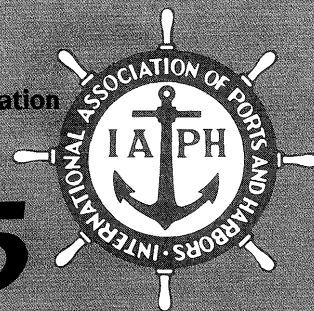


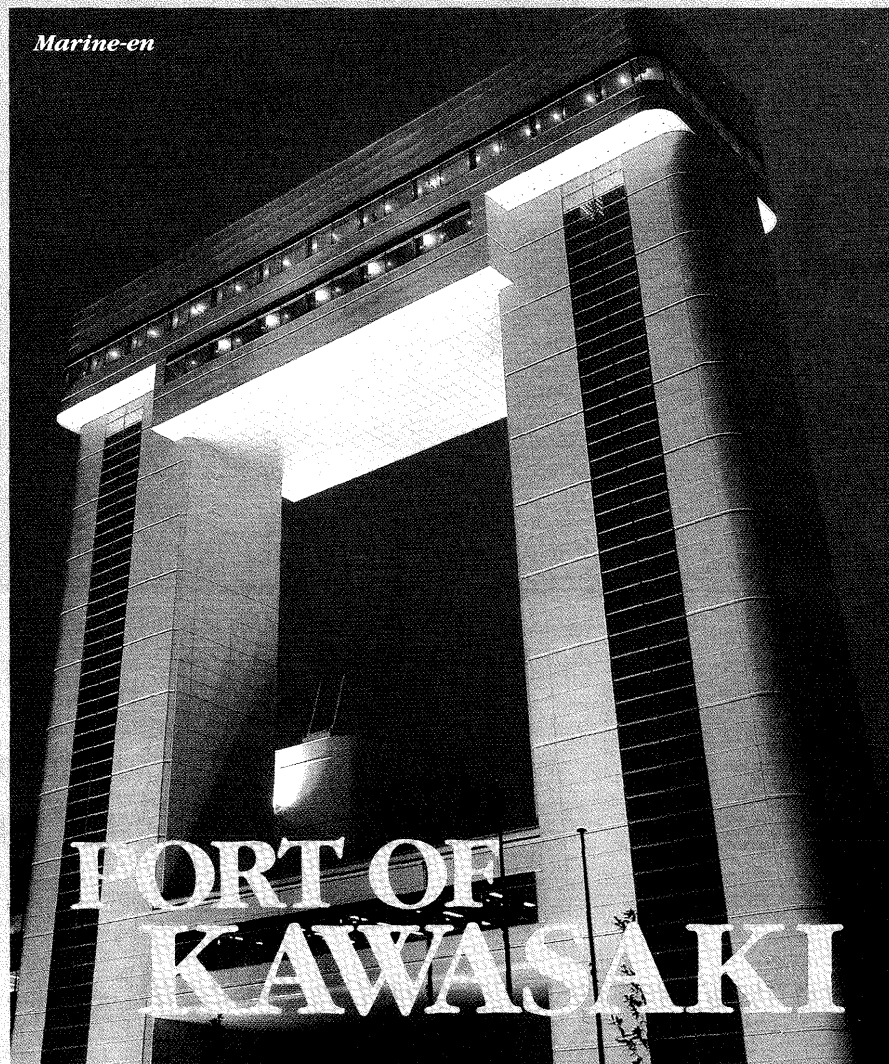
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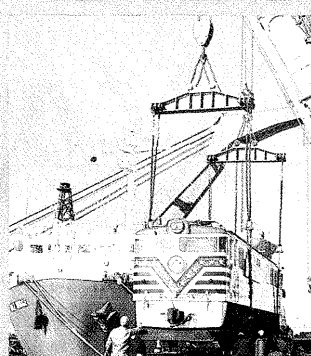
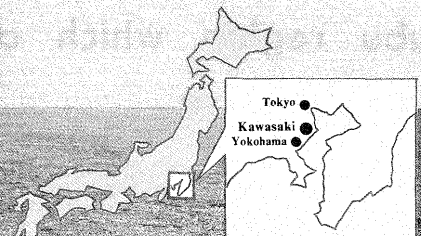
June
1992 Vol. 37 No. 5



Marine-en



The Port of Kawasaki, which is situated at the heart of the Keihin Industrial Zone, the first and foremost industrial area in Japan, has, along with the Ports of Tokyo and Yokohama, played a significant role in the development of the economy and everyday life of Japan. The Port, covering a total area of 3,373 ha (and featuring a waterfront area of 1,973 ha and a water depth of 12m), provides various amenities and recreational facilities for its citizens. The Kawasaki Marine-en building was recently completed as a new tower symbolizing Kawasaki. The 11-story, 60m tower comprises an observation tower, congress halls and a museum where the visitors can view the history and ideas for the future of the port through visual presentations and other means so as to familiarize them with the Port of Kawasaki.



