working Session No. 6: Port Affairs

Session Chairman: Robert Cooper, Ports of Auckland

Topics: ☐ Port Planning and Construction (Philip Ng, Port of Singapore)
(Speakers: to be decided)

☐ Dredging Task Force (Dwayne Lee, Port of Los Angeles)
(Speakers: to be decided)

☐ Port Safety and Environment (P. van der Kluit, Port of Rotterdam) (Speakers to be decided)

☐ Marine Operations (J. Watson, Port of Dundee) (Speakers to be decided)

☐ Cargo Operations (J. Terpstra, Port of Tacoma) (Speakers to be decided)

☐ EDI/Automation and Computerization (Consider Rotterdam)

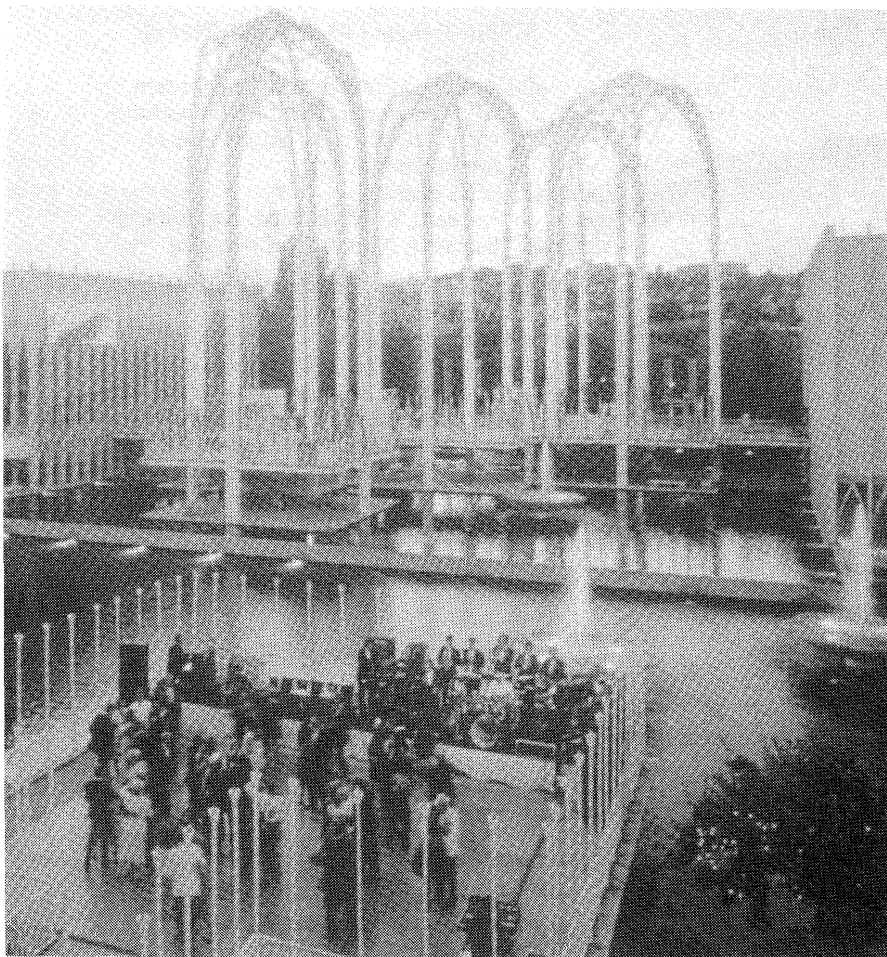
☐ Northern Sea-Route (Speaker: to be decided, e.g. Olson P. Smith, U.S. Army of Corps of Engineers)

1200/1400 Luncheon Speaker: To be decided, e.g. Craig McCaw, Chairman & CEO, McCaw Cellular Communications

1400/1545 Second Plenary Session (Closing Session)

1600/1700 Post-Conference Board & Exco Joint meeting (To be immediately followed by the Post-Conference Exco Meeting)

1930 Gala Dinner at Museum of Flight



OUR EXCITING 1995 IAPH CONFERENCE OPENING RECEPTION...

THE PACIFIC SCIENCE CENTER

Sunday Evening, June 11, 1995

Following the opening ceremonies at the Westin Hotel, delegates and their guests will be whisked away in private Monorail cars to the world-famous Seattle Center.

Site of the 1962 World's Fair and the home of the 610 foot (186 meter) Space Needle, the Center also houses the Pacific Science Center, an interactive and entertaining science and technology museum. Walk among life-like dinosaurs, experience the latest in video technology with "Virtual Reality" and better understand our changing world.

As the sun sets, a buffet dinner offering a taste of the Pacific Northwest will be served. Guests may stroll through the courtyard and enjoy the beautiful outdoor lighting as it illuminates the fountains and statues ranging from dinosaurs to whales.

ONE OF THE 1995 IAPH CONFERENCE SOCIAL EVENTS...

TILLICUM VILLAGE SALMON DINNER CRUISE

Monday, June 12, 1995

Depart from Pier 56 for a short cruise to Blake Island marine State Park, the site of the popular Tillicum Village. This unique village is styled after the native Indian "Longhouse" and remains one of the Northwest's most natural settings to achieve the true Native American experience.

A traditional Northwest feast will be offered, featuring alder-smoked salmon and steamed clams. As your meal ends, the lights will dim for an enchanting cultural performance. While a narrator tells stories of Indian land and customs and their creation, Northwest Native American performers portray their ancient folklore through a series of costumed dances.

The island itself offers a glimpse of the natural beauty of the Pacific Northwest. Guests are invited to walk along nature trails or browse through the gift shop.

President Clinton and visiting dignitaries enjoyed their visit to Blake Island during the 1993 Asia Pacific Economic Cooperation Conference.

A TRIP TO MOUNT RAINIER NATIONAL PARK

Tuesday, June 13, 1995



A trip to Washington State isn't complete without a visit to beautiful Mount Rainier National Park. The 14,411 foot (4,393 meter) mountain, once an active volcano, is capped with glaciers and can be seen for hundreds of miles on a clear day.

During your visit to the park, you not only will experience the majesty of the mountain, but you also will discover beautiful alpine meadows covered with wildflowers, cascading waterfalls and clear, pristine lakes.

From this spectacular vantage point, you will see Mount Baker to the north and Mount St. Helens to the south. Mount St. Helens is well-known for its violent eruption in 1980.

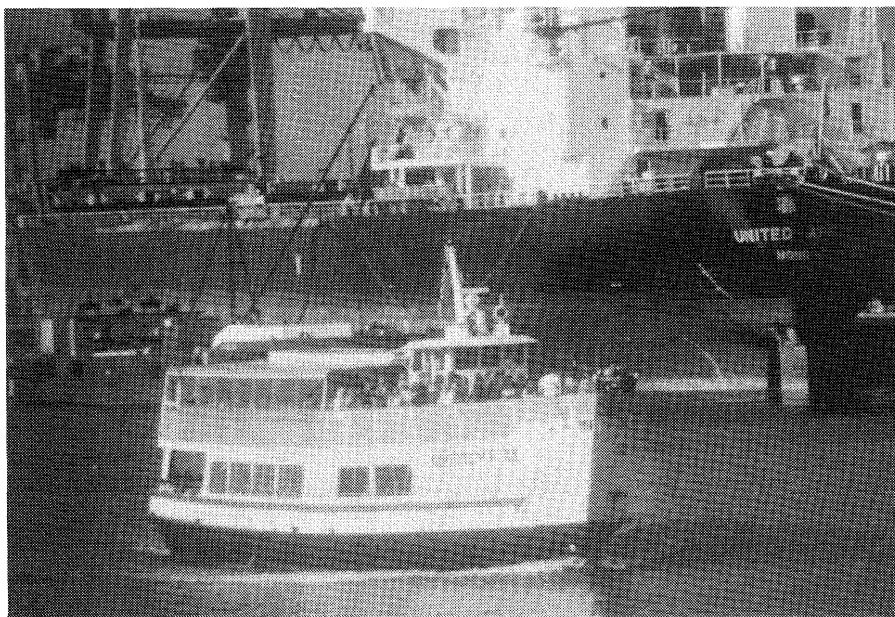
An informative Visitors Center and historic Paradise Lodge assist visitors in making the most of their time spent in this wonderful park. A picnic-style lunch will be provided.

TECHNICAL TOURS WITH A COUNTRY TWIST...

PORT TECHNICAL TOUR DAY

Wednesday, June 14, 1995

Guests will board two major sightseeing vessels for a waterside tour of the Port of Seattle, featuring the Port's vast marine terminals and current waterfront development. After that delegates and their guests will enjoy lunch on board the vessels during a leisurely trip through Puget Sound to the Port of Tacoma. Modern dockside intermodal rail facilities and environmental clean-up projects will be among the highlights of the Port of Tacoma's technical tour.



Following the tour, guests will disembark their vessels and head to the Port's Terminal 7 ware house, which will be transformed into a country western atmosphere for the evening. After a cocktail hour, delegates and guests will enjoy a world-famous "Chowdown"—featuring the finest in Pacific Northwest seafood ranging from salmon to crab.

Entertainment for the evening will be All-American Country and Western. Instructors will be on hand to help you learn the basic dance moves, and there will be plenty of lively music to enjoy. This will be the most casual day of the conference. We encourage you to wear blue jeans, or any other comfortable clothes you might want. The emphasis on this evening event is down-home, country fun!

IAPH Staff Visits Gothenburg, London

Following their attendance at the mid-term Exco in Copenhagen, Secretary General Kusaka and his staff from the Tokyo Head Office visited Gothenburg, Sweden, where they were welcomed by Mr. Goran Wennergren, President of the Port of Gothenburg AB, and Mrs. Wennergren as their guests at Mr. Wennergren's country house one Sunday



IAPH staff together with the Port of Shanghai delegation in the port tour in Gothenburg.

afternoon.

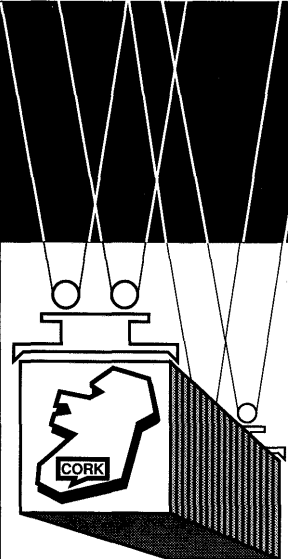
On the morning of June 6, 1994, the Head Office members visited the Port, where they were guided around the various facilities by Mr. Thomas Lumsden, General Manager, Alysborg Harbour, followed by Mr. Wennergren's

presentations on the current situation of the Port in its boardroom. The party from Tokyo together with Mr. Tu Deming, Director, Port of Shanghai, who was also visiting Gothenburg that morning was given a boat tour of the port over lunch.

On the morning of June 7, the Secretariat members visited the British Ports Association, where they were welcomed by Mr. David Whitehead, Chief Executive and other staff members of the BPA. Mr. A.J. Smith, our European Representative and Mr. Mike Compton from the Ports' Safety Organization, were also present at the meeting. Mr. Kusaka, IAPH Secretary General, expressed his deep appreciation to the BPA officials for the cooperation they had afforded IAPH in support of the work under the arrangement of the IAPH/BPA Agreement on Representation.

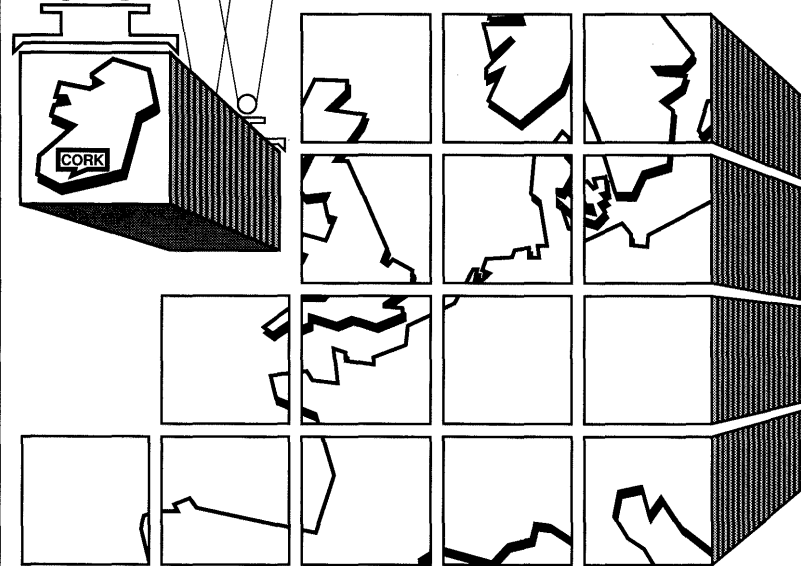


IAPH Staff visiting the BPA office



PORT of CORK


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ONLY CORK OFFERS

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- SHORTEST CROSSING TO THE CONTINENT

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CORK HARBOUR COMMISSIONERS, CUSTOM HOUSE ST., CORK.
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Visitors to Head Office

On May 9, 1994, Mr. Olivier Deheegher and Mr. Luc Roussel, researchers of Environment et Aménagement Regional (ENVAR), University of Lille, France, visited the head office, where they were met by Mr. R. Kondoh, on their month-long research trip to Japan on the subject areas of regional, urban and waterfront development projects. The party visited a number of port cities to observe the existing and planned projects including such port cities as Tokyo, Yokohama, Nagoya, Osaka, Kobe and Hakata.

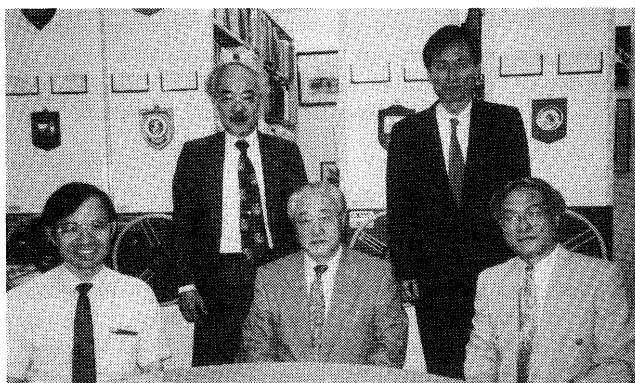
On May 13, 1994, Mr. Andre Pages, Honorary Member of IAPH (1985) and former chairman of the IAPH Committee



Mr. and Mrs. Pages in Tokyo

on the Legal Protection of Port Interests, visited the Head Office on his private trip to Japan, where he was received by Secretary General Kusaka and his staff. They exchanged views and comments on items of mutual concern. Residing in Bordeaux, Mr. Pages has acted as an IAPH expert at the series of UNCTAD/IMO initiatives for the revision of the Convention on Maritime Liens and Mortgages and the Salvage Convention. His recent study is related to the monetary erosion for compensation funds as provided for in conventions concerning maritime disasters and accidents.

On June 24, 1994, on their two-day study mission to Japan, Mr. Chiu Chin-Sen, Transportation Department, and Mr. Kuo-Quan Chen, Managing Director, The Association of Ports and Harbors, Taipei, China, visited the Head Office and met with Secretary General Kusaka and his staff to exchange views on the current situations of ports. On the same day, the party visited the Japanese Shipowners' Association, where they were received by Mr. Naoyoshi Mikawa, Deputy Director, Business Affairs Department, and further by Mr. Toshio Suda, Managing Director, Japan Shippers' Council. On the previous day, the party had visited the Port of Yokohama.



Front: from left, Mr. Chiu Chin-Sen, Mr. Kusaka and Mr. Kuo-Quan Chen. Back: Mr. Kondoh and Mr. Suzuki, MOT, Japan.