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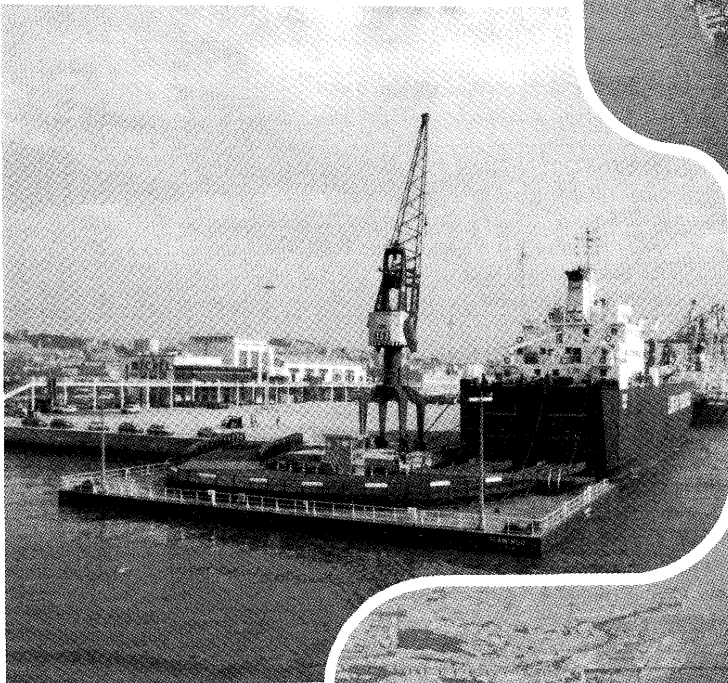
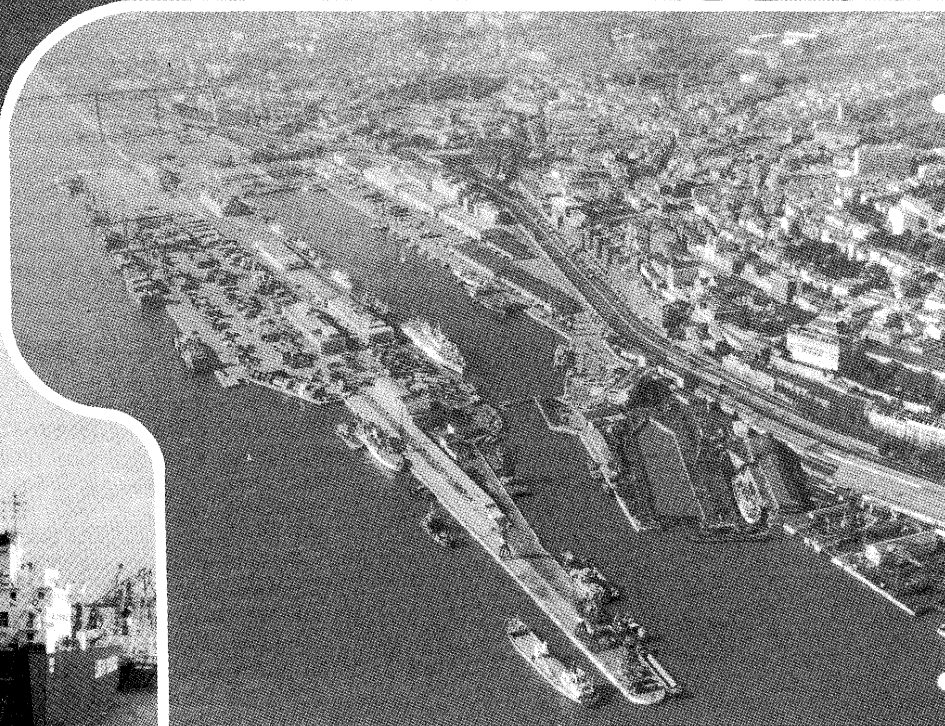
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IAPH ANNOUNCEMENTS AND NEWS

IAPH Responds To Questionnaire from UNEP

on dangerous chemical substances

In February this year, the Tokyo Head Office received a letter from the Nairobi-based United Nations Environment Programme (UNEP), asking our organization to provide UNEP with information about any steps taken by IAPH in terms of research, new regulations, or other actions in accordance with the recommendations noted by the Governing Council of UNEP.

The Governing Council of UNEP, at its ninth session held in May 1981, recognized that the preparation of a list of environmentally dangerous chemical substances harmful at the global level, to which special attention should be paid in environmental policies, would contribute to the formation of public awareness of their possible environmental hazards. At successive Governing Council sessions, the list has been presented following thorough updating and expansion to include harmful processes and phenomena of global significance involving chemicals.

At its fourteenth session in 1987, the Governing Council requested the Executive Director to refer to the report on the list to Governments, relevant international organizations, industry and nongovernmental organizations for further study and action as appropriate and to obtain their comments on the report and, in particular, on the recommendations it contains and the implementation thereof. The report has been updated following individual appraisal of all comments received from Governments and other sources and contains short executive summaries on the seven chosen themes: acidification; air pollution; eutrophication; oil pollution; pollution due to agricultural activities and pollution due to industrial chemicals and waste.

In May 1991, the decision was reached by the Council to request the Executive Director that the Committee review the use made of the list and to submit the outcome of this review to the Governing Council at its seventeenth session in 1993.

In accordance with this decision, IAPH was invited by Mr. S. Evteev, Assistant Director, Office of the Environment Programme, to provide UNEP with information and comments available so that the UNEP office can prepare proposals for a possible update of the list on the basis of the responses thus received from various organizations, for submission to the Governing Council in 1993.

In responding to the UNEP questionnaire, Secretary General Kusaka has sought Mr. Dwayne Lee's assistance

in preparing an IAPH response reflecting the IAPH initiatives on the environmental issues.

Mr. Dwayne Lee, Chairman of the IAPH Dredging Task Force and Deputy Executive Director, Development Port of Los Angeles, accepted the role and prepared the response from IAPH, which Mr. Lee sent to the Director, International Register of Potentially Toxic Chemicals at Palais des Nations in Geneva on March 24, 1992. For the benefit of IAPH members, we reproduce below IAPH's response to the UNEP questionnaire as prepared by Mr. Lee.

QUESTIONNAIRE

Has your organization found the report on the UNEP List of Selected Environmentally Harmful Chemical Substances Processes and Phenomena of Global Significance to be interesting?

IAPH and its member ports are aware of many of the issues raised in the UNEP list. This awareness, however, is not directly from the list but through the London Dumping Convention and the national authorities of the member ports. The information the list contains is indeed interesting to us and helpful, in those applicable areas, toward sound environmental operation of a port.

Has a specific topic in the report made your organization more aware of a given problem related to chemical pollution?

Again, IAPH's exposure to the substance of the report is secondary and not direct.

Has the report been circulated to, for example, your field offices or national contact points?

No. The portion of the report that has the predominant interest to ports is the discussion of wastes since dredged material has, unfortunately, been placed in that category.

Has a specific topic in the report stimulated related scientific research programs by your organization in a given country?

IAPH and its member ports are not directly involved in research. Our responsibility is to provide harbor facilities to our national authorities that meet the national need. As such, we often identify areas that need research but we seldom, if ever, conduct it.

Has a specific topic in the report led to any new activities being initiated in your organization?

Yes. Several of the more recent IAPH initiatives to

insure our member ports operate in an environmentally responsible manner are detailed below. The cumulative effect of these IAPH initiatives and actions clearly demonstrate an increased level of environmental awareness in the port community and a commitment to improving the environmental quality in the port's area of responsibility.

- A. In May 1991 IAPH adopted a Resolution on the Environment. Some of the major features of that resolution are: (1) economic development planning must be accompanied by environmental protection planning, (2) ensure the existence of adequate legal base to protect the environment of port facilities, and (3) adoption of "the polluter pays" principle.
- B. Also in May 1991, IAPH published and disseminated to its member ports, "Dredging for Development". One section of that document discusses environmental aspects and is provided for your information.
- C. In April 1990, IAPH published the results of a survey of its member ports to ascertain the priority of environmental issues in the ports. A copy of that report is attached for your information.
- D. In preparation for the London Dumping Convention, Session 14 (LDC 14), IAPH submitted a position paper in support of "the precautionary approach" for disposal of dredged material at sea. At LDC 14, a resolution was passed adopting the precautionary approach which IAPH fully supports.
- E. In preparation for IAPH participation in UNCED 1992 in Rio and the PREPCOM 4 in New York city, a position paper was developed outlining the major issues of concern to the IAPH member ports. The paper covers the need for dredged material to be disposed at sea, the need for a holistic approach to waste management, the optimum role of the ports toward the upstream polluters, and the future role of IMO in marine pollution control strategies.

Would your organization find it useful that UNEP continue the updating procedure of the List? If so, does your organization have specific suggestions to further improve the content and presentation of the List.

IAPH would find it useful for UNEP to continue to update the list. We do have several suggestions to amplify the discussion of disposal of dredged materials. Dredged material is incorporated in your list under the category of "wastes". Such a classification is common to the manner in which many of the national authorities of our member ports classify dredged material. As such, this unfortunately labels dredged material unfairly. In the GESAMP Report, "The State of the Marine Environment", UNEP Regional Seas Reports and Studies No.115, UNEP, 1990, GESAMP states "about 10 percent of dredged material is contaminated from a variety of sources" and "about 80 to 90 percent of all material dumped at sea results from dredging" (page 12). Ports must dredge to provide the service they do. Frequently disposal at sea is not only the most economical alternative, it is also the most environmentally responsible alternative. From the GESAMP report quoted above, 90% of that material is not contaminated yet because dredged material is classified as a "waste" it receives a label that is not warranted by the scientific

evidence. The same GESAMP report makes rough estimates of the relative contribution of all potential pollutants from various activities entering the sea. That breakout is as follows:

Offshore Production	1%
Marine Transport	12%
Dumping	10%
Run-off and land based discharges	44%
Atmosphere	33%

These conclusions from GESAMP are consistent with the information and analysis of the national authorities of many of our member ports. As they clearly demonstrate, the disposal of dredged material is predominantly with uncontaminated material (approximately 90%), and all dumping of which dredged disposal is a subset contributes only 10% to the total contamination load into the sea. In some fashion these aspects of dredged material need to be incorporated into the UNEP list. The impression left with the reader who may not be aware of these scientific assessments would be that all dredged material is a contaminated waste and should be treated accordingly. This would be a totally incorrect conclusion.

Recommendation 139 (a) "Society needs to rethink its attitude toward wastes. It should concentrate on reducing waste production as part of an overall strategy to reduce pollution rather than accept present levels". IAPH is in full agreement as evidenced by the Environmental Resolution it passed in May 1991.

Recommendation 139 (c). "Waste management strategies should emphasize waste minimization and recycling." IAPH also fully agrees and believes there is an opportunity for dredged material to be considered as a suitable candidate for "recycling". For many years ports have sought ways to beneficially dispose of their dredged material. With the inclusion of environmental concerns into the decision-making process, these beneficial use applications are now assessed for their environmental soundness. Using dredged material beneficially is, in effect, a "recycling" of that material. Such uses are encouraged by IAPH and our member ports. As with many recyclable products, a great public acceptance of the product is essential to the success of any long term practice.

SG Report for Exco in Charleston

The Secretary General's Report, for submission to the mid-term meeting of the Executive Committee, was completed by the Head Office Secretariat in Tokyo and advance copies of it were dispatched to the Officers concerned to enable them to review the issues which are to be dealt with at the meetings in Charleston on May 7 and 8, 1992.

In the Report, the Secretary General outlines the current situation concerning our Association in the following five sections:

The first section deals with the facts about our organization, and the key officials in the Committees as well as the Liaison Officers are listed with notes on the current

situation covering the changes since the Spanish Conference.

The second section concerns the membership situation. Details on the Regular and Associate Members as well as the Temporary Membership are presented.

The third section covers the versatile activities of the Association since the Spanish Conference one year ago by listing the major events and work undertaken by the Association's officers, committees and representatives in chronological order.

In the fourth section, the publications of IAPH such as "Ports and Harbors" and various Technical Committee reports including the Guidelines, as well as other publications IAPH produces on a regular or individual basis are introduced, together with relevant information and data.

The last and, fifth section deals with the financial situation concerning the Association as it was reported in the Settlement of Accounts for 1991.

Summarizing his 50-page Report, Secretary General Kusaka presents his introductory remarks as follows.

Introduction

Allow me to begin this Report by expressing the deep appreciation of IAPH to all the officials and staff members at the South Carolina State Ports Authority for the excellent arrangements they have made for hosting this year's mid-term Exco and other committee meetings of our Association in Charleston, South Carolina, U.S.A.