Revision of the Dredged Material Guidelines

Submitted by
The International Association
of Ports and Harbors

For Consideration by
The Scientific Group
of the London Convention
July 1994

Transmitted by
Dwayne G. Lee
Observer on behalf of IAPH



Prepared by
Richard K. Peddicord, Ph. D.
Consultant to IAPH



1.0 ROLE OF INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS

The ports of the world play a vital role and serve important national, regional, and global interests in carrying out waterborne trade and commerce. This intra- and international commerce is essential to the national economies of the port countries. The port operations are not only essential elements of many national economies, but are also a fundamental basis for commercial, legal and political relationships between states. Port operations are especially important for many developing countries that rely heavily on maritime commerce to sustain their economic growth and development. The International Association of Ports and Harbors (IAPH) represents the worldwide port industry with over 400 member ports in 83 nations. Since 1980, IAPH has been an active participant in the work of the London Convention regarding the management of dredged material for the protection of marine environment.

Most of the international ports of the world are located near the sea. They have a universal problem of continuous sediment deposition in waterways, which must be dredged periodically to maintain the depths required for navigation of the vessels engaged in international trade. The volumes of sediment that must be dredged may range in the hundreds of thousands to millions of cubic meters of sediment annually. The vast majority of this sediment is essentially free of contamination and can be used for a variety of beneficial purposes¹ or can be placed on land or in the ocean without environmental concern.

A small proportion of this sediment may be contaminated sufficiently to require careful management. That management can be conducted in an environmentally sound manner under certain circumstances by placing the sediment on land and in other circumstances the sediment can be placed in the ocean without environmentally adverse consequences.

In certain cases, placement in the water may be the environmentally preferable alternative.²

2.0 BASIS FOR DREDGED MATERIAL GUIDELINES

The Dredged Material Guidelines (DMG) were adopted at LC 10 as the culmination of years of study, review and evaluation by the Scientific Group. The Scientific Group considered the results of tens of millions of dollars worth of worldwide research, monitoring, testing, and evaluation related to potential environmental impacts of dredged material disposal at sea. Much of this research included efforts on appropriate classification of dredged material. The extensive and intensive international evaluation of dredged material demonstrated to the satisfaction of the Scientific Group that most dredged material is of little environmental concern. The circumstances under which dredged material might be of environmental concern in the ocean are well known. Reliable ways to manage that small proportion of all dredged material that is contaminated to minimize environmental risks are also well known. The thorough evaluation of dredged material over many years by the international community was considered by the Scientific Group in developing the DMG, and the DMG reflect this knowledge.

3.0 IAPH SUPPORT OF DMG CONCEPTS

Throughout its history of involvement with the London Convention, IAPH has helped to formulate the concepts underlying the DMG. IAPH supports and helped to secure the adoption of the DMG. The essential purpose of the DMG is to distinguish the relatively small amounts of problematic dredged material from large amounts of dredged material that are not of environmental concern in the ocean, and to provide guidelines for handling both classes of dredged material appropriately in the ocean. The key concepts that have proven their value and must therefore be maintained in the DMG include the following.

3.1 UNIQUENESS OF DREDGED MATERIAL

Dredged material differs from all other materials covered by the London Convention in several ways that are critical to its proper environmental management.

3.1.1 Natural Origin

Dredged material is natural sediment, some of which has varying amounts of incidental anthropogenic constituents. Dredged material consists of soil material eroded from the land and carried into port areas by waterways, with some marine sediments brought in by the actions of the incoming tides. The sediment that settles in navigation areas of harbors and subsequently must be dredged and removed to maintain navigation depths is natural sediment deposited by natural processes. Dredged material is identical to sediments deposited in these harbors in areas that are not dredged for navigation.

3.1.2 Natural Transport

Dredged material that is taken to sea for disposal is comparable to the sediments that are carried out of the same harbor by natural water movements and deposited at sea. Dredging represents a very small proportion of the total amount of sediment moved down waterways, through harbors, and into the ocean annually by natural processes. A small proportion of the sediment that enters harbors is

contaminated due to human activities. Both contaminated and uncontaminated sediment settles in areas that are dredged for navigation purposes, and both classes of sediment settle in areas that are not dredged. That sediment (contaminated or not) which settles in navigation areas is periodically dredged and transported to sea or to other disposal sites in order to maintain the navigable viability of the port. That sediment (contaminated or not) which settles outside navigation areas is resuspended and transported to the ocean by natural processes, often in greater volumes than are involved with dredging.

3.1.3 Varying Contamination

Historically, dredged material has been the principal LC material that is for the most part free of contamination at levels of environmental concern by metals, nutrients, petroleum, synthetic organics, and all other contaminants. Most dredged material is essentially clean natural sediment. Only a small proportion of dredged material has contaminants of potential concern.³

3.1.4 Contaminants from Disparate Sources

Dredged material is produced by natural processes of erosion and sediment transport. It is not a result of any discrete human activity or process. Whatever contaminants may be associated with some sediment are introduced from a wide variety of sources, often far removed from the port whose economic viability depends on the dredging and removal of those sediments. It might be said that dredged material is produced by no one, and the small portion which is contaminated, is contaminated by everyone.

3.1.5 Sequestering of Contaminants

The sediment matrix of dredged material is unique from other materials that might be disposed at sea. Sediments have a great capacity to tightly bind and sequester contaminants in ways that significantly reduce both the degree and rate at which those contaminants become biologically available. This reduced bioavailability results in greatly reduced potential for environmental impact compared to similar contaminants in other materials.^{3,4}

3.2 RECOGNITION OF BIOAVAILABILITY

The concept of bioavailability and its importance has been recognized by provisions of the DMG and the Guidelines for Allocation of Substances to the Annexes to the London Dumping Convention. Resolution LDC.31 (11) acknowledges that recognition of reduced bioavailability of contaminants sorbed to sediments is essential for realistic evaluation of potential environmental impacts of dredged material. It has been shown scientifically that both metals and organic contaminants added to sediments tend to "weather in" over time, and that the bioavailability of anthropogenic contaminants of sediments decreases with time.^{4,5,6}

3.3 SPECIAL CARE RECOGNIZED

The Scientific Group has accepted the concept of special care measures to allow the safe disposal at sea of even contaminated dredged material under certain circumstances. Special care measures may include such things as capping of contaminated dredged material with a layer of clean sediment in order to reduce the accessibility to biota of the contaminants in the dredged material. The nature of the sediment matrix itself reduces the bioavailability of con-

taminants in dredged material, and a cap reduces the bioaccessibility of those contaminants by isolating them from organisms that might be affected by them. Special care involving capping reduces bioaccessibility of the contaminants, and at the same time the sediment matrix reduces bioavailability of contaminants in the dredged material, providing two mechanisms of environmental protection.

4.0 RELATIONSHIP OF THE DMG TO THE WASTE ASSESSMENT FRAMEWORK

The Waste Assessment Framework (WAF) is a broad framework for assessing any and all materials that may be considered for placement in the ocean. The DMG are a subset of the WAF, designed specifically for the unique material described in Section 3 above. The DMG are compatible with the WAF, but not all WAF provisions need to be applied to this unique subset in order to meet the purpose of the DMG.

4.1 WAF PROVISIONS APPLICABLE TO DREDGED MATERIAL

4.1.1 Waste Prevention (WAF 5.2.8)

In this discussion it is essential to distinguish the port in the sense of a general geographic area (i.e., the port of New York meaning the New York Harbor area) from the Port in the sense of a business enterprise whose economic interests depend on dredging (i.e., the Port Authority of New York and New Jersey).

The concepts of waste prevention and source control are absolutely essential for proper management of dredged material over the long term. However, these concepts must be applied far more broadly than the Ports. They must be applied throughout the watershed prior to the sediments being carried into harbor areas and settling in the navigation channels in order to control contamination of dredged material at the source of contamination.

As source control is implemented over time, even that small proportion of dredged material that is contaminated will gradually be replaced with sediments that are progressively less contaminated. Therefore the problem of contaminated dredged material should properly be viewed as an interim one which will eventually be solved by controlling pollution at its source. In order to accomplish this, it must be recognized that the Ports which have the economic interest in removing the dredged material are seldom the source of most contamination. The major sources often are far removed from the geographical location and control of the Ports.

4.1.2 Waste Management (WAF 5.2.10)

Waste management is something of a misnomer when applied to dredged material. In fact, the vast majority of dredged material is not contaminated and is not a waste, and it is incorrect to consider it as such. It is a beneficial material for which a variety of productive uses are available.¹ However, because of the volumes of material involved and the potential for adverse impacts of salt associated with marine sediments placed in an upland environment, all dredged material disposal options should be evaluated in light of a comparative risk assessment including both ocean and land placement alternatives.

4.1.3 Dredged Material as a Special Case (WAF 5.2.11)

This is the most lengthy and comprehensive section

of the WAF that explicitly applies to dredged material. It encompasses a number of important concepts including the importance of source control. While source control must be applied far beyond the jurisdiction and authority of the Ports, the problems of contaminated dredged material must be faced until source control is achieved. However, those problems are temporary and will diminish as source control improves. Until source control is achieved, any problems with the portion of dredged material that is contaminated can be addressed using disposal management techniques according to Resolution LDC.21(10).

4.1.4 Special Care (WAF 5.5.10-11)

These sections of the WAF recognize techniques to reduce the bioaccessibility of contaminated dredged material and therefore reduce the environmental exposure of organisms. In this way, special care techniques reduce any potential consequences of those contaminants.

Capping is explicitly endorsed as a special care measure along with variations on the capping process that provide physical isolation of the dredged material. Capping, however, is only an example of special care measures that are recognized. Other techniques that may be developed in the future that accomplish the same purpose of reducing the environmental exposure and therefore potential effects of contaminated dredged material are recognized in these sections of the WAF.

4.2 WAF PROVISIONS WITH LIMITED APPLICABILITY TO DREDGED MATERIAL

4.2.1 Waste Audits

Since Ports are not manufacturers and are generally no more than minor contributors to the contamination found in that portion of dredged material which is contaminated, Ports are not in a position to conduct typical waste audits or to utilize clean production techniques. Ports do need to take appropriate measures to address spills, manage runoff, and other activities within their control.

4.4.2 Source Control

Ports cannot reasonably or practically be required on an international basis to take steps to control upstream land-based sources of pollution. IAPH supports efforts by its member Ports to control upstream sources of pollution where a Port is uniquely situated to do so. However, in most cases Ports do not have the political or legal authority to impose prohibitions or regulatory restraints upon upland sources of pollution. This is the function of national authorities through domestic laws, regulations, and permit requirements.

4.3 USE OF DREDGED MATERIAL GUIDELINES

The use of the DMG together with appropriate parts of the WAF is an effective means for accessing the suitability of dredged material for placement at sea. IAPH endorses the revisions and uses of the DMG proposed by the Permanent International Association of Navigation Congresses (PIANC) in submittal number LC/SG 17/2/1 entitled "Review and Evaluation of the Guidelines for the Application to the Annexes to the Disposal of Dredged Material." This evaluation is a balanced analysis and statement of appropriate uses of the WAF in evaluating dredged material for placement in the ocean. The IAPH commends PIANC for their excellent effort in recommending modifications to the DMG to be consistent with the WAF.

4.4 PRECAUTIONARY APPROACH

The Scientific Group and Contracting Parties have recognized that the WAF incorporates the precautionary approach, and the WAF has been approved for interim use with dredged material. The precautionary approach is compatible with the option of ocean placement of contaminated dredged material. The issue is one of risk assessment and management; that is, whether a reasonable evaluation can be made of the likely impacts from ocean placement. At the fourteenth meeting of the LDC, contracting parties endorsed use of the precautionary approach under which "...appropriate preventative measures are taken when there is reason to believe that substances or energy introduced in the marine environment are likely to cause harm, even when there is no conclusive evidence to prove a causal relationship between inputs and their effects" (LDC.44(14)). This provides for an assessment of impacts from ocean disposal to determine whether there is reason to believe it will likely cause harm. The DMG are useful assessment tools for determining whether contaminated sediments can be safely placed at sea. These protocols reflect a precautionary approach to dredged material management that is designed to provide protection to the marine environment while at the same time recognizing the critical need of many Ports to use the ocean disposal option. IAPH supports the precautionary approach as adopted in LDC.44(14) and believes the DMG is the effective implementation for dredged material.

4.5 ROLE OF WAF AND DMG

It is well known that the great majority of dredged material is essentially clean and presents no problem for ocean disposal. The importance of DMG and WAF is in assessing the suitability for ocean disposal of dredged material containing varying degrees of contamination, and providing for appropriate management of both uncontaminated and contaminated dredged material placed at sea.

5.0 CONCLUSIONS

The DMG, when used with appropriate parts of the WAF are consistent with the precautionary approach and with the purposes and goals of the United Nations Conference on Environment and Development (UNCED) and with the provisions of Agenda 21. IAPH endorses the "Review and Evaluation of the Guidelines for the Application of the Annexes to the Disposal of Dredged Material" as prepared by PIANC, and supports the adoption of this view. IAPH looks forward to a continuing partnership with the Contracting Parties in assuring the environmentally safe disposal at sea of dredged material.

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Applicability of Action Levels for Cadmium, Tributyltin Oxide, and Chlorobenzenes in Dredged Material

Submitted by
The International Association of Ports and Harbors
For Consideration by
The Scientific Group of the London Convention July 1994

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1. BACKGROUND

The contracting parties to the London Convention (LC) have selected three indicative substances (cadmium for Annex 1, tributyltin oxide for Annex 2, and chlorobenzenes) for the consideration of action levels to determine the suitability for ocean disposal under the Waste Assessment Framework (WAF) with particular reference to the presence of the substances in dredged material.

Cadmium is a naturally occurring metal found in soils and sediments throughout much of the world. It is used in a wide variety of industrial applications. Tributyltin oxide is a synthetic organometallic compound with a number of industrial applications, including use in anti-fouling paints for ships. Chlorobenzenes are a class of synthetic organic compounds. The class includes a number of specific compounds with different toxicities and environmental behaviors. Chlorobenzenes are used in the synthesis of a wide variety

of organic compounds.

2. NUMERICAL ACTION LEVELS FOR DREDGED MATERIAL ON A GLOBAL BASIS ARE SCIENTIFICALLY UNSOUND

2.1 HISTORY

The International Association of Ports and Harbors (IAPH) has opposed international numerical action levels for dredged material and supported risk-based direct effects evaluation through the Dredged Material Guidelines (DMG). The practicality, reliability, and environmental protectiveness of the direct evaluation approach has been proven through more than 15 years experience as the basis for the United States regulation of dredged material in compliance with the LC. The approach has received similar acceptance based on proven utility in Europe and throughout the rest of the world.

2.2 TECHNICAL LIMITATIONS OF ACTION LEVEL APPROACH ON A GLOBAL BASIS

All methods proposed to date for deriving action levels share several characteristics that seriously limit their technical applicability to dredged material on a global basis, due in part to the unique characteristics of dredged material, which enable sediments to sequester contaminants, reducing their bioavailability and effects. These unique characteristics of the sediment matrix limit the practical utility of numerical action levels to use as a screening mechanism, with opportunity for verification of actual impacts, in appropriate cases, through the use of more reliable effects-based testing.

2.2.1 The Nature of Dredged Material Precludes the Need for, and Development of, Global Action Levels

While a number of methodologies have been proposed for developing numerical action levels for dredged material, none deal adequately with the unique characteristics of dredged material. Consequently, IAPH believes the development of numerical values for worldwide application to dredged material is neither practical nor environmentally sound.

- * Most dredged material is uncontaminated, with only a small proportion containing sufficient contaminants to be of environmental concern for ocean disposal.

- * Dredged material is a complex natural sediment matrix that is highly variable around the world. While all sediments have a great capacity to sequester contaminants, thereby reducing their bioavailability, that capacity varies with many sediment characteristics. For example, different clay mineralogies have different capacities to sequester contaminants. Organic materials of various origins in sediments also have different capacities to sequester contaminants.¹ Considered on a global basis, the mineralogy and nature of organic matter in sediments and dredged material varies widely. Therefore, the ability of sediments to sequester contaminants, reducing their bioavailability and thus their effects, varies widely.

- * Considered on a worldwide basis, the proportion of dredged material that is contaminated may contain any contaminants in an almost infinite variety of mixtures and concentrations.

- * The sediment matrix greatly reduces both the extent and the rate of bioavailability of all contaminants relative to other LC materials.^{1,2}

- * Special care measure can effectively isolate dredged

material from the marine environment regardless of the degree of contamination.

2.2.2 Limitations Common to All Action Level Methods

All methods proposed to date for development of action levels share at least two important characteristics which make them fundamentally inapplicable to dredged material on a global basis.

2.2.2.1 Action Level Approach Does Not Address Chemicals for Which Levels Have Not Been Developed

If action levels were developed for the three constituents under consideration, a sediment could be below those levels and still pose environmental risks due to other chemicals for which levels had not been developed. This limitation is applicable regardless of the number of contaminants for which there are action levels. The action level approach provides no means of evaluating such constituents.

2.2.2.2 Action Levels Do Not Address Unanticipated Chemicals

Action levels are developed on a chemical-by-chemical basis and provide no means for evaluating chemicals which may be present in dredged material unknown to the evaluator, but perhaps of environmental importance. The action level approach requires that all chemicals of concern be identified and analyzed in the dredged material. If, for example, there were no known or suspected sources of tributyltin oxide in the sediment in question and it were not analyzed for this compound, then any effect of tributyltin oxide that might be in the sample from unrecognized sources would not be evaluated using the action level approach.

2.2.2.3 Action Levels Do Not Address the Interaction of Chemicals

All action level methodologies proposed to date develop values on a single chemical basis. No method has been proposed to develop numerical action levels that quantify the potential interactions of two or more contaminants present together in the dredged material. Such interactions can be either synergistic (the presence of the second chemical increases the effect of the first chemical) or antagonistic (the presence of the second chemical decreases the effect of the first chemical). The inability of action levels to account for interaction is especially limiting in the case of dredged material. That portion of dredged material which is contaminated often contains a variety of metallic and organic contaminants. The potential identities and relative concentrations of these contaminants is almost infinite considered on a worldwide basis, thereby making the ability of action levels to consider only single contaminants in isolation a seriously limiting factor.

2.2.2.4 Action Levels Cannot Lead to Definitive Conclusions on a Global Basis

As discussed above, dredged materials that do not exceed action levels cannot, on a global basis, be definitively regarded as acceptable for ocean disposal without further evaluation. Nor can dredged materials that exceed action levels be definitively regarded as unacceptable on a global basis without further evaluation. Due to the uncertainties in the methods for deriving action levels, discussed in detail below, the calculated values are so variable that on a worldwide

basis they can be regarded only as general indicators of potential problems. More detailed evaluation would be necessary to determine definitively whether a dredged material that exceeded action levels was unacceptable for ocean disposal. Since both exceeding and not exceeding action levels require further investigation, there is no practical advantage to the use of action levels on a global basis. Direct assessment of potential effects following the DMG would be a logical approach to further evaluation, and should be used instead of action levels in the first place.

2.2.3 Action Levels Derived by the Apparent Effects Threshold Method

2.2.3.1 Description of Apparent Effects Threshold Method

The apparent threshold (AET) is a method of numerically relating sediment toxicity and/or biological conditions to sediment contaminant concentrations. AET values can be derived for any chemical and any biological parameter such as toxicity to any species, alterations in the community of sediment-dwelling organisms, and other parameters that can be measured quantitatively. To derive an AET value, a data set is required in which data for each sample include (1) sediment concentration of the contaminant for which the AET value is being derived, and (2) a measure of the biological parameter being considered. The sample data are arranged in order of increasing contaminant concentration, and the occurrence or absence of the biological parameter of interest is noted in each sample. In concept, this results in a pattern of initial samples with low contaminant concentration in which no biological change occurred, than in a series of samples in which biological changes occurred sporadically, but inconsistently, as contaminant concentration increased. This inconsistency is presumably due to the fact that a number of parameters other than the contaminant in question influenced biological response to the sediment. Finally, a contaminant concentration is reached beyond which biological changes occurred in all the remaining samples.

An AET is defined as the sediment concentration of a given chemical above which statistically significant biological effects are always expected. If any chemical exceeds its AET for a particular biological indicator, an adverse biological effect is predicted for that indicator. If all chemical concentrations are below their AET for a particular biological indicator, then no adverse effect is predicted.³

AET values have been published for cadmium, but not for tributyltin oxide or total chlorobenzenes.

The AET method describes the co-occurrence of contamination and biological change, but it has no mechanistic basis, resulting in two shortcomings: (1) it does not demonstrate cause and effect, and (2) it produces inconsistent results.

2.2.3.2 Apparent Effect Threshold Method Does Not Demonstrate Cause and Effect

Action levels cannot be useful in the global regulation of dredged material, unless they establish a stronger indication of a cause and effect relationship than currently exists in an effects-based testing approach. AET has not established this stronger association. In a review of the AET process by the Science Advisory Board of the U.S. Environmental Protection Agency, the Board concluded "...the AET method is not capable of demonstrating specific cause and effect

relationships for any one specific chemical."³

The lack of cause and effect relationship means that it is possible to produce very misleading values, as the following extreme example indicates. A set of AET values was derived in the remedial investigation for the Commencement Bay Nearshore/Tideflats site near Tacoma, Washington.⁴ In that report, data on sediment toxicity to amphipods are used to derive AET values for contaminants in the sediment samples. However, the same toxicity data can be used to derive AET values not for contaminants, but for the distance of the sampling site from Mt. Olympus in the State of Washington. This is done by following the AET derivation process exactly. The sampling sites in the remedial investigation were listed in order of increasing distance from Mt. Olympus and the occurrence or absence of amphipod toxicity at each site was noted. The greatest "no effect" distance beyond which effects were always observed is the AET for distance from Mt. Olympus. This exercise produces an AET of 72.89 miles from Mt. Olympus.

No one assumes that distance from Mt. Olympus has anything to do with amphipod toxicity, yet this derivation is completely consistent with the AET definition and derivation process. The dangers of incorrectly associating cause and effect with AET values is seen when the definition of AETs is considered: "A toxicity apparent effects threshold (AET) is defined as the contaminant concentration [or distance from Mt. Olympus?] above which significant sediment toxicity would always be expected."

Action levels set by a method that provides little indication of cause and effect between the contaminant and biological impact would be of little value in a worldwide regulatory program. If, for instance, the AET process were used to establish an action level for cadmium under the LC, placement in the ocean of a dredged material that exceeded the action level would be interrupted. This could lead to efforts to reduce the cadmium concentration in the material to be dredged from that channel in the future. Such efforts are invariably expensive and time consuming. However, in the absence of a cause and effect relationship, there is no reason to believe that reducing the cadmium concentration in the sediment would reduce the toxicity or other adverse biological impacts of that sediment, which could be caused by any contaminant or combination of contaminants. All time and expense to reduce the cadmium concentration in this example would have been misdirected and produced no benefit.

Regulation on the basis of an action level that did not indicate cause and effect could actually produce environmental degradation. If, in the above example, action levels derived by AET were the sole basis for regulating the dredged material, the material whose cadmium concentration was brought below the cadmium action level would be considered acceptable for placement at sea. However, lacking a cause and effect relationship, bringing the cadmium concentration below the action level might not affect the toxicity (or other biological impact) of the sediment at all. Yet the sediment would be judged satisfactory for ocean disposal because it was below the action level. Regulation based on action levels that did not provide cause and effect would, in fact, sanction and encourage the degradation of the ocean environment.

2.2.3.3 The Apparent Effects Threshold Method Provides Inconsistent Results

Because the AET is simply a statistical correspondence method and not mechanistically based description of the

process by which effects are caused, AET results are inconsistent from one geographical area to another. This clearly precludes the use of AET-based action levels on a global basis. For example, AET values have been developed for Puget Sound in the State of Washington, USA, and for the State of California, USA. In a study evaluating the AET approach for assessing contamination of marine sediments in California, the AET values for Puget Sound and California were compared.⁵ The AET for cadmium based on toxicity to mussel larvae for Puget Sound was 16 times higher than the corresponding cadmium AET value for California. This difficulty applies equally to other parameters. The AET value based on toxicity to mussel larvae was also 16 times higher in Puget Sound than in California for low molecular weight polycyclic aromatic hydrocarbons, 12 times higher in Puget Sound than in California for total PCB, and 10 times higher in Puget Sound than in California for high molecular weight polycyclic aromatic hydrocarbons. If the AET is in fact "the contaminant concentration above which significant sediment toxicity would always be expected," it is difficult to understand how the values could be so different for the same chemical and biological effect. Nor is this difficulty unique to a particular biological effect. In the same report,⁵ the authors calculated AET values for northern and southern California, based on toxicity to amphipods. The cadmium AET for southern California was 18 times higher than the corresponding value for northern California. The low molecular weight polycyclic aromatic hydrocarbon compound fluorene AET value was 17 times higher in northern California than in southern California, and the high molecular weight polycyclic aromatic hydrocarbon compound fluoranthene had an AET 12 times higher for northern California than southern California. The geographic differences are even more dramatic in the case of specific various isomers of the pesticide DDT and its degradation products. The AET for total DDT based on amphipod toxicity was 344 times higher in southern California than in northern California. For the breakdown product p,p'DDT, the AET value was 100 times higher in southern than in northern California. For the breakdown product p,p'DDE, the southern California AET was 2,689 times higher than the northern California value. The compound p,p'DDT gave an AET value 64 times higher in southern California than in northern California (Table 1).

**TABLE 1. INCONSISTENCIES IN AET VALUES.
DERIVED FROM DATA PRESENTED IN REFERENCE 5.**

Constituent	Difference Between California and Puget Sound Values	Difference Between Northern and Southern California Values
Cadmium	16-fold	18-fold
LPAH*	16-fold	—
Fluorene	—	17-fold
HPAH**	10-fold	—
Fluoranthene	—	12-fold
Total PCB	12-fold	3-fold
Total DDT	3-fold	344-fold
p,p'DDT	—	100-fold
p,p'DDE	—	2,689-fold
p,p'DDT	—	64-fold

*LPAH = Low molecular weight polycyclic aromatic hydrocarbons.

**IAPH = High molecular weight polycyclic aromatic hydrocarbons.

—Data for this comparison not presented in Reference 5.

If inconsistencies of this sort exist over such a small geographic range as northern and southern portions of a single state within one country, it is difficult to see how the AET process could be used to derive action levels for application on a global basis.

Part of these inconsistencies may be caused by correlations among contaminant concentrations resulting in false AET values. It is not uncommon for several contaminants to originate from the same source, and for their concentrations in sediment to be closely correlated. When this occurs, the nature of the AET process is such that the effects of Chemical A cannot be distinguished from the effects of Chemical B. Therefore, the AET value for Chemical B reflects combined effects of A and B, resulting in a false AET value. This phenomena has been documented statistically in a study that concluded "...the high probability of establishing false AETs that cannot be detected as false would appear to be insurmountable, especially if the goal were the establishment of defensible chemical-specific sediment quality criteria."⁶

2.2.3.4 Worldwide Action Levels Cannot Be Set Using the Apparent Effects Threshold Method

Even if the action level approach were to be taken, the apparent effects threshold method could not be used to derive values for worldwide application. The lack of an indication of cause and effect, the inconsistency of results, and the potential for false values are fatal flaws which prohibit the use of action levels based on AET values on a global basis. IAPH cannot support utilizing the AET method for any such purpose.

2.2.4 Action Levels Derived by the Sediment Quality Triad

2.2.4.1 Description of the Sediment Quality Triad

In the sediment quality triad approach, chemical analyses of sediments, sediment toxicity tests, and studies of in-place sediment effects such as changes in community structure of sediment-dwelling organisms, are used to provide a description of sediment quality. Chemical analyses of sediment provide information on the identities and amounts of contaminants present. Sediment toxicity tests indicate effects of sediment on survival of organisms in laboratory tests. Studies of in-place effects provide a measure of biological conditions in the field in the presence of the sediments in question. The major emphasis in the triad approach has been an attempt to provide an integrated description of sediment quality considering these three perspectives. In the triad approach, data on all three parameters are presented as ratios of the test sediment results to results of the same evaluation using a reference sediment. These ratio-to-reference (RTR) values are combined in a diagrammatic form to illustrate the degree of divergence of the test sediment from the selected reference sediment in terms of the three parameters. The pattern and degree of divergence is the basis for interpretation of the data.

The sediment quality triad is an attempt to provide a structured comprehensive approach to sediment evaluation. It is not intended as a method for generating numerical values for broad application as action levels, and has been used for this purpose very little.

Numerical "criteria" for three chemicals have been generated using the sediment quality triad.⁷ These "criteria" are the concentrations of the chemicals at which effects occurred in one data set at a frequency the author considered important. There has not been use of the sediment quality

triad approach on a widespread basis for generating numerical sediment quality values. Numerical values for cadmium, tributyltin oxide or chlorobenzenes have not been established using the sediment quality triad.

2.2.4.2 The Sediment Quality Triad Does Not Demonstrate Cause and Effect

The developers of the sediment quality triad do not maintain that the method demonstrates a cause and effect relationship between any of the set of chemicals analyzed and the observed biological results. They do contend that the "weight of evidence" from the two independent measures of biological effect provide a likelihood that some characteristic of the sediment in question is responsible for the observed effects.

The shortcomings of regulating on the basis of a process without a clearly demonstrated cause and effect between chemicals of concern and environmental consequences have been discussed in Section 2.2.3.2 above. In a review of methods for classifying sediments, the Science Advisory Board of the U.S. Environmental Protection Agency concluded "...the Triad method does not establish causal relationships between specific contaminant concentrations and observed adverse effects."⁸ Even if the "weight of evidence" view of triad results is accepted, the lack of clearly demonstrated cause and effect renders the triad approach unacceptable as a global basis for regulating dredged material.

2.2.4.3 Sediment Quality Triad Results Cannot Be Applied to Multiple Sediments

Because the triad is based upon co-occurrence of several parameters and not on a mechanistic process, the results are unique to each sediment evaluated and cannot be extrapolated from one sediment to another. The sediment quality triad data treatment "...may provide more realistic *site specific* criteria than single chemical characterizations such as are undertaken in other approaches"⁷ (emphasis added). And, later in the paper "because of the possibility of interactions between groups of chemicals, it is probably not possible to determine in isolation from other contaminants the no-effect level for a particular contaminant... thus the *site-specific* criteria determined here ... are realistically applicable only if PAH and PCB levels (and those of other chemicals) do not exceed their particular criteria concentrations"⁷ (emphasis added). In a review of the methods for classifying sediments, the Science Advisory Board of the U.S. Environmental Protection Agency concluded "the major weakness of the Triad method is its site-specific nature."⁸ Since sediment quality triad results generated from one sediment cannot be applied to another sediment, the approach cannot be used to generate action levels applicable on a global basis.