IAPH Activities

As for the details of the Association's activities during the months following the 17th Conference of IAPH in Spain last May, we have kept our members informed of all developments through the announcements in "Ports and Harbors", by circular letters and by other forms of communication.

The numerous achievements we have been able to report to IAPH's worldwide membership have been due to the valuable advice received from the President and Vice-Presidents and the leadership displayed by the committee chairmen, as well as to the devoted service they have given us. We cannot, of course, overlook the fact that our chairmen's efforts have been consistently backed by the port organizations they represent and by the enthusiastic committee members who have energetically participated in their respective committee activities.

I would also like to thank the Liaison Officers — including those who have served in their capacities as IAPH representatives or consultants — and the British Ports Federation for their wonderful performance in representing our Association at the various meetings of UN agencies or at other international maritime forums.

In 1991, IAPH was granted NGO observer status by the Nairobi-based United Nations Environmental Programme (UNEP), in addition to the consultative status we already have with ECOSOC, IMO, UNCTAD and CCC.

This resulted from the resolution (No.3) of the Spanish Conference which authorized the Secretary General to apply for a more formal working relationship with UNEP, in the expectation that port and harbor operations and programs will be given full and fair consideration as UNEP advances its objectives. Thus, IAPH is now in a position to work together with UNEP to boost the quality of the global environment.

Our Technical Committees, which have formed the backbone of IAPH's activities, have constantly directed their

efforts to meeting the varied needs of the Association. They are tackling their wide-ranging work from a global perspective so as to cope with the changes in the varied needs of port customers, while keeping track of the technological innovations in transport and gearing their activities to environmental considerations or the local communities. Furthermore, it has been suggested by some committees that our Technical Committees should be restructured. Accordingly, the new set-ups are to be proposed by the members concerned for discussion at the Charleston meetings. I hope that the Charleston meetings will be able to produce a satisfactory conclusion concerning the future course of our committee activities.

Membership

Our membership campaign efforts, headed by the Membership Committee Chairman, have been supported by innumerable IAPH officers and other individuals, who have taken all opportunities to convince non-members of the merits of joining our ranks. Naturally, our Head Office has been centrally involved in these endeavours. However, as outlined in this Report, the number of Regular Members we were able to add during 1991 amounted to only four, while we must report that six Regular Members left our Association for various reasons.

Nevertheless, if we look at the membership dues unit figures, according to last year's tonnage report by the Regular Members there was an increase of 15 units in the figures for 1992 over those for 1991. I wish to express my sincere thanks for the great efforts made by our members who have registered increased dues units. This has obviously contributed to the strength of IAPH finances.

Finance

The report on IAPH's Settlement of Accounts for 1991 is presented in this Report, together with a copy of the auditor's statement. As for the General Accounts, the total revenues in the term exceeded the budget. This is as a result of the timely payment of dues by the majority of Regular Members together with increased interest income from our cash deposits reflecting the relatively high interest rates in force during 1991. As for Expenses, we have directed our efforts to keeping the cost of the Head Office operations as low as possible. Furthermore, the level of disbursements paid out for both "Technical Committees' financial support" and for "strategic action projects" has turned out to be below the budgeted amount, as the anticipated projects requiring budget allocations have not actually taken place.

As for the financial performance of IAPH, revenues are strongly affected by movements in the SDR or SDR/Yen values. Fortunately, as far as the year 1991 was concerned, the SDR maintained a comparatively high value against the Yen throughout the year, to the benefit of the Association's finances.

Nevertheless, I must say that the future is indeed uncertain. Our Head Office is determined to continue directing its utmost efforts towards the wise management of the Association's finances, with the guidance of the Finance Committee.

International Cooperation

IAPH members representing developed ports have long supported the idea of assisting their counterparts in developing ports towards the goal of increasing the capabilities of their ports.

As a manifestation of IAPH's spirit in the various activities of the Association, it is incumbent upon our members to work together for the betterment of ports and harbors all over the world. The CIPD has been at the front of IAPH's efforts in our cooperation programs.

In accordance with the decision reached by Exco's Fremantle meeting in 1990, we have been conducting a fund-raising campaign to raise the resources to be used for bursary money (the IPD Fund). We have asked all IAPH members for voluntary contributions in an effort to raise US\$70,000.

As the list of donors included in my Report shows, we have received most generous contributions from many member organizations, to whom I wish to express my sincere thanks. As of April 10, 1992, 22 months after the campaign started, we have so far been able to raise a little over 50% of the targeted amount.

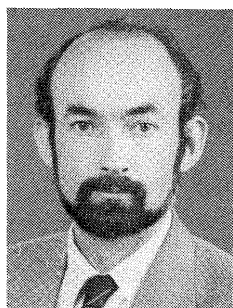
Ports and Harbors

In conformity with the guidelines previously adopted by Exco, our efforts have been constantly directed to increasing the readability of "Ports and Harbors" and to maintaining a good profile for the Association's members and readers at large. We have enjoyed the great support of all members and committees in receiving useful information and articles on their activities on a timely basis. The Head Office urges all members to use the space available in the journal as actively and frequently as possible and also seeks the positive support of our advertising efforts.

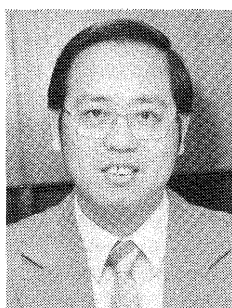
The 18th Conference in Sydney in 1993

The preparations for the 1993 Conference in Sydney are underway, directed by our hosts at the Maritime Services Board and the Department of Transport, New South Wales, Australia, in close contact with the Head Office in Tokyo as well as the Officers and the committee chairmen. I am grateful for the efforts and enthusiasm exhibited by our hosts in making the necessary preparations for the event. I am convinced that Exco will be able to give effective guidance in further refining the programs which our host will come up with for the discussions at Charleston.