Because sediment quality triad results are presented on the basis of "ratio to reference" the data do not follow a normal statistical distribution.⁹ There is, therefore, a high probability of declaring no difference between the reference and test sediments when in fact there is a true difference, especially if the number of samples is relatively small.⁹ Because most evaluations of potential dredging projects are based on a number of samples that would be considered relatively small in this context, there is a high probability using the sediment quality triad of declaring a sediment acceptable for ocean placement when in fact that is not the case.

2.2.4.3 Action Levels Cannot Be Set Using the Sediment Quality Triad

Even if the action level approach were to be taken, the sediment quality triad could not be used to derive values. Both of the absence of an indication of cause and effect and the ability to apply values only to the sediment from which they were derived prohibit the use of the sediment quality triad-based action levels on a global basis. IAPH cannot support an attempt to use the sediment quality triad for any such purpose.

3. INTERNATIONAL NUMERICAL ACTION LEVELS FOR DREDGED MATERIAL ARE UNNECESSARY AND INAPPROPRIATE

Numerical action levels applied to dredged material on a global basis are not only technically unsound but are unnecessary for the effective protection of the marine environment, and therefore are inappropriate. The unique mitigative properties of sediments and the sequestering effects of special care measures preclude reliance on numerical action levels and require direct biological assessment under the DMG as the appropriate means for determining the suitability of dredged material for disposal at sea.

3.1 MITIGATIVE PROPERTIES OF DREDGED MATERIAL

The sediment matrix of dredged material is unique from other materials that might be disposed at sea. Sediments have a great capacity to tightly bind and sequester contaminants in ways that significantly reduce both the degree and the rate at which those contaminants become biologically available. The reduced bioavailability results in greatly reduced potential for environmental impact compared to similar contaminants in other materials.

A paper submitted to the Scientific Group for consideration in April 1989 by IAPH¹ discusses the mitigative properties of dredged material in some detail. Some of the primary components of dredged material that play major roles in sequestering of contaminants include high molecular weight humic acid and lower molecular weight fulvic acids, in addition to a wide spectrum of other organic materials in dredged material. Humic and other organic materials have great capacity to sequester and reduce the bioavailability of both metals and organic contaminants.¹ Cadmium is known to be less toxic to aquatic organisms when complexed with humic acids than when it is not complexed.¹ The bioavailability of organometallic compounds like tributyltin oxide is also reduced by complexation with humic materials.¹ Organic matter in dredged material is widely recognized as a major factor controlling the bioavailability of nonionic organic chemicals such as chlorobenzenes in sediments.^{1,10} Clay minerals are effective at sequestering cadmium and other metals as well as polar organic molecules such as tributyltin oxide in sediments.¹ Iron oxides and manganese oxides and hydroxides have high sorptive capacity for metals and can thus effectively sequester such contaminants as cadmium and other metals in dredged material.¹¹ Sulfides are abundant in most dredged material, and are very effective at sequestering metals like cadmium.¹²

All these sequestering processes reduce the extent and rate of bioavailability of contaminants in sediments. Most dredged materials contain all these sequestering agents in varying concentrations. Therefore, a number of sequestering mechanisms are at work simultaneously in dredged material, reducing the bioavailability of organic contaminants such

as chlorobenzenes, organometallics such as tributyltin oxide and metals such as cadmium.

The concept of bioavailability and its importance in reducing the environmental effects of contaminants has been recognized by provision of the DMG and the Guidelines for Allocation of Substances to the Annexes to the London Dumping Convention. Resolution No. LDC.31(11) acknowledges that recognition of reduced bioavailability of contaminants sorbed to sediments is essential for realistic evaluation of potential environmental impacts of dredged material.

3.2 SPECIAL CARE

The Scientific Group has accepted the concept of special care measures to allow the safe disposal at sea of even contaminated dredged material under appropriate circumstances. Special care measures may include such things as capping of contaminated dredged material with a layer of clean sediment in order to reduce the accessibility to biota of the contaminants in the dredged material. Sections 5.5.10 and 11 of the WAF recognize techniques to reduce the bioaccessibility of contaminated dredged material and therefore protect organisms by reducing their environmental exposure. In this way, special care techniques reduce any potential consequences of contaminants in dredged material. Capping is explicitly endorsed in the WAF as a special care measure, along with variations on the capping process that provide physical isolation of the dredged material.

4. DIRECT ASSESSMENT USING THE DMG IS SOUND AND APPROPRIATE

The DMG provide a technically sound and realistic approach for global application for determining the environmental risks associated with placing dredged material at sea. Using this approach, risks of placing the dredged material at sea can be compared with risks of placing the same material in other disposal options.

Direct effects evaluation as defined in paragraph 3 of the DMG avoids all the limitations of the action level approach. Direct testing for biological effects considers the effect of all chemicals present, acting interactively with all other chemicals. It also fully considers bioavailability since the specific dredged material in question is evaluated with its unique combination of contaminants and sequestering agents.

Use of the DMG has been endorsed consistently by IAPH and PIANC. IAPH endorses the revisions and uses of the DMG proposed by PIANC in Submittal No. LC/SG17/2/1 entitled "Review and Evaluation of the Guidelines for the Application to the Annexes to the Disposal of Dredged Material." This evaluation is a balanced analyses and statement of appropriate uses of the WAF in accessing dredged material for placement in the ocean.

The Scientific Group and Contracting Parties have recognized that the WAF incorporates the precautionary approach and the WAF has been approved for interim use with dredged material. The precautionary approach is compatible with the option of ocean placement of contaminated dredged material. The issue is one of risk assessment and risk management. The fourteenth meeting of the LC endorsed use of the precautionary approach providing for an assessment of impacts from ocean disposal to determine whether there is reason to believe it will likely cause harm. The DMG is a useful assessment tool for determining whether contaminated sediments can be safely placed at sea. These

protocols reflect a precautionary approach to dredged material management that will provide protection to the marine environment while at the same time recognizing the critical need of many ports to use the ocean disposal option for dredged material.

5. CONCLUSIONS

Direct biological assessments are the most effective and accurate means of predicting the effects from the disposal of dredged material in the ocean and for determining the acceptability of dredged material for ocean disposal. The DMG when used with appropriate parts of the WAF are consistent with the precautionary approach and incorporate this direct biological assessment to the evaluation of dredged material. IAPH endorses the "Review and Evaluation of the Guidelines for the Application of the Annexes to the Disposal of Dredged Material" prepared by PIANC and supports the adoption of this view.

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OPEN FORUM

The Baltic Sea – Ocean of the Future From a European Perspective

Address delivered at the 2nd Conference of Baltic Ports Organization
on 16 March 1994, Stockholm



By David Jeffery

Chief Executive

Port of London Authority, U.K.

Vice Chairman, European Sea Ports Organisation

Introduction

It is always an exciting challenge to take part in a debate about the future. But when I have to sit down to think the subject through and try to analyse what I think I can see in a very cloudy crystal ball I realize the scale of uncertainty that ranges across all the forces that shape our industry and just how little I know. In these circumstances I always turn to others for comfort. On this occasion I draw moral support from a quotation I came across recently:

"Posterity (ie the future) is as likely as anybody else to get it wrong." (*Heywood Brown*)

What I hope to do over the next few minutes is to give a brief outsider's view of the Baltic Sea as the Ocean of the Future before putting it and its ports into the wider context of Europe and the world in general. In doing so I will touch on the prospects and opportunities for marine transport, identify what we ports have in common, the importance of widening our perspective as an industry not constrained by geography and the need to draw strength from each other in seeking to ensure that our voice is taken fully into account in the corridors of national and international power. I will of course refer to the role of the European Sea Ports

Organisation, its work and the need for co-operation between it and BPO and other organisations.

The Baltic Sea – Ocean of the Future?

The title is a provocative one for me because the inference that might be drawn is that the Baltic and its ports are somehow self-contained, and perhaps insulated to a greater or lesser degree from Europe and the wider world. But the prosperity of the Baltic and its ports will of course hinge on trade with partners beyond the Baltic as they serve the needs of the burgeoning economy in the region over the next ten years or so. Furthermore the way your ports conduct their business will be influenced as much by those trading partners as the Baltic Ports themselves.

I believe that, more important than looking in on itself is the need to view the Baltic as but one small piece of a jigsaw puzzle. So where does this lead us. First we have to make the immediate connection into the European dimension by ensuring that you fit easily into a larger section of the jigsaw puzzle. There can be no doubt that your greatest potential for the future lies in short sea and near sea trade, centered on the European Union. It may seem ironic to you to hear an ancient Briton like me speak in such positive European terms ... but there are quite a number of us about. The explanation I always give is that public and political expression and media opinion attributed to the UK often lag behind those of us who have to look objectively at and adopt the best option for economic success if we are to prosper. In emphasising the importance of the Union I must also say, as the Chief Executive of the United Kingdom's largest port, that it is not always plain sailing to be a part of it. Those of us in the ports industry know that there are always forces at work even within our nation states whose priorities militate in general against maritime transport. Their dimension becomes more difficult and complex to deal with in the

Applicability of Action—

(Continued from Page 33)

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European Union. This is an important aspect that I shall return to later.

But that is not the end of the story. You cannot rest on a European boundary. GATT places your ports like mine into a global network. At the same time international organisations, such as the IMO, seek increasingly to influence and regulate in a uniform way what goes on in the world's oceans.

Thus I conclude that the future prosperity of the Baltic Sea and its ports rests upon a successful drive to ensure that they fit readily and as seamlessly as possible into a European and global marine transport context.

Marine Transport and the Role of Ports Opportunity

It is timely to take a glance at the opportunity that presents itself to the marine transport industry and in particular ports as an important component of it. And it is sobering and a warning to repeat an old adage that "Opportunity knocks more often than you think but generally there's no-one at home" (Will Rogers)

I cannot recall when maritime transport and particularly short sea shipping have had so much going for them. At long last decision makers are at least prepared to acknowledge the advantages of the maritime mode and are saying some of the right things. The European Commission and the Union see the encouragement of short sea shipping as a priority. By our actions we have the opportunity to and must try to press the advantage home.

Advantages

There is recognition that maritime transport is the most environmentally friendly mode and that it is desirable to move goods, as near to their point of consumption and use, by sea or inland waterway. Routing can be much more flexible along a maritime highway that for our purpose can be deemed to be of virtually infinite capacity. As to true cost efficiency, aside from over very short distances, the maritime mode is demonstrably cost efficient and as reliable or better than road/rail. Sadly, overt and hidden subsidies to road and rail transport sometimes distort both the picture and competition. This is an issue that we must continue to keep before the eyes of the legislators whose rhetoric about the encouragement of maritime transport must be backed by action to ensure fair competition.

Challenge

All of this has led to a close scrutiny of the role and efficiency of ports. The shipping industry sees us traditionally as an expensive evil that they cannot avoid, that should preferably offer services free of charge and be seen only if it is unavoidable and preferably never heard. As in all other industries no-one can claim that every port is as efficient as it might be. If we are to seize the opportunity presented by the market we have to bring the standards of the least efficient as closely as possible into line with those of the best. The aim must be to make the whole cycle of transport from cargo origin to destination as near a continuous flow process as possible through the variety of modes involved.

Response

I started this paper and presentation by breaking your ports out of the tight geographical straightjacket of the Baltic. That theme is also relevant in dealing with the way that the ports industry responds to the challenges and opportunity

it faces wherever it operates.

I am in no doubt that national and supra national politicians and bureaucrats who are responsible for, or dabble from time to time in, port related matters are sometimes over influenced by political, geographical and peripheral influences. They send then in different directions to the disbenefit of our industry and those we aim to serve. It is my experience that ports have much more in common than not. Our different locations and divergent origins and constitutions are of secondly importance as compared with what we as an industry have in common. I am convinced that we must therefore draw closer together to respond in a professional way in order to influence policy and ensure that the best solutions are secured. This is readily illustrated by looking at a sample of the key issues which are giving rise to European Union and international measures.

The European Context

It cannot be argued that we can sensibly address what are common problems in isolation from other ports who are our trading partners. The problems of pollution and the environment have no geographical boundaries. Terrorism, illegal immigration and drug smuggling strike the same nerve in a port which is an innocent exporter or importer. Matters of safety are about seeking the best standards to which we all aspire.

Nor can we at one end of the maritime transport chain ignore what goes on, or is deemed to be needed commercially at the other end. The chain is as weak as its weakest link and so questions of compatibility of equipment, methods, procedures and technology must be pursued. And in all this we need to ensure that freedom of competition is safeguarded if the shape of our market is not to be distorted and that market is to remain efficient.

Those of us operating within the European Union still have to face member state policies and rules which are ill founded or simply politically expedient. There are occasions when such matters are determined without either early or full consultation, the result placing inappropriate burdens on ports without achieving in the most efficient manner the end they seek to reach.

The scope for and scale of inappropriate and ill considered directives and regulations is potentially that much greater when they are sponsored and devised in the European Commission or European Parliament by people who though very able do not have direct involvement or experience in the ports industry.

The heady but non maritime atmosphere of Brussels can add another unhelpful dimension and head of steam to aspects that deserve more measured consideration. Therefore it is crucial to the maritime transport industry and ports in particular that they are organised at a European level in such a way that they can speak with responsibility and weight when faced with proposals which are inappropriate or unacceptable. Equally important is the industry's voice being used pro-actively to try to shape policy.

The European Community Sea Ports Organisation was formed with the encouragement of the European Commission, Director General VII, to undertake this role, and I sketch briefly some of the aspects of its activities so far. Before I do so though, I have to say that it is inevitable that we shall not always agree with what emerges from Brussels. In our first year of life we have found ourselves at odds with a number of initiatives which we believe are ill founded. As ESPO sharpens our focus on issues, so the European

Commission must ensure early and meaningful consultation, setting sensible deadlines and showing a willingness to listen to the voice of those who are responsible for achieving results in the ports industry. Some of our recent points of disagreement would have been avoided if proper discussion had taken place. In other cases proposals that are fundamentally flawed might have been altered at the outset.

ESPO's membership consists of delegates representing all of the ports within the European Union. Representatives of EFTA country ports have an observer status within ESPO.

The broad objectives of the organisation is to promote policies and viewpoints of the Community ports with the European Union Authorities and other relevant international bodies. It aims to study all problems relating to the port industry in the context of the treaties establishing the European Union, so as to keep its members informed and to seek, where possible, common positions. In general the promotion of port interests include:

- * maintaining regular contacts with EU Authorities;
- * obtaining port relevant information;
- * holding regular meetings of members to obtain opinions and reach common positions; and
- * presenting ports views to the EU and other relevant bodies.

If technical expertise is required sub-groups are established to deal with these specific issues.

A disconcerting feature of life in the European Union is the tendency for Euro Organisations to proliferate — they seem from time to time to breed like rabbits — to deal with or bring together those touched by particular issues, or to meet EC programmes and initiatives. They can give rise to the misplaced assertion that because there is movement there is progress. Equally serious is the danger of a variety of voices touching, in a varying degree, on subjects which lead officials to make and succeed in implementing the wrong choices. I have set out at the enclosure just a few of the groups in whose activities ports have a particular interest.

Conclusion

Ports are affected more than most other industries, by factors and influences far beyond their immediate location. It would be a mistake therefore to dream of a prosperous future for the ports solely by virtue of their location within the perimeter of the Baltic sea — the Ocean of the Future. Prosperity will depend on a growing economy; a growing economy will be founded on trade with partners beyond the Baltic; since trading with the countries of the European Union and the huge market they represent, will be the source of a very high proportion of that prosperity, it is important that linkages are established between the regional organisations that represent ports.