Mr. Miller of HK New Exco Member



Mr. J.A. Miller



Mr. Michael C.C. Sze

To fill the vacancy created on the IAPH Executive Committee by Mr. Michael C.C. Sze, who has moved from the position of Director of Marine to that of Secretary for Constitutional Affairs, Hong Kong Government, and has

thus resigned as an IAPH Exco member, Secretary General Kusaka called for two meetings by correspondence of the Board of Directors to elect a new Exco member from the Asian region. On March 18, 1992, the Board members in the Asian Region nominated and voted for Mr. J. A. Miller, Mr. Sze's successor at the Marine Department, as the IAPH Director from Hong Kong. Furthermore, the matter was placed before the Board of Directors at its meeting by correspondence on April 20, 1992 and Mr. Miller's election was unanimously supported.

Secretary General Kusaka wrote to Mr. Michael Sze in April expressing his appreciation for the valuable contribution Mr. Sze made to our Association, while Mr. Kusaka contacted Mr. Miller to ask for Hong Kong's continued support of the activities of IAPH.

Entry Form Sent for '93 IAPH Directory

An entry form for the 1993 edition of the IAPH Membership Directory was sent out to all IAPH members from the Tokyo Head Office on June 1, 1992.

Upon receipt of the form, all members are requested to check the attached information and make the necessary corrections and changes. The completed form should be returned to the Head Office by the end of July 1992.

Members are also invited to run their advertisement in the Directory at reasonable rates: ¥80,000 for a full page (152 x 75 mm) and ¥50,000 for a half-page (75 x 75mm).

In previous editions, some entries were listed with an asterisk to identify those members whose updated details had not been received by the deadline. We urge all members to make the latest situation concerning the respective organizations available to the Head Office in time for insertion in the new edition of the Directory, which is recognized as one of the most convenient and accurate reference books for identifying "who's who" in world ports as well as the annual tonnage figures handled at each IAPH member port.

Port Jurists Informal Meeting in Geneva

By Marcel-Yves LE GARREC
Secretary General
Port of Bordeaux Authority

The objective of the "informal" meeting of port jurists which was held in Geneva on the initiative of UNCTAD from 18 to 20 November was to examine a pre-report of the legal aspects of port management.

The report, written by Mr. REZENTHEL, Head of Legal and European Affairs at the Port of Dunkirk Authority, had been sent beforehand to the different ports present at the meeting.

The participants, 27 in total (see attached list), came from different ports and regions throughout the world:



Marcel-Yves Le Garrec

- Europe (Belgium, the Netherlands, France, Spain, Portugal, the United Kingdom, Turkey);
- West Africa (Ivory Coast, Cameroons, Angola);
- North Africa (Algeria, Morocco, Tunisia);
- The Caribbean (Guadeloupe, Trinidad); and they also included:

+ a TRAINMAR expert (Mr. BYL) and the representatives of the port section (Mr. CAMBON together with three economists).

IAPH was represented by Mr. M.Y. LE GARREC, who also represented the Port of Bordeaux Authority.

He had been requested to present a paper on the influence of international legislation of port management, an aspect which had hardly been mentioned in the pre-report which had dealt with the national law aspects — notably from the point of view of French law.

It was agreed from the start that the examination of the report and the various reflections should result not only in a final report but equally on the formulation of international recommendations aimed at assisting port managements, especially those from the developing countries, many of whom had requested help in improving both port operations and management.

1. General Considerations

The first day's discussions centered on a reflection of the differences in legal structures between States and therefore in port, structures linked to the functions exercised by the Ports which vary from one country to another. During the debate the partisans of privatization (private property) opposed those in favour of "public service" ports established on public property, with variations that enable a larger or smaller degree of privatization of certain port functions, thanks to management techniques that did not, however, bring the notion of public property into issue.

After the general considerations of the law applicable in each country (public law/private law), the representative of the Port of Rotterdam stressed the influence of international conventions on the developing countries and, in a general way, on ports (This was to be the object of a later paper in the name of the IAPH).

The next discussion centered on the different management modes in ports, with two particular points of reference: the public law approach of the French style and the private law approach of the Anglo-Saxon style (Common Law).

- ports with centralized or decentralized management;
- privatised ports or nationalized ports; and
- autonomous ports.

It was noted that the assignments of ports and the range of their functions could be very different from one country to another.

The examination of these functions continued based on the different chapters of the pre-report:

- port works and their financing (with observations from the Cameroon representative on the financial burdens of ports);
- port land administration (linked to the property regime in force): privatization, concession, occupancy authorization, direct management, etc; and
- policing in its widest sense (administrative and repressive policing) and the role of port officers.

2. Operations

During the examination of Chapter V, devoted to port operations, there was once again a question of the administration of port land (importance of mastering real estate).

Cranage operations gave rise to a debate (covering development and management by the port authority, equipment entrusted to a private company with an obligation to provide a public service or, even, totally private handling equipment).

Tariff management of port services was examined as well as the working of the administrative board, the port board or even the institutions introduced at a national level to coordinate port policy (an interesting example being Morocco with its technical committees).

3. Liability — Legal Protection

The group then examined chapter VI, which dealt with liability and insurance as related to ports.

As far as the protection of port works was concerned, most countries have introduced insurance systems, but a port can also be its own insurer. In France the public thoroughfares procedure is administered.

In the case of damage caused by a ship to works, the development in the European countries of the system of a caution (France and the Netherlands), providing a maximum guarantee — action on the ship's agent was raised, but is not possible. So why not associate the ship's agent with the liability of the shipowner?

Among other possibilities were arresting the ship or other ships belonging to the same shipowner to obtain reimbursement of debts (also valid for port dues), but this requires the intervention of the law courts for the sale of the ship.

There is, however, a different system in force in Tunisia: the possibility of a state of financial liquidation which enables the port to sell a ship after arrest and without a legal trial.

For damage to the port one is faced with the limitation of liability in the international conventions (a subject developed by the representative of the International Association of Ports and Harbors, together with the example of a recent accident in Bordeaux).

The problems of wrecks — particularly the costs of removing wrecks — were then discussed. At Le Havre, the port intervenes for abandoned vessels (forfeiture of ownership and sale) before they become wrecks: This is a subject to be developed later.

Other questions that were examined were: the problem of accommodating dangerous vessels, sub-standard ships. No obligation for a port, except by decision of the State (e.g. in France: the Maritime Prefect — TANIO at Le Havre).

Port activity can be a source of damage. The group examined the measures taken by ports when their liability is evoked:

- There is a developed system of civil liability insurance in France and Holland,
- In Belgium there is no insurances, but liability is avoided by limiting the equipment provided, e.g. the port does not provide fenders for berths, that is left to the operator. On the other hand, there is an obligation for the stevedores to be insured,
- In France, in several ports there is common insurance for the port authority and the stevedore (less impact on the stevedore?) Stevedores are liable for cranage during the time they are using it,

- In English ports there is global insurance, but it becomes difficult to know whether this or that risk is insured correctly.

The problem of dangerous goods merits being developed. A paper by M-Y LE Garrec on this subject was made available to participants.

A distinction must be made between dangerous goods and polluting substances or materials (problems of effluents/dredging spoil, etc).

The importance of international regulations and their influence on port management (the restrictions are increasingly numerous) are the subject of M-Y Le Garrec's paper attached to this report.

4. Stevedoring

The examination of Chapter VII was devoted to the delicate problem of the legal regulation of stevedoring.

In numerous developing countries, labour or sailors who do not have the status of dockworkers are used.

In Europe and throughout the world, the rigidity of the system has led to upheaval in the organization of stevedoring, particularly in Great Britain, Spain, Italy, Australia and New Zealand, following on from Germany and Holland.

Today, in France major reform is at hand. This chapter will no doubt require revision. For the present it is difficult to discuss the subject.

The group raised the question of the application of international working standards (ILO).

5. Real Estate Management

Finally, when discussing Chapter VIII relating to real estate management (question already raised in connection with operation), the French concept of public domain and the systems where land is private (cf Great Britain) conflicted.

With a regime in the public domain, it is possible to use advantageous measures such as expropriation.

The importance of property revenues was stressed in discussion of the problem of tariffication.

The urban function of ports as development focal points raises the difficult question of town/port relations.

Recommendations Made by the Informal Working Group of Port Jurists During Their Meeting at The UNCTAD Headquarters, Geneva from 18 to 20 November 1991

The group congratulated the UNCTAD secretariat on its initiative in organizing a meeting of experts in order to examine the study project drawn-up by R. Rezenthel of the Port of Dunkirk Authority for the UNCTAD Secretariat and entitled "The Legal Aspects of Port Management". The discussions enable a certain number of recommendations, both general and technical, to be formulated on the subject under study. The group felt, however, that it would be useful to highlight the following points:

- a) The demands of international trade have led commercial ports to extend the range and reinforce the quality of the services that they offer to users and to adopt commercial management. This cannot satisfactorily be achieved without an appropriate

legal framework, both at a national and at a local level. A very complete legal framework exists in countries with written law such as France whose legal system inspired the study project submitted to the group. Other, very different, systems are in force elsewhere in common law countries, such as the United Kingdom. Finally, a third group of countries has opted for an intermediary regime. The group felt that each country must forge its own system according to its needs and its conception of a port authority's functions.

- b) The UNCTAD project document deals with the principal subjects that ought to be taken into account in this field. A certain number of principles and practical advice are given and analyzed, which should prove useful in most countries. The Group felt that once completed, by incorporating the recommendations made during the present meeting, the document should be very useful for legal councilors and management responsible for the operation, administration and development of ports.
- c) The group considers that the port legal subjects dealt with by the study, namely the institutional aspects, the financing of port works and handling gear, port policing, operations, liability and insurance, stevedoring and the administration of port land whether public or private, should periodically be examined at an international level and experiences exchanged. It therefore recommends that these subjects remain inscribed in the UNCTAD Secretariat's work programme and that they be examined during a forthcoming session of the intergovernmental group of port experts.
- d) In the specific domain of port operations and policing, the group recommends the adoption of regulations particular to each port to ensure, on the one hand, the maintenance of good port operations in all security of the water surfaces and land areas and, on the other, to take and apply required coercive measures in cases of infraction. It is better to train staff and adopt administrative measures to prevent rather than have to cure.
- e) It is desirable that governments participating in the drafting of international legal instruments that effect port activities take the necessary measures to ensure that:
 - their representatives are assisted by port jurists whenever possible;
 - the interests of the port authorities and the various members of the port community are protected and their liabilities do not become excessive; and
 - port operations are not slowed down or stopped because of legal conflicts involving the ship, the cargo or port labour.
- f) The group appreciated the concerns expressed by the representatives of the developing countries. It felt that it would be appropriate to strengthen the legal services of many of the developing ports. It invited the UNCTAD Secretariat and other competent national and international organizations to help with the training of such jurists. Inter-regional, regional or national seminars dealing with these subjects were required.
- g) The group feels that the provision of contracts drawn

up for credit grants by financial backers should respect certain minimal norms, so as not to penalize ports except under measures in cases of unpredictable circumstances.

- h) The definition and the role of ports are not always sufficiently clearly defined, whether at a national or international level. In this perspective, and in order to favour action by the ports to develop trade, the group recommends that the adaptation and eventual extension of the Geneva Convention of 9th December 1923 relating to the freedom of access and shipping in maritime ports be envisaged.
- i) Port tariffing is an essential element in any operations, revenue, or development policy and port authorities should control it.
- j) It is desirable that ports have available the legal means to ensure that their smooth running is not disturbed by events such as ship arrests, the presence of wrecks or abandoned ships or that of polluting

products.