The need for co-operation extends from the commercial, namely how can we jointly play our part in making the maritime transport chain more efficient, to a multitude of other matters that exercise governments and regulatory bodies within the two regions. But it also extends to wider international scene. ESPO and BPO are but two pieces in a jigsaw puzzle of regional organisations/associations of ports across the world, at the heart of which is the International Association of Ports and Harbors where the global influence of the ports industry is exercised. In all of this our objective must be to make sure that port initiatives are given a proper hearing and that port solutions to problems fit easily and efficiently into the blueprint of marine transport.

Baltic Ports Organization 2nd General Assembly Held in Stockholm

on Thursday, March 24, 1994

Chairman's Report

By Peeter Palu

On October 21st 1991 BPO was established in Copenhagen - this was almost on the date for the two years celebration of the fall of the Berlin Wall.

BPO was established on the initiative of 4 ports, namely Copenhagen, Rostock, Tallinn and St. Petersburg. The idea of creating an organization in the Baltic Region to support future transportation needs in terms of strong sea transportation corridors was born.

The initiators decided this way of foundation in order to obtain a fast working platform for conducting the rules and regulations as well as the scope of potential member ports. With the prevailing liberalization process in Eastern Europe — substantial increase in trade with the western world was and is still anticipated.

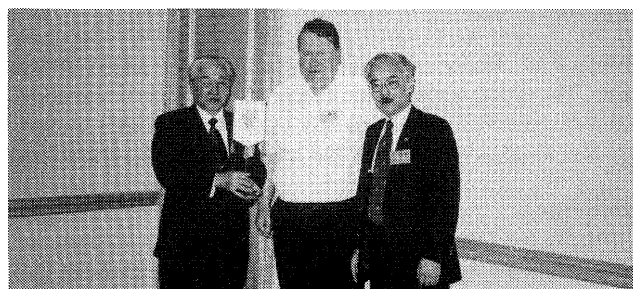
New terms in the shipping industry will appear — the usual terms like ARA range (meaning Antwerp/Rotterdam/Amsterdam) and GIB-SKAW range (meaning from Gibraltar to Skagen in Denmark) will have to add new geographical names in the Baltic Sea.

New types of tonnages are concurrently being introduced - more frequent ROLL ON/ROLL OFF vessels are integrated and becoming the every day picture of our Region while and the LOAD ON/LOAD OFF terminology is well known in most corners of the Baltic Sea.

We know for a fact that road and rail systems in Europe will not be able to cope with the increasing flow of volumes of cargo and passengers — and ports of our region are inclined to play a more significant and important role in tomorrow's transportation pattern.

That was the basis on which 62 delegates from 9 countries around the Baltic Sea were gathered at a well organized and successful 1st General Assembly in Tallinn on March 26th 1992 — under the slogan: "TOWARDS THE FUTURE OF THE NEW BALTIC REGION". On that day the charter of BPO took place and our present By-laws were adopted. Today BPO is consisting of 36 member ports in the 9 Baltic countries. In addition to this one Port Association is a member, namely, The Association of Danish Ports.

On that day it was also decided that BPO would extend its global interests by making an alliance with IAPH (The International Association of Ports and Harbors) which is



Mr. Peeter Palu, Chairman, BPO (center)
(Photo taken in 1993 in Sydney)

non-governmental, but truly an international forum of ports and harbours established in 1955. Today it represents 230 major world ports from as many as 85 countries all over the world. It is the aim of IAPH to promote the welfare of ports and enhance the dialogue among the people engaged in international maritime transport. IAPH as an international and global institution has been granted the status of a consultative organization by the United Nations and its specialized agencies and is allowed to present the views and positions held by world ports.

In this co-operation BPO is now also working to make ports more visible and reliable via links in the global maritime transportation systems. As chairman of BPO — I had the pleasure to present a paper on behalf of BPO at the International IAPH Conference in Sydney last year. The text has been distributed to all member ports and circulated to the press.

Now let me briefly submit to you the main objectives of BPO and then revert to the 5 committees which create — so to speak — the “back bone” of our organization.

The objectives of BPO are:

- Rapid and rational development of maritime transport in the Baltic Region, in order to boost economic development of the states in the region, and to create an efficient gateway for transfer of cargo and passengers from port to port in the region.
- Coordination of co-operation with regard to development, investments, specialization etc.
- Exchange of information, technology transfer, port management services, know-how, rehabilitation of ports etc.
- Education and training of personnel.
- Establishing and maintaining a network of international contacts for member ports.
- Marketing of the Baltic Region as a strategic logistics centre.
- Negotiations and decision making with regard to BPO's affiliation to other international organizations.

Without any doubt all 5 working committees have made their contribution to achieving the objectives of BPO.

Later today we shall have the possibility to hear the committee chairmen's reports.

However, allow me briefly to mention some of the most significant achievements of these committees:

Committee No. 1: “Port Planning and Construction”

Chairman: Mr. Aldis Zieds, Port of Riga

The original name of the committee “The Development of Port Facilities” expressed one of the main reasons and goals for founding BPO.

In order to achieve these goals and on the initiative of the committee, good contacts between the representatives of member ports have been established.

The main cooperation forms are:

- changing experiences;
- analysing development plans and port designs; and
- getting acquainted with existing facilities.

All the above mentioned enables to improve the general level of planning, designing and construction of ports' infrastructure and also avoid previous mistakes, which is

especially useful for the ports in the new independent countries on the eastern side of the Baltic Sea.

Committee No. 2: “Development of Traffic to/from Member Ports”

Chairman: Mr. C.C. Skat Larsen, Port of Copenhagen.

The committee has been active and methodical.

“BPO Handbook” with loose sheets introducing member ports is one of the results of this work.

Further extensive data analyses have been collected.

It enables to start elaborating scenario for maritime transport, trade and shipping, for future transport demand, including cargo and passenger traffic for single member ports, as well as for the entire Baltic region.

Committee No. 3: “International Relations and Public Relations — Exchange of Information between ports”

Chairman: Mr. Anders Edstrom, Port of Helsingborg

So far the main results of the work have been:

- A Handbook with information of the members ports which was produced during 1993 in co-operation with Committee No 2.
- An advertising campaign for the Handbook and BPO.
- Adopting the network of BPO- co-ordinators.
- Suggestions regarding a cruise project.
- Suggestions regarding a BPO- conference in Tallinn.
- Suggestions to merge Committees No. 2 and 3.

Committee No. 4: “Education and Training e.g. Exchange Schemes” **Chairman: Mrs. Regina Seipold, Port of Rostock**

The committee has made inquiries in order to investigate the necessity and possibility in member ports for service and training.

There are plans to compile a reference book about respective educational institutions in the Baltic countries.

A good example is an already engaged project, namely a 3-week pilot course for dockworkers in the Harbour School in Copenhagen, where 14 employees from the Port of Tallinn are participating at the time being.

Committee No. 5: “Co-operation in national and international laws, affecting ports, e.g. environment, pollution, waste, aid schemes etc.”

Chairman: Mr. Stanislaw Adrianowski, Port of Gdynia

The Baltic Sea is a “special area”, a Sea particularly sensitive to discharge of waste from ships. On that account the committee considered it as one of its starting points the International Convention for the Prevention of Pollution from Ships, 1973, collectively known as MARPOL 73/78.

In order to obtain information about physical adequacy of reception facilities and different methods of payment for compulsory service rendered by member ports to the shipping industry a questionnaire was devised, distributed and received results processed.

Our organization which is only 2 years old shall strive to get more focus on our region - in our efforts to obtain more essential links in the maritime transport networks both nationally and internationally.

We wish to play a vital role as a place where different
(Continued on Page 38)

International Maritime Information

WORLD PORT NEWS

1st Int'l Conference On Crisis Management

The Aftermath of Maritime Disasters
Singapore: 29th - 30th September,
1994

Kuala Lumpur: 26th - 27th Sep-
tember, 1994

Subject areas to be featured by ex-
perts: 1) Collisions and Maritime Dis-
aster, 2) Parties involved in maritime
collisions, 3) Emergency alert proce-
dure, 4) Media management in a crisis,
5) Insurance claims under hull policies,
6) P&I Clubs' assistance, 7) Oil pol-
lution & environment, 8) Oil spill
compensation, 9) Salvage and towage,
10) Role of port authorities, 11)
Experts' assistance, 12) The lawyer's
role, 13) Resolving disputes, 14) Lim-
itation of liabilities, 15) Oil pollution
— Case studies, 16) Collisions — Case
studies, and 17) Maritime Disasters and
casualties in the Straits of Malacca.

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World Symposium on Trade Efficiency in Oct.

The World Symposium on Trade
Efficiency, a global trade meeting to
be held in Columbus, Ohio, USA, Oc-
tober 17-21, will be a groundbreaking

event in the field of international trade.

For the first time in history, United
Nations' trade ministers and senior
officials will unite with mayors and
municipal leaders from cities through-
out the world, as well as top-level ex-
ecutives from international companies,
and leaders in the field of information
technology. Their common goal will
be to promote international trade by
using new information technologies.

U.N. Secretary-General Boutros
Boutros-Ghali and U.S. Secretary of
Commerce Ron Brown will be among
the international dignitaries in attend-
ance for the Symposium's U.N. meet-
ings. U.S. President Bill Clinton and
U.S. Vice President Al Gore have been
invited. The World Symposium on
Trade Efficiency is the culmination of
a two-year United Nations Trade Ef-
ficiency Initiative Project sponsored
by the U.N. Conference on Trade &
Development (UNCTAD). Over five
days, the Symposium will attract
thousands of key policy makers and
corporate decision makers from around
the globe — those who share a com-
mitment to the advancement of inter-
national trade as part of a global
economy.

"This U.N. Symposium...will bring
together for the first time, trade min-
isters, private sector chief executive
officers, and mayors. This will allow
leaders from around the world to ex-
change views, policies and practical
information to prepare countries for
electronic commerce and tomorrow's
world of the 'paperless' business tran-
saction," said U.S. Secretary of State

Warren Christopher.

The Symposium will comprise four
distinct yet interrelated components,
each focusing on unique aspects of
international trade. The United Nations
International Symposium on Trade
Efficiency, October 17-21, will draw
ministers and senior officials from
UNCTAD's 175 member countries.
Their energies will be directed on
promoting trade relations, developing
standards for electronic commerce, and
the launch of a global Trade Point
network. Also featured will be a world-
wide video conference with heads of
state.

The Global Summit for Mayors,
October 18-21, hosted by Columbus
Mayor Greg Lashutka, will attract
mayors and municipal leaders from
metropolitan centers around the globe.
They will discuss several topics under
the umbrella theme of "The New Local
Government/Private Sector Partner-
ship for Trade and Development." Talks
will focus on preparing cities for
international trade in the 21st century,
and promoting trade through the use
of new technologies for electronic
commerce.

The Global Executive Trade Summit,
October 19-21, will draw senior-level
executives from international compa-
nies that currently market their pro-
ducts globally; companies wishing to
expand their international presence;
and large companies seeking to partner
with small- and medium-sized compa-
nies as suppliers or resellers.

At The World Trade Efficiency &
Technology Exhibition, October 18-21,

Baltic Port Organization—

(Continued from Page 37)

modes of transportation meet - and have the responsibility
to move cargoes and passengers as smoothly, as fast and
as safely as possible.

It is in this respect that ports have long played an
indispensable role in peoples lives and in their business
communities.

Ports are expected to be constantly responsive and
reliable assets in the lives and welfare of the people.

So if a port is accused of impeding the free and smooth
movement of cargo and/or passengers, we must yield to such

criticism and be prepared to act on it — as a reflection of
the general perception that ports play a vital role in peoples
lives.

Indeed we all realize that we — the staff held responsible
for the port operations — should understand that ports need
to function as catalysts or channels for all parties involved:
that being public organizations, business sectors as well as
private individuals.

We shall strive to have more member ports in our
organization, — for instance ports like Ventspils and Liepaja
in Latvia both seems to be good candidates.

In order to cope with future needs and extension of
our organization it will be necessary to change some phrasing
and articles of our By-laws.

leaders in the field of information technology, Electronics Data Interchange (EDI), telecommunications, networking services, and computer hardware and software will demonstrate state-of-the-art solutions that create pathways to international trade. Exhibitors will include banks, customs brokers, freight forwarders, distributors, ports and airports, logistics experts, government agencies, and other trade intermediaries. Attendees will have "hands-on" opportunities to see how this technology can work successfully for their own companies and localities, allowing them to be competitive players in the global marketplace.

For more information about The World Symposium on Trade Efficiency, contact:

In Asia, Africa, Europe, Australasia
Touchstone Exhibitions & Conferences Ltd, Haleon House, 4 Red Lion Street, Richmond, Surrey, TW9 1RW, UK. Tel: +44(0) 81 332 0044 Fax: +44(0) 81 332 0874

In North America & South America
Bannister & Associates, Blendonview Office Park, 5008-01 Pine Creek Drive, Westerville, Ohio 43081-4899, USA. Tel: 010 1 614 895 1355 Fax: 010 1 614 895 3466

China Portex '94 Dec. 6-10, Shanghai

China Ports and Harbors Association (CPHA) and China International Chamber of Commerce (CICC) Shanghai Branch will jointly organize The 4th International Exhibition for Port and Waterway Construction, Shipbuilding Industry, Marine and Offshore Technology (China Portex '94) on December 6-10 in Shanghai with a view to promoting exchanges between Chinese ports and other ports in the world and to increasing trade and technical cooperation. Ports, port equipment manufacturers, shipyards, shipping companies and maritime-related research institutes, colleges, financial institutions, etc., both from China and abroad, will participate in the exhibition. CPHA will provide the exhibitors with reliable services.

CPHA has successfully organized three previous exhibitions. They were welcomed by ports and port-related

companies around the world. IAPH ex-President, Mr. John Mather, was invited to China Portex '92, and delivered a speech at the event.

China Portex '94 has received approval from the state government. The Ministry of Communications, the State Gateway Office, COSCO, China Shipbuilding Industry Corp., and China Society of Navigation sponsor the event. The Port of Shanghai is a co-organizer.

Ports and port-related companies around the world are welcomed to exhibit their products and services at China Portex '94. For further information, please contact:

Mr. Gu Quanlin

China Int'l Port Information Consultation Center

Tel: 86-21-3231871

Fax: 86-21-3290202

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14 - 17 November 1995

The Netherlands

Theme: Dredging Benefits

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For further details and enquiries please contact:

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The Americas

1st-quarter Halifax Cargo Increases Over 20%

First quarter cargo results for the Port of Halifax show an overall increase of over 20% as compared to first quarter '93 statistics. (4.1 million tonnes versus 3.4 million tonnes in '93)

Imports and exports of crude oil led the traffic increase, but significant volumes of fuel oil and gypsum contributed to the overall positive first quarter.

Labour intensive break bulk cargo (rail cars, world food, steel and equipment, and rubber) reflected an increase of 23%, containerized cargo reflected a decrease of 12% primarily due to non-recurring vessel calls made in last year's first quarter.

Recent efforts by Port stakeholders to provide a more competitive environment for United States mid-west cargo are expected to pay dividends for the Port community as a whole. The efforts have been prompted by Canadian National's construction of the Sarnia-Port Huron tunnel to be completed in early 1995. The tunnel will give Halifax faster access to US mid-west markets utilizing double-stack trains.

In March, the Port's labour unions agreed to reduce cargo assessments for containers moving to/from the mid-west, effective upon the opening of the tunnel. The Halifax Port Corporation continues its own incentives for all US cargoes, which effectively reduce wharfage charges for these cargoes by 98%.