- k) With respect to the port domain, this should be clearly defined together with legal or other measures that can be taken to enable and protect future port development, which includes the drafting of sustainable port development plans.
- l) The regime of port liability vis-à-vis third parties or port users should be defined to take into account the specifics of port activities.
- m) In order to facilitate the management of port risks, the group expressed the wish that limitation of liability be instituted in favour of ports.
- n) It is hoped that UNCTAD will take into account the wish expressed by the group that an international association of port jurists be created and that it will do all it can to enable this objective to be achieved, in liaison with the other organizations involved such as the International Association of Ports and Harbors (IAPH).

A Goodwill Message to the 1st Conference of Baltic Ports Organization (BPO), March 26/27 1992, Tallin, Estonia

By Hiroshi Kusaka, Secretary General International Association of Ports and Harbors (IAPH)

It is truly an honor and pleasure for me to be able to address the participants of this epoch-making 1st Conference of the Baltic Ports Organization convened in Tallin, Estonia, from 26 to 27 March, 1992.

On behalf of the entire membership of the International Association of Ports and Harbors (IAPH), I would first like to express my hearty respect and congratulations to the port officials gathered in this beautiful port city of Tallin in reborn Estonia, under the banner of the Baltic Ports Organization. You are here to confirm your determination to establish ties of communication and mutual understanding among the people engaged in ports through the development and improvement of maritime transport links in the region. I am saying this because I firmly believe that ties of dialogue and communication with others comprise an essential element in the construction of dependable and viable systems of maritime transport — including of course, port systems.

Perhaps I may be allowed to note here that IAPH is a non-governmental but truly international forum of ports and harbors, established in 1955 in Los Angeles. Currently, IAPH is represented by some 230 major world ports from as many as 83 different countries from all over the world. The Association aims to promote the welfare of ports and to enhance the dialogue among the people engaged in international maritime transport.

Being an international and global institution, IAPH 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. IAPH works with various other international institutions engaged in maritime transport.

IAPH is working to make ports more viable and reliable links in maritime transport and to raise their profile in the communities where they are located. We

meet every two years. We met in Barcelona, Spain last May for a conference in which some 790 delegates and spouses from 53 different countries participated. It was our 17th Conference. The next IAPH World Ports Conference will be held in Sydney, Australia in April 1993.

As a business grouping of experts in of port operations and engineering from many professional backgrounds, IAPH has been actively involved in contemporary issues. One of them is the question of making ports more responsive to the demands engendered by containerization and intermodalism and the on-going & on-coming trend towards yet greater sophistication in shipping and commodity distribution.

The issues related to the port environment must inevitably concern the ports themselves. As you will no doubt agree the matter of controlling pollution in port will continue to be of enormous importance, and we all share for facing this challenge to ensure a sustainable future for ports. To share the expertise and experiences of our members, IAPH has introduced a series of guidelines for tackling this matter. Another area of concern for IAPH is the question of how to resist the illegal trafficking of drugs through ports. As you no doubt know, a global war has been declared on the threat of drugs to all societies. It was on the agenda of the London Summit, and the Customs Co-operation Council (CCC, Belgium) is in a position to report on the situation to the 1992 Summit in Munich.

Ports are essential links in maritime transport networks, both national and international. They play a vital role as the places where two different modes of transport meet and they have the responsibility to move cargoes as smoothly and safely as possible from sea to land and vice versa. In this respect, 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. But, to a frustratingly disappointing level, we see ports being accused of impeding the free and smooth movement of cargo. We must yield to such criticism to some degree and must also be prepared to act on it as it is a reflection of the general perception that ports play a vital role in peoples' lives.

Indeed, we must realize that the people held responsible for port operations should understand that ports need to function as catalyst or channels for all the parties involved - public organizations, businesses and private individuals. In this context, I am convinced that the

establishment of the Baltic Ports Organization will contribute to the enhancement of swift and stable movement of cargoes for the people in the Baltic region and its hinterlands.

Let me express my congratulations to you once again, and allow me to offer the observation that IAPH will be more than happy to serve you all as a forum for exchanging ideas and information as well as a business partner in the years to come.

(March, 1992)

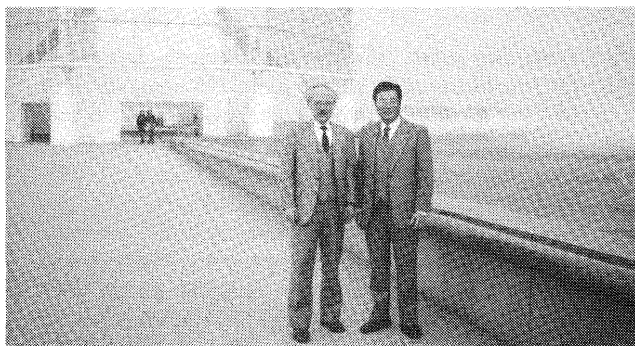
Hiroshi Kusaka
Secretary General, IAPH

Visitors to Head Office

On April 1, **Mr. Francis J. Sheehan**, Deputy Port Director, Sales and Marketing, **Massachusetts Port Authority**, accompanied by **Mr. K. Fujino**, Far East Representative of Massport in Tokyo, visited IAPH Head Office, where they were welcomed by **Mr. R. Kondoh**, Deputy Secretary General and **Ms. Kimiko Takeda**.

On April 18, **Mr. Wong Hung Kim**, a former IAPH President from the Port of Singapore Authority, who is currently the President of Singapore Telecoms, visited the

Tokyo Head Office where he was welcomed by his friends at the Secretariat. In the absence of Secretary General Kusaka, who was away in China as a member of a Japanese Government mission, **Mr. R. Kondoh** and **Ms. Kimiko Takeda**, as well as **Mr. Toru Akiyama**, Secretary General Emeritus, had the pleasure of meeting the visitor from Singapore. **Mr. Wong** spared time out of his busy schedule to visit his IAPH friends and exchanged views and information on the quickly-changing world situation and the issues involving IAPH, and of course on topics concerning mutual IAPH friends made over many years.



Mr. Wong (right) and Mr. Kondoh visit the Kasai Waterfront Park in Tokyo.



Front: Mr. Wong (left) and Mr. Akiyama
Back: Ms. Takeda and Mr. Kondoh

Report on 66th Session of Legal Committee, IMO 16/20 March, 1992, at London

Report by **André Pagès**

The IMO Legal Committee held its 66th Session at the organization's headquarters from 16th to 20th March 1992.

The session was chaired by Prof. R. Cleton (the Netherlands), seconded by Prof. Trotz (Germany) as the Vice-President.

It was followed by:

- 48 national delegations, plus Hong Kong as an associate member;
- 1 delegation from an intergovernmental organization, FIPOL (International Fund for Oil Pollution); and by
- the observers of 20 non-governmental organizations, including André Pagès for the International Association of Ports and Harbors.

The agenda was extensive.

1. DRAFT HNS CONVENTION

(DRAFT CONVENTION ON THE LIABILITY AND COMPENSATION IN RESPECT OF DAMAGE CAUSED BY THE TRANSPORT OF POTENTIALLY HAZARDOUS AND NOXIOUS SUBSTANCES BY SEA)

Continuation of work

The report of the IAPH observers on the previous sessions gives some indication of the far-off origins of the draft convention and of the difficulty in getting it off the ground.

The debate once again covered points that had been previously raised and left numerous options for ultimate decision (sessions in 1992 and 1993), but with the aim of completing the draft text for examination by a diplomatic conference in early 1994.

1.1 Substances classified as Potential NHS

Following the proposal from the technical working group created during a previous session, HN substances covered by the convention will be those that have already been classified as such by existing regulations and conventions:

- MARPOL Annexes 1 & 2, the IMDG Code, liquefied gases, substances with flash points of less than 60°C, those that require special construction regulations for ships that carry them, etc.

The list is completed for each substances by an indication of the degree of danger involved.

Thought was given to the way in which this list of NHS can be frequently and rapidly revised to take into account changes in the reference lists caused by lessons learned from experience: Is there a need for protocols? What about revision procedures? Should protocols be formulated through tacit agreement — or by proposals from a working group?

A number of related but varied questions were raised. For examples:

- Up to what limit level should measures to safeguard the environment be covered, if the risk is unknown?
- Should nuclear substances be included in the list of NHS for those States who are not a party to the Paris and Vienna Conventions?
- Will the convention cover authorized dumping at sea?
- Or will it only apply to accident that occur during transportation to the dumping zone?
- One delegation whose country is a major exporter of liquefied gas (LNG) and the SIGTTO (Society of International Gas Tankers and Terminal Operators) found the classification applying to LNG too severe,
- Further debate occurred on whether it was opportune to introduce bunker fuels (for vessels other than oil tankers) into the scope of the convention or to opt for one of the various other solutions proposed: incorporation in the 1969/71 Oil Conventions; creation of a new specific convention, score for of settling the question through the national legislation of each country, etc.

1.2 Shipowners' Liability

By transporting NHS, shipowners come within the scope of the draft convention with its special liabilities and insurance obligations.

Confirmation was given that the draft convention concerns shipowners and not their eventual operators (charterers), so that there is no ambiguity relating to the identity of the liable person.

But numerous other points remain to be settled:

- Does the transportation of even the smallest package of an NHS imply that the shipowners comes under the scope of the draft NHS convention; or will there be a threshold of risk; specific to each product; determined by quantity and the degree of risk involved?
- Is a second limit to be imposed, above which in-

surance will be obligatory?

- Will the NHS convention establish a scope of liability and burden of compensation, to complement those already established by the general Conventions on Limitations of Liability?

This would facilitate the most advantageous possible introduction into the capacities of the insurance market. But the opposition of the different States is very varied with respect to the 1924, 1957 or 1976 Limitations of Liability Conventions.

- Should the NHS convention be independent from the general conventions by limiting its scope rigorously?
- Should it include a scale of limitations of liability that is different from the Conventions mentioned above (for example, 15 million SDR) to cover the dangers imputable to certain cargoes carried in small ships?

1.3 Shippers' Contributions

In either case, how is compensation imputable to the shipowner, in case of need, to be complemented by a fund composed of shippers contributions (along the lines of the 1971 Fund Convention that relates to the 1969 Convention on oil pollution damage)?

In any case:

- The number of people involved in the major oil groups, who often include cargo owners and their transporters, is not large. In addition, crude oil, refined oil and bunker fuel pollution risks are also fairly similar. Thus the major oil groups are directly in contact with FIPOL.
- However, the HNS Convention involves a multitude of substances of different kind, tonnages and degrees of hazardousness and with varied transport modes (packages, dry bulk, liquid bulk, liquefied gases, etc.).

The draft text provides that the fund is to be composed of contributions established according to:

- the risk factor retained for each substance (and, here again, frequent revision could be required);
- the quantitative factor of the tonnage of cargo lots; and
- the classification factor into different major groups (packages, dry or liquid bulks, liquefied gas, etc.).

Contributions are to be expressed in "HNS points", which are to be obtained by the shipper from agents, who are correspondents of the fund.

But, this raises a certain number of questions:

- Who is going to authorize such agents? The fund authority? The exporting State?
- Will their distribution in the commercial market and in ports make them easily accessible?
- Will their task be limited simply to selling HNS points? Or will they be authorized to ensure that these correspond to the cargo lots involved?
- What commission are they to be paid for carrying out this service?
- Will major shippers be able to contact the fund authority directly?

In another context, will the smooth running of the system be facilitated:

- by exonerating all parcel lots?
- by exonerating small parcel lots (up to a given limit)?
- by taxing only bulk cargo loads?
- by assimilating liquid chemical substances carried

in mobile tanks (in containers, on trailers or on wagons)?

1.4 Observations

The procedure of debates at the present session of IMO's Legal Committee, as in the past, denotes a reticence to engage in the revision of the 1969 London Convention on Maritime Claims.

It is true that numerous