Clinton Urges Joint Efforts on Dredging

In response to a joint letter from over 35 maritime, port and labor interests

about the importance of dredging our nation's harbors, on March 25 during the American Association of Port Authorities' (AAPA) Annual Spring Conference, President Bill Clinton sent a letter to AAPA President Erik Stromberg which said:

"I am calling on Federal agencies to redouble their efforts, and urge the State, local, port environmental and other interested groups to continue their joint efforts to find solutions to these [dredging] problems. Our Nation's ports are a key link in the Nation's intermodal transportation chain, and your continued success and support will be crucial to achieving our goals."

The President acknowledged the significant economic contribution of ports, stating that, "The public port community will play a pivotal role as we expand export trading opportunities and create a truly global marketplace."

"Ports can only realize their full potential as magnets for shipping and commerce if our Nation's harbors are dredged and open for trade," President Clinton stated in the letter. Moreover, the President restated his belief, which is shared by the ports, that environmental protection and port operations are compatible objectives.

(Port Report)

Nedlloyd to Begin Oakland Calls

Oakland will become Nedlloyd Lines' regular Bay Area port of call with the arrival May 29 of the containership *Graz*. The Rotterdam-headquartered carrier will use the new, 38-acre (15 ha) container terminal operated by Trans Pacific Container Service Corp. (TraPac).

Vessels in two Nedlloyd rotations will call the Oakland port: the Central/South America service calling Mexico, Guatemala, El Salvador, Nicaragua and Colombia with two vessels; and the Asia/Mideast/Africa service, using six ships. Each service will provide sailings from Oakland every 14 days.

Nedlloyd West Coast Vice President/Business Manager Curt Rodby cited "both immediate and future benefits" in the line's new landside arrangements in California. He noted that Nedlloyd already uses TraPac's Los Angeles terminal, where, as in

Oakland, Mitsui O.S.K. Lines (MOL) is based. Nedlloyd has formed an alliance with MOL, Compagnie Generale Maritime (CGM) and Malaysia International Shipping Corp. (MISC) in the Europe-Far East Trade, and has announced an expanded partnership in that lane with American President Lines (APL) and Orient Overseas Container Line (OOCL).

In addition, a Far East — U. S. East Coast service via the Panama Canal is being discussed, which would include Nedlloyd, APL, MOL and OOCL.

Seattle: Ground Broken On Waterfront Project

The Port of Seattle broke ground on June 21, 1994 on the pierside portion of its Central Waterfront Project. Unveiled as Bell Street Pier, the \$83.6 million project is a multi-use facility for maritime, international trade and public use.

"Today, we officially launch the construction of Bell Street Pier and move from visions and dreams to setting the cornerstone for our region's new front door," said Patricia Davis, president of the Port of Seattle Commission. "My colleagues and I are excited that this project will bring our region's colorful maritime tradition closer to our community and will provide a vital connection between the people of this region and its visitors — be they tourists on cruise ships to Alaska or business and government leaders from our many Asian trading partners."

Bell Street Pier features a dynamic mix of public and private uses. Project components include:

- Cruise ship accommodations and moorage space for factory trawlers and other general maritime uses.
- 47,000 square foot international conference center.
- Odyssey Contemporary Maritime Museum.
- A fish processing facility with retail store — Port Chatham.
- A restaurant — Anthony's Dockside Diner — and other shops.
- Public access areas including a public plaza, rooftop plaza and short-stay recreational boating marina.

"This project represents an investment by the people of King County to

increase tourism, create jobs and support trade development," said King County Council President Ken Pullen. "The cruise ships which are expected to call here will bring tourists to businesses in King County and throughout our state, while factory trawlers and Port Chatham will help revitalize this region's fishing industry. Finally, Bell Street Pier provides a place (international conference center) for businesses and governments to exchange ideas and build the relationships necessary to foster trade. In the most trade-dependent state in the nation, a place which can support meetings of an international nature on an on-going basis is critical."

Construction of Bell Street Pier will continue through mid-1996. The facility is expected to be complete in time to greet cruise ship passengers in the summer 1996 Alaska cruise season.

Seattle's First Quarter: Container Volumes Up

Container volumes at the Pacific Northwest's leading gateway are up 12 percent over first quarter 1993 activity. More than 275,000 TEUs crossed Port of Seattle docks January through March.

"More containers means more work for people involved in trade and transportation," said Seattle Port Commission President Pat Davis. "Those workers, and the companies that employ them, purchase goods and services in our local communities. That means the Port of Seattle's good start in 1994 is contributing as a major force in the local economy."

First quarter performance puts the Port on the fast track toward achieving its expected three to five percent increase in container volumes by year end. The Port moved 1.151 million TEUs in 1993; 1994 forecasts are for 1.19-1.2 million TEUs.

"Our solid start to 1994 is due to those carriers serving transpacific routes," said Mic Dinsmore, executive director of the Port of Seattle. "Our leading carrier in the first quarter was Hanjin Shipping, Ltd., followed by American President Lines, Hyundai Merchant Marine, NYK Line, and Matson Navigation. Our fastest growing carrier, year-to-date, was NYK Line with

a 95 percent increase over the first quarter of 1993. Their growth is largely due to the success of a new service which they introduced midway through last year." The 1994 pace is expected to pick up with the addition of two new steamship lines to the harbor, ELMA and South Pacific Interline, as well as the new service initiated last month by Hyundai.

"What's even more exciting about the container volume activity is that, compared to last year, a higher percentage of the containers are full," said Keith Christian, acting managing director of Port's marine division. "That's a good sign for the stabilization and recovery of Pacific Rim economies and of trade between the U.S. and Pacific Asia."

"The number of full containers crossing Port docks in Pacific Asia trade was up by 15 percent in the first quarter," continued Christian. "And, while trade with Central and South America is a much smaller part of our overall trade, container volumes have increased by 72 percent which is a significant rise. We are increasingly dependent on international trade volumes while the U.S. economy recovers for domestic commerce."

In announcing its first quarter container activity, the Port also reported 1993 preliminary waterborne trade figures (dollar value). Total two-way trade through the Seattle harbor amounted to \$28.3 billion, five percent increase over 1992 trade. More than \$6 billion worth of goods were exported through the Port (a four percent increase), while the \$22 billion worth of imports represented about a six percent increase as compared to 1992 activity.

"Japan continues to play a significant role in trade through this gateway — continuing as the Port's top trading partner and showing a nearly 10 percent increase in trade through the harbour," noted Dinsmore. "Trade with China continues to grow at an astounding pace. In the past 10 years, trade with China has increased at an average annual growth rate of 27 percent. In 1993 China trade through the Seattle harbor increased 56 percent over 1992, making China the Port's third largest trading partner." Final 1993 statistics are being compiled and will be released later this spring.

Africa/Europe

Antwerp: Traffic 16% Up During First Quarter

The port of Antwerp did amazingly well during this year's first quarter. The growth of traffic that started the second semester of last year, continued even stronger. At the end of March the port achieved a total turnover of 26.7 million tonnes, 16% or 3.66 million tonnes more than during the same period of last year. It concerns the port's highest quarter-figure ever.

With a score of 16.5 million tonnes, general cargo shows an increase of 12.1%. Important growers are fertilizers and chemicals (+30%), timber (+12.1%), paper and cellulose (+13.9%), flour (+15.7%) and sugar (+86%).

Container traffic also broke a record with an increase of 30% to 5.7 million tonnes or 516,867 TEUs (+26%).

Bulk traffic increased with 17.1% to 14.5 million tonnes, a growth that is equally divided between loadings and unloadings. Liquid bulk shows an average increase of 16.6% and dry bulk of 17.4%. Commodities that increased most are: ores (+63.7%) and coal (+9.2%).

In these first three months, 3,904 vessels called at Antwerp (+1.9%), representing a GRT of 38,854,587 (+8.2%).

Imports Through Port of Helsinki Picking Up

Traditionally known as a general cargo import harbour, the Port of Helsinki has become predominantly a channel for exports in the wake of the recent rapid growth in exporting. However, the amounts of imports and exports are evening out as general cargo imports have at last begun to recover after three years. Import growth in January-April 1994 was of the order of 25%. Exports were also up, this time at a rate of about 15%. The nationwide figures for growth were on the same level. Part of the expansion is accounted for by an increase in Russian transit trade through the Port of Helsinki. In quantitative terms, transit business over

the four-month period was about 100,000 tonnes, compared with a similar total figure for the whole of 1993.

Container and trailer transport expanded along with the growth in cargo traffic: containers were up by 10% and lorries and trailers by almost 30%.

The Port of Helsinki's cargo traffic consists to a large extent of value-added final products. This means it is considerably more valuable than the average for goods transported by sea. According to statistics from the National Board of Customs, the value of a tonne of cargo imported through the Port of Helsinki in 1993 was FIM 11,200 while the value of an exported tonne was about FIM 13,200. Both figures are almost three times the average for Finnish sea transport.

Passenger transport declined by some 12%. The major factors in this were the absence of the cruise vessel *M/S Sally Albatross* after an accident and the ice conditions that hampered vessels plying the Tallinn run during the beginning of the winter.

(Port of Helsinki)

Finnish Express Service Winning Over Customers

Since mid-April the Finnish line Oy Containerships has been operating the *MS Containership III* on direct sailings from the Eurokai Terminal in Hamburg to Helsinki and from there to its own Petros Terminal No. 56 in St. Petersburg with onward connections to Moscow.

This new express service is winning over customers not just because of its speed from port to port but also because of the sensationally fast port handling.

Oy Containerships has a guaranteed berth for its ships at its own terminal in St. Petersburg so unloading or loading can start as soon as a ship ties up.

Once the ship has been loaded up again, it can sail again straightaway. There are regular departures from the Port of Hamburg every nine days. The transit time from Hamburg to St. Petersburg for delivery of containers is five days at the most, deliveries to Moscow take seven. This makes the Port of Hamburg and its feeder-ship connections a competitive alternative to direct surface transport by road or rail.

This Finnish shipping line can provide special pallet-width, open-top or refrigerated containers. In Hamburg the line is represented by the ship-brokers Robert W. Hugo (GmbH & Co.) and Mr. Hugo himself is available to answer any enquiries on Hamburg (+49 40) 37 28 01.

In the first three quarters of 1993 transit traffic to and from Russia via Hamburg increased by 94%, though admittedly from small beginnings. This growth trend has continued this year despite the economic difficulties faced by the countries of the ex-Soviet Union. Transit traffic to and from Russia via Finland and Hamburg is also increasing. Though no current figures are available on the development of German-Russian trade, the potential volume of cargo is quite considerable — a demand the new Oy Containerships liner service intends to meet.

Rouen Port's Priorities And Key Objectives

The Port of Rouen Authority is defining the objectives and strategies to amplify the recovery which began in 1993, with a volume of traffic at almost 24 million tonnes and general cargo up 15%.

In 1993, the Port's productivity index was up 47% over the 1991 figure. The implementation of the reform of the dock labour system, with highly motivated dockers employed by 10 stevedoring companies at the Port, means more efficient handling and a more reliable, faster Port where harmonious labour relations prevail.

The Port's key priority, according to Port managing director René Genevois, is more diversified and even more competitive services. The Port's strategic objectives include developing regular lines, improving access, and capturing new market shares.

(Rouen Port)

Hamburg: Turnover Continues to Rise

Cargo turnover in the Port of Hamburg continues to rise. In the first quarter of this year 16.6 million tonnes of cargo passed through the Port on the Elbe — up a striking 9.8% on the



The Finnish line Oy Containerships' MS **Containership III** departs from the EU-ROKAI Terminal in Hamburg on its first run to St. Petersburg; cargo turnover on the Hamburg-CIS route rose by 322% in the first quarter of this year.

comparable period last year. 9.99 million tonnes were accounted for by incoming cargoes (a rise of 3.4%) while outgoing goods made up 6.6 million tonnes (up a remarkable 21.3%).

The quantitative trend in the general-cargo sector was particularly pleasing. Here, cargo turnover increased by 8.1% to 8.4 million tonnes in the year to the first quarter. Incoming general cargoes rose by even more — 9.9% — to reach 4.2 million tonnes (outgoing general cargoes were up 6.4%).

The structural shift from conventional to containerized cargoes continues unabated in the Port of Hamburg. In the first quarter of this year containerized cargo turnover totalled 6.7 million tonnes, 14.4% up on the same period last year. In TEU terms container turnover rose by 12.4% 649,627 with March a record month — 232,106 TEUs.

The highest increases (in absolute terms) were recorded on the North-East Asian, Scandinavian and Eastern European routes. In Scandinavia the fastest growth was in trade to and from Finland, above all as a result of increased transit traffic with Russia and the Baltic Republics. In Eastern Europe trade with the countries of the ex-Soviet Union (CIS) grew most with a 322% (!) increase in turnover of loaded containers bound for the CIS in the year to the first quarter. Conventional general-cargo turnover fell by 11.2%. As a result, the containerization rate in Germany's largest seaport rose to 79.8% (up 4.3 percentage points).

Whereas bulk cargo turnover was subject to severe fluctuations in 1993,

there was growth in the first quarter of this year. Despite falls in suction and liquid cargoes, the bulk-cargo sector rose to 8.3 million tonnes, 11.6% up the year before. Outgoing bulk cargoes totalled 2.45 million tonnes, a massive 59% increase on the previous year. Grabber cargo turnover rose by 41.9% to reach 3.4 million tonnes. Both incoming and outgoing cargoes (e.g. fertilizers and scrap) contributed to this favourable trend. Suction cargoes fell by 8.5% to 1.3 million tonnes though outgoing turnover actually rose by 49.3%. Grain exports doubled in expectation of restrictive measures once the GATT negotiations were concluded. Liquid-cargo turnover fell by 0.5% to 3.5 million tonnes as a result of a fall in incoming shipments of petroleum products.

"The developments in the first quarter have raised hopes that by the end of 1994 we will have exceeded last year's cargo turnover," said Dr. Hans Ludwig Beth, Chairman of Port of Hamburg Marketing and Public Relations (HHVW). "This is certainly a positive factor — even though cargo-turnover figures are only one indication of a port's success and do not necessarily allow us to draw any conclusions as to port operators' earnings. But in evaluating such figures, one shouldn't forget that they also point to such increasingly important secondary services as information and telecommunications, logistics and distribution, seaworthy packaging and the like, all of which round off Hamburg's service spectrum and strengthen our position in competition with other seaports. Partic-

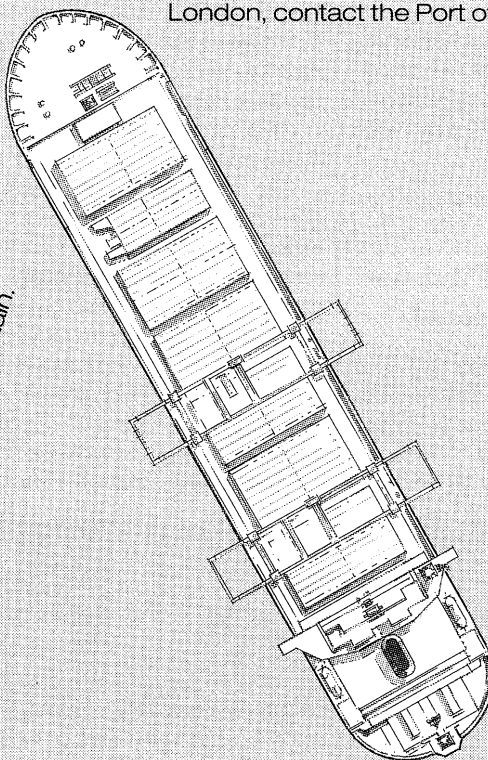


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ularly during the past two months the Port of Hamburg's promotional activities have focused on these services at trade fairs in Japan, USA and Sweden."

Port of Helsingborg: A Strong Start of 1994!

First quarter of the year signified a strong increase of the cargo volumes for the port of Helsingborg, Sweden, and also an increase in motor vehicles and passengers. The total cargo throughput for the port in the first three months of 1994 have increased with 25%!

Counted in metric tonnes the ferry cargo showed the largest increase. The general cargo with, amongst others the handling of metals and perishables, had the largest percentage increase. Bulk cargo with mineral oils, fuels and grain, have increased with 66.2 percentage which means a total of 228,983 metric tonnes. Compared with the same period the last year this is an increase with 91,224 metric tonnes.

Cork: £750,000 Pact for Service Enhancement

The £6 million Refurbishment Programme at the Port of Cork's Ringaskiddy Ferry Terminal took a further step forward on 22 February with the formal signing of a £750,000 contract

at the offices of Cork Harbour Commissioners. The contract was awarded to prominent Irish construction firm, Piers Contracting Ltd., Carrigtwohill, Co. Cork for the extension and upgrading of the Passenger Terminal Building.

Due for completion by early summer, the contract involves an increase in floor area from 850 sq. metres to 1,400 sq. metres, a modern and attractive layout in line with the highest Passenger Terminal standards and a considerably enhanced level of customer services.

The current contract is a significant element of the overall Refurbishment Programme which, when completed in March 1995, will also include a second linkspan, a replacement passenger handling facility and extended car compounds. By that time the Ringaskiddy Ferry Terminal will be fully equipped to accommodate the entire range of large jumbo ferries and will be comparable, in terms of both ship facilities and passenger amenities, with the most modern terminals in Europe.

All works qualify for E.U. Cohesion Fund grant aid.

The substantial investment is required to cater for the port's rapidly expanding ferry traffic. Last year passenger throughput reached 300,000 passengers, an increase of 85,000 passengers or 40% compared with the previous year. Accompanied cars showed even greater growth — up by 24,000 units or 45% to 77,000 units. This remarkable achievement resulted from increased capacity provided by

the port's three ferry operators viz Swansea Cork Ferries, Brittany Ferries and Irish Ferries.

Clydeport: After-tax Profits of £2.4 Million

Clydeport Holdings Ltd, operators of port facilities on the Clyde, have announced a profit after tax of £2.4M in their annual report and accounts for the twelve months to December 31, 1993.

Despite recessionary conditions throughout the year and the loss of the Ravenscraig and Hunterston Traffic, turnover held up well at £11.8M with encouraging levels of trade at Glasgow and Greenock. Overhead costs were tightly managed and reduced by over 15% to £2.6M.

The company's net assets are valued at £17M including cash balances of £1.5M.

John Mather, chairman and chief executive, said: "I am pleased to report that the excellent start achieved in our first year of operation has continued throughout 1993.

"Considering the depth of the recession affecting the United Kingdom, traffic on the Clyde has held up remarkably well.

"Project cargo from Glasgow was particularly buoyant and new container services and cruise vessels have been attracted to the Greenock Ocean Terminal.

"The purchase of the Hunterston Terminal from British Steel underlines the importance the Board gives to extending and enhancing port operations.

"At Hunterston we have a terminal that is able to compete on a European scale in the transshipment of coal and other commodities. The terminal will also serve to export Scottish coal."

The chairman took considerable satisfaction as a result of the company achieving BS5750 accreditation during 1993 and praised the employees for their enthusiasm and commitment.

Mr Mather reported that over the next two years in excess of £10 million will be invested in expansion of facilities, new plant and equipment and maintenance projects. Of that sum, £6.8 million is being spent under the European Commission's Renaval scheme.

He added: "I am optimistic about



Pictured at the signing of the contract for the extension and upgrading of the Passenger Terminal Building at Ringaskiddy are: (Left to right) Brian O'Sullivan, Harbour Engineer, Cork Harbour Commissioners; Nobby O'Reilly, Piers Contracting Limited; Jim Cregan, Chairman, Cork Harbour Commissioners; Pat Keenan, Chief Executive, Cork Harbour Commissioners.

the future. Clydeport will continue to thrive thanks to the ongoing determination and support of our employees, the high level of investment and accreditation to BS5750 in all areas."

2 Cold Store Chambers Commissioned at Cardiff

Associated British Ports' (ABP) Managing Director, Mr Stuart Bradley, officially commissioned two new cold storage chambers at the King's Wharf Cold Store, Queen Alexandra Dock, at ABP's Port of Cardiff.

The £1 million scheme involved the demolition of a third of the original quayside Cold Stores and the building of two new chambers, "E" and "F". The new quayside chambers are specially designed to eliminate exposure of frozen products to inclement weather and temperature variations. The temperature-controlled facilities at the Port of Cardiff have also received recognition in the form of ISO 9002 BS 5750: Part 2 Quality Assurance.

The building of Chambers "E" and "F", completed in January 1994, was carried out by Dean & Dyball. The development increases freezer capacity at the King's Wharf Cold Store by 10,900 cubic metres; goods can be stored at temperatures of -28 degrees Centigrade.

Typical products handled at the Cold Store include meat, fish frozen and chilled fruit juices, butter, cheese and general foodstuffs.

Unveiling a plaque at the Cold Store, Mr Bradley said: "This investment in the Port of Cardiff is designed to cater for the growth of specialist product-handling requiring sophisticated refrigerated storage. It is a further example of ABP's commitment to invest in new facilities wherever positive commercial opportunities are identified."

Commenting on the BS 5750 award, Brian Harding, Port Manager, ABP Cardiff, said: "I am delighted that the King's Wharf Cold Store has achieved this Quality Award. It is the first wholly-administered business unit within ABP to obtain accreditation. This underlines our policy of providing a first-class, quality-assured service to our customers in this specialised sector."

Asia/Oceania

Newcastle Coal Export Capacity Expansion Set

Still in the midst of a \$100 million expansion announced late last year, Port Waratah Coal Services (PWCS) have announced a further \$200 million expansion that will lift the Port of Newcastle's coal export capacity from 45 to 66 million tonnes a year.

Already the largest coal export port in Australia, the expansion to 66 million tonnes will see Newcastle become the largest coal export capacity Port in the world.

The expansion program currently in progress will lift capacity by 7 million tonnes to 53 million tonnes per annum and includes a new berth, extension of conveyor systems and a doubling of capacity of the coal stockpile.

The latest expansion plans announced include:

- further expansion of the coal stockpile by some 900,000 tonnes,
- duplicating the rail receival dump hopper and conveyors,
- a new shiploader and associated conveyor systems.

The expansion, as well as generating employment in the Region, will mean coal exports through the Port will be worth more than \$3 billion in export income.

The current expansion underway is expected to be completed by September this year, with the additional \$200 million expansion to be completed by April 1996.

PWCS General Manager Mr Phillip Hughes said "The decision to initiate an investment of this magnitude is not done lightly and it is both a signal to our customers and an outstanding statement of confidence in the future of the Hunter Valley." (*Scuttlebutt*)

China Ports: Further Cooperation With IAPH

China Ports and Harbors Association, an IAPH associate member, convened its meeting of directors in mid-May in Guangzhou, a port city in Southern China. the Chinese Ministry of Communications sent a letter of congratulation to the meeting, in which

the Ministry praised CPHA's performance in port studies, consultation services, human resource development and international liaison and cooperation. The Ministry encouraged CPHA to play an even better role as a trade association.

Mr. Li Weizhong, President and Director General of CPHA, submitted a work report to the meeting. He reiterated that CPHA would continue to enhance its cooperation with IAPH, would organize and coordinate the 8 Chinese member ports of IAPH to participate in the various IAPH activities and to promote international port development through friendly cooperation.

At the meeting, a new leading team was elected. Mr. Li Weizhong was re-elected President and Director General. 13 vice Directors General were elected. Mr. Li Minggui, who would remain Secretary General, was named vice Director General. Mr. Tu Deming of Shanghai Port was elected 1st vice Director General. Mr. Wang Diandong of Dalian Port, Mr. Wang Ende of Tianjin Port, Mr. Li Dexuan of Qinhuangdao Port, and Mr. Qiao Shide of Guangzhou Port (former port director) were also vice Director Generals. Mr. Qian Yongchang, ex-Minister of Communications and presently Executive Vice President of China Transport Association, was elected Honorary President of CPHA.

The Port of Qingdao — A Pearl in the Yellow Sea

By Chang De Chuan
President of Qingdao
Harbour Bureau

1. General Information on the Port

The Port of Qingdao, situated by the side of the Yellow Sea and in the Jiaozhou Bay of the Shandong Peninsula, is a fine natural port free of silt and ice. It has five major harbours, namely Beigang, Dagang, Zhonggang, Huangdao Oil Harbour and Qianwan Harbour. With Shandong Province as its base, the economic hinterland of the Port stretches away across Henan, Hebei, Shanxi, the middle part of Shansi and the east of Gansu,

connecting the eastern, northern and middle parts of China. Lying at the eastern end of the Jiaoji Railway and Jiqing Expressway, being a port of the national railway and highway network, the Port has easy access to water and land transportation. The volume of cargo handled in 1993 was 35.4 million tons and the current handling capacity of the Port is 73 million tons.

2. The Advantages of the Port

The Port is blessed with many advantages. The first advantage is that the Port, near the city proper, has Qingdao, a fine city, as its base. The City of Qingdao, an industrial, cultural, commercial, financial and economic center, is an important port and trading city open to the outside world, advanced in industry and excellent in providing a wide range of services.

The Customs, Commodity Inspection Bureau, Ship Inspection Bureau, Shipping Agency, Shipment Agency, banks, financial, insurance institutes and headquarters of the Foreign Trade Management Bureau of Shandong Province are all located here in Qingdao. Industry, an intelligence, and the comprehensive services of a city are the foundation of the development of a port. The proximity of the Port and the Qingdao industrial area, the tourist area, the commercial area, the financial area and the high-tech industrial park, and of the Qianwan Harbour, located in Huangdao District, as well as the Qingdao Economic and Technological Development Zone and the Qingdao Bonded Area, enables Qingdao to offer a convenient port transportation service to the export-oriented economic development of Qingdao.

The second advantage of the Port is its outside transportation network, with the Jiaoji and Jiaohuang railways reaching the Port and Jiqing Expressway, the Yanqing Expressway, a highway network and the Jiaozhou Bay rim expressway linking the former Port of Qingdao with the newly built port of Qingdao. Qingdao Airport, together with Qingdao Railway Station and Qingdao Passenger Terminal, forms a multi-directional transportation network for both passengers and cargoes, thus making the Port a highly efficient one.

The third advantage of the Port is its modern handling equipment. There

are, at present, 12 wharves with 70 berths (44 berths for commercial use) in the Port, among which 29 deep-water berths (24 for commercial use) can accommodate vessels of over 10,000 tons. The second phase of Huangdao Oil Harbour, the biggest crude oil harbour in the country, can accommodate tankers of 200,000 tons. There are altogether 5 berths in both the first and the second phases of Huangdao Oil Harbour, with an annual handling capacity of 30 million tons. Qianwan Mineral Harbour, the biggest among the ports in North China, with an annual handling capacity of 6 millions tons, can accommodate ore-carriers of 100,000 tons. No. 8 Harbour, the biggest bulk cargo harbour in the country, has a designated handling capacity of 4 million tons. There are over 50 machines of various types for loading and unloading cargoes and more than 50 handling ships, with a maximum tonnage of 320 tons in the sea and 150 tons on the yard.

The port management is computerized and advanced communications equipment is also in operation, with 5,200 programme controlled telephones connected with Qingdao communications center. With the computer system of container shipment connected with that of the cargo agency, the shipment agency and the foreign trade departments, services by the Port are fast and convenient. The Plan-5000 dispatching network information system which has been put into operation has become a computer network system covering the main working sections of the entire Port.

The fourth advantage of the Port is its rapid development of container transportation, especially its international container shipment business, with a rate of development of 31.7% in recent years and with its annual handling capacity ranking the third in the country after Shanghai and Tianjin.

A special berth for container vessels with the largest draught in the country and sophisticated loading and unloading equipment is available in the Port.

The Port has a container yard of more than 400,000 sq.m. which is able to provide services such as stuffing, stripping, consolidating, stacking, refrigerating, storing, cleaning, repairing, etc. Ten international container liners, such as the weekly liner services to Kobe, regular liners to Hong Kong,

Southeast Asia, US, etc, have been opened.

Business ties have been established with 40 countries and regions around the world and train-and-bus coordinated transport services to Shandong Province, North and Northwest China have been put into operation with the container shipment service center, while the railroad service can reach as far as the southwestern provinces such as Shanxi and Qinghai.

The fifth advantage of the Port is its wide ties of exchange and cooperation with other countries. The Port is one of the ports of country to have joined the international Association of Port-sand Harbors, having forged friendship ties with Shimizu, Shimozu and Wakayama ports in Japan and Wilhelmshaven Port in Germany. Along with the policy of reform and advancement of trading capacity, 16 joint ventures and 2 bonded warehouse projects with Singapore, Hong Kong, Indonesia, US, etc, have been set up since the Port strengthened its cooperation with foreign enterprises. The export-oriented joint venture projects cover a wide range of businesses such as loading and unloading, processing and manufacturing, ship repairing, communications, mounting and decorating, real estate development, bonded storing and so on. Apart from the regular passenger liners to Shanghai, Dalian and Guangzhou, the Port has opened passenger and container liners to Inchon, Korea, thus promoting the ties of exchange and cooperation between Qingdao and the outside world.

The sixth advantage of the Port is its being one of the key ports of our country. The government attaches much importance to the construction and development of the Port and leaders of the various levels such as President Jiang Zemin and Premier Li Peng have inspected the Port many times and given the Port hope and encouragement for its future development.

3. The Prospects for the Port

The Port has a bright future. To meet the demand for making Qingdao an international metropolis and to make contributions to the economic development of Shandong Province, North and Northwest China, we will continue our efforts in port construction. We need to grab the opportunity, accelerate our pace of development and try our

best to build Gingdao Port into an international and modern port with an annual handling capacity of 100 million tons by the end of this century.

We will carry out the further technical reform of the old part of the Port, perfect its functions and make it a comprehensive commercial port including an international passenger center of 80,000 sq.m. so as to meet the demand for the Port to function as part of an air, sea and land transportation network. Six deep-water berths and a 3.15 million ton handling capacity, including a special berth for the 4th generation ships, will be newly added to the second phase of Qianwan Harbour, which is now under construction.

The third phase of Qianwan Harbour project, being officially authorized, contains a plan of implementing 9 deep-water berths (where, 6 container berths including 2 berths for 50,000 tonners, 2 berths for 30,000 tonners and 2 berths for 20,000 tonners), and 3 bulk cargo berths (where, 1 berth for 100,000 tonners, 1 berth for 50,000 tonners and one for 20,000 tonners). A total amount of investment amounts to RMB5 billion. When implemented in full, Qianwan Harbour, with 21 deep-water berths, will be a large-scaled transit port.

By the year 2000, the Port of Qingdao, a multi-functional, comprehensive, internationalized and modern port of 100 million ton handling capacity, will be one of the most famous ports in the world.

Tauranga Ltd: Improved Net Profit for 6 Months

The Port of Tauranga Ltd has reported a \$3.06 million net profit for the six months to March 31, 1994 — an improvement of 2.9 percent on the same period last year.

"This is particularly pleasing when last year's record log export levels are taken into account," Port of Tauranga chairman Fraser McKenzie said.

"Despite lower cargo levels for the period, we have been able to achieve an increase in after-tax profit through the changing mix of cargoes, increasing our property rentals and continuing to control our costs."

Mr McKenzie said with log export levels now showing signs of improve-

ment, the company expected to meet its budget projections for this commodity by year end.

"We are also on target to meet our budget projections of a double-digit percentage increase in after-tax profit by year end, compared to the last financial year."

The increased net profit was achieved on trade volumes for the first six months of the year of 3,096 million tonnes. Export volumes, exclusive of logs, were down 1.4 percent on the same period last year. Imports increased by 9.4 percent to 886,587 tonnes.

Chief executive John Halling said log exports through the Port in the first six months of the financial year dropped by an anticipated 31.1 percent over the same period last year.

"This reflects the lower log export levels recorded late last year, however, indications now are that this trend is improving and we expect to meet our targets for this commodity by year end," he said.

"Also encouraging was the 3.3 percent reduction in operating expenditure over the period, along with continued falls in depreciation and financial costs."

Mr Halling said the reduced operating costs were achieved by the commitment of staff to a 21 month industrial agreement with a 2.5 percent wage increase, as well as through the programme of asset maintenance.

Increased areas of port land and buildings leased to customers has also has a significant impact on the result with a substantial increase in that revenue to \$1.52 million.

Mr Halling said other positive trends included a 2.6 percent increase in container trade and a move by several of the Port's larger clients to consolidate their cargo at Tauranga.

"We also exported our first shipment of onions from Pukekohe, reflecting increasing exporter enthusiasm for the Port of Tauranga, as well as a doubling of cruise vessel visits."

Fertiliser imports continued to grow, mirroring an improvement in rural confidence and dairy products export increased by just under 18 percent.

The Port's directors had recommended a fully imputed interim dividend of 2.0 cents per share, similar to the interim dividend last year, with non-resident portfolio investors also

receiving a supplementary dividend of approximately 0.35 cents per share.

Directors expected the final dividend, barring any unforeseen circumstances, to be similar to that paid out last year.

"With a robust New Zealand economy now evident and growing signs of optimism internationally, the Port of Tauranga Ltd is confident of its position for the remainder of the financial year," Mr Halling said.

Philippine Seminar On Narcotics Smuggling

Seventy-one officials from the various government law enforcement, intelligence and customs agencies, including the Philippine Ports Authority (PPA), recently attended the Seminar on Alliance of Customs and Trade for the Interdiction of Narcotics. Seminar participants from the PPA included: Hector Miole, Manager of the PPA Port Police Department, Numeriano F. Borleo, Jr and Augusto H. Pilapil, both Investigation and Intelligence chiefs of the same port agency.

Held in Manila, Philippines on 25-29 April 1994, the seminar was organized by the CCC/Defis Project Management Team in coordination with the Philippines' Bureau of Customs.

The seminar was the result of the continuing efforts of the Customs Cooperation Council (CCC) to promote awareness and usher greater cooperation among customs, law enforcement agencies and traders/private business in the prevention of smuggling and drug trafficking in the ports.

Seminar lectures and briefings focussed on the approaches/systems used to detect smuggling and drug trafficking operations, the Japanese experience on customs enforcement and the organization and operation of the CCC. The seminar also gave emphases on the concept, purpose and importance of the instrument called Memorandum of Understanding (MOU).

In addition to the above topics, some very interesting and enlightening visuals were shown to the participants like the video documentation on the successful detection and apprehension of a US-based drug smuggler and the latest statistics on the magnitude of drug trafficking occurring throughout the world. A slide presentation was also

shown documenting the actual shipment of illegal drugs via container at the Port of Kobe in Japan.

To underscore the significance of the seminar, a workshop was conducted wherein the participants were divided into five groupings. Each group to represent a particular syndicate engaged in solving drug smuggling through the following methods: diplomatic channels, dumped-overboard (shipping), air-mail, freight forwarder and direct bribery method.

Generally, the seminar was a success. The knowledge learned from the lectures were truly eye-openers. And the PPA fully shares and supports the visions of the CCC and IAPH in combatting drug smuggling. The port agency likewise endorses the conduct of seminars of this kind in all ports worldwide.

1993 Another Good Year For Port of Singapore

In 1993, the Port of Singapore had chalked up another year of good per-

formance. Shipping tonnage rose 8% to 623.8 million gross registered tons when 92,655 vessels called at the Port.

Container throughput in 1993 grew by 20% to a record 9.05 million TEUs, accounting for about 8% of the world's throughput. The good growth in 1993 was registered on the back of a yearly 22% expansion in Singapore's container traffic during the last ten years.

Despite the strong growth in shipping tonnage, the Port of Singapore Authority (PSA) has again shown that productivity growth and high service levels can be maintained at the world's busiest port. 1993 saw PSA achieving good productivity growth with value-added per employee reaching S\$202,000. This represents a 12% increase over 1992 and four times above the national average.

As a responsible corporate citizen, PSA is committed to a policy of maintaining a safe and clean marine environment for the enjoyment and benefit of Singaporeans.

PSA continually develops navigational systems and safety procedures to provide for safe and efficient

movement of vessels. Round-the-clock patrol of all anchorages and fairways ensures pollution-free waters.

The financial performance of the Group operating income rose by 11% to S\$1,457.2 million. Income from container-handling services formed the bulk of the growth and accounted for 57% of total income.

Operating surplus increased by 19% to S\$578.2 million. The Group's net surplus after including non-operating income and before tax amounted to S\$690.3 million, an increase of 18%.

The Group's capital expenditure increased by 155.6% to S\$1,147.0 million in 1993. Expenditure in container handling equipment and container berth facilities amounted to S\$924.0 million. This included development expenditure on the new container terminal at Pasir Panjang.

Rate of return on turnover increased from 36.8% in 1992 to 39.7% in 1993, the highest since 1989. Return on fixed assets and on shareholders funds rose marginally by 0.1% to 13.6% and half a per cent to 12.9% respectively.

The Expanding Port of Niigata A Gateway to the Japan Sea Rim

Located roughly in the center of Japan and facing the Japan Sea, the Port of Niigata is regarded as historically significant as one of only five harbors, including Yokohama and Kobe, opened in 1868.

In recent years, Niigata's rapid transit network has developed in the form of the Joetsu Bullet Train Line and express roadways.

Along with its international airport, Niigata now has easy access to major metropolitan areas in not only Japan but also Korea and the Russian Far East.

Currently, in addition to domestic routes, regular shipping lines have been established with Russia, Korea, Hong Kong, Taiwan and North Korea. In 1993, a regular passenger line to Vladivostok opened, along with the completion of an international terminal for passengers.

The Port of Niigata is aggressively developing its facilities in many areas, including the completion of a 14 meter quay for large-sized containers in 1996.

The Port of Niigata looks forward to serving you. Come and experience Niigata Port!

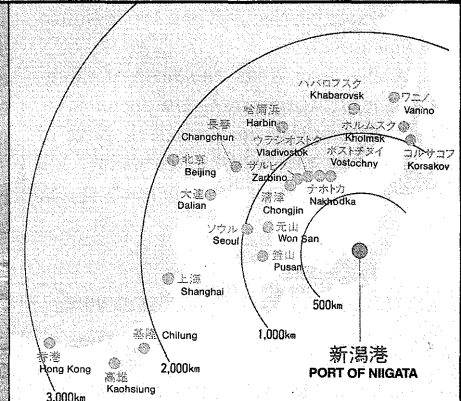
Promotion Division

Bureau of Harbor and Airport Development
Niigata Prefectural Government
4-1 Shinko-cho, Niigata 950, Japan

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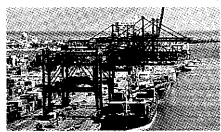
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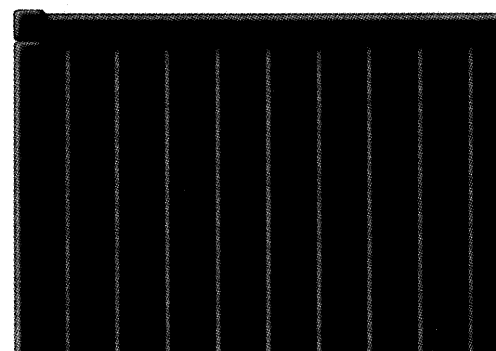
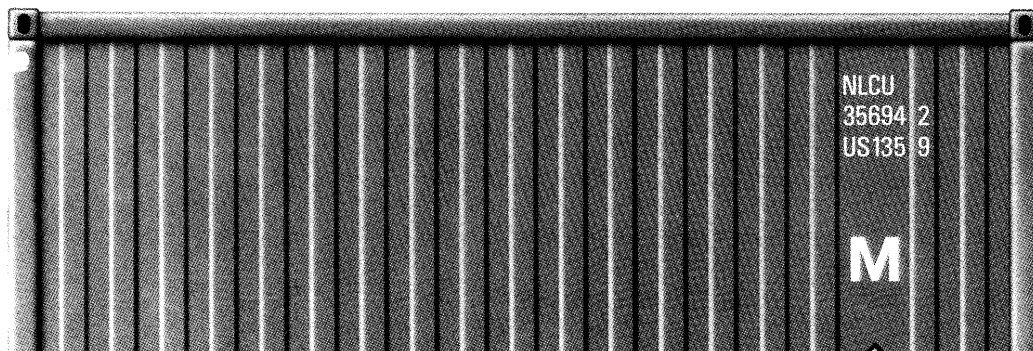
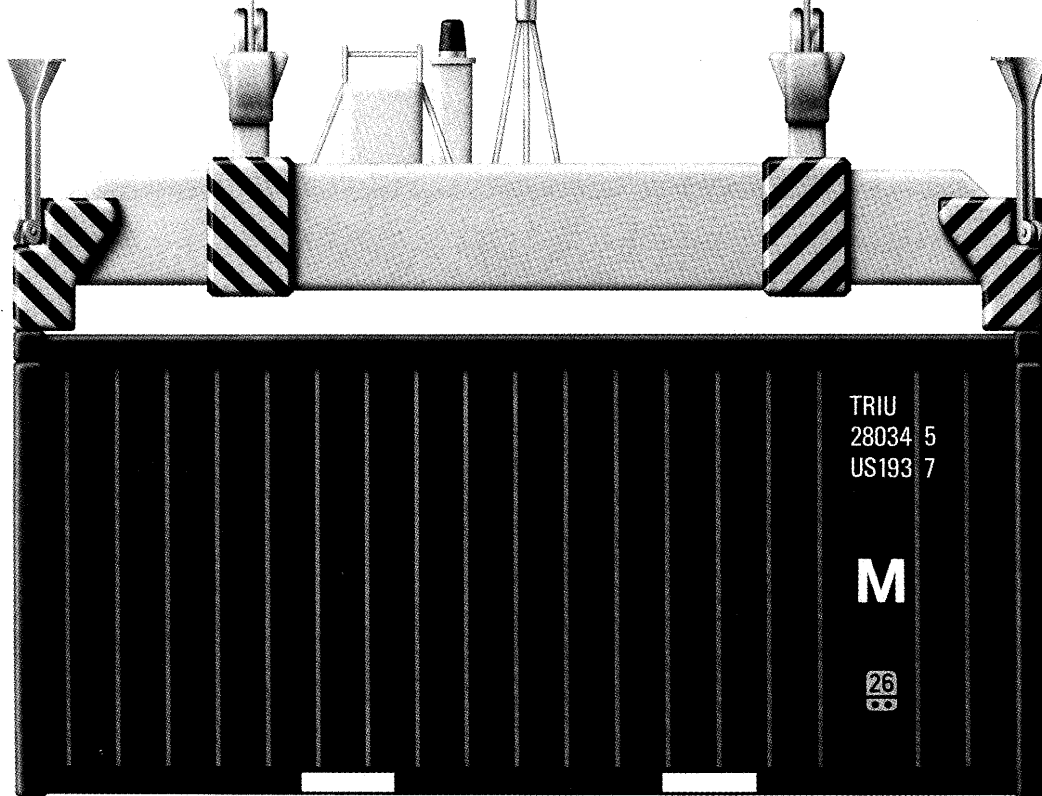
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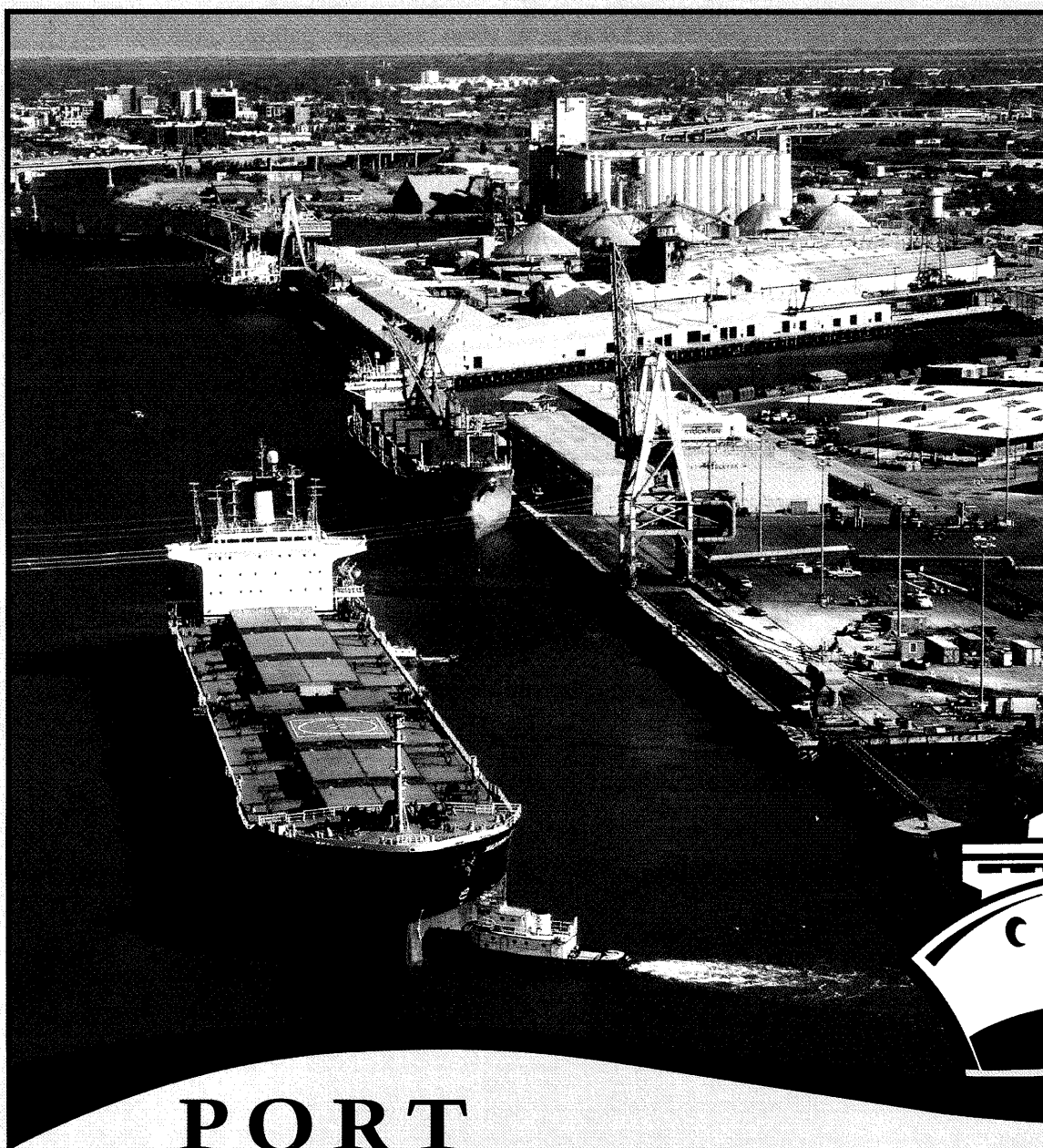
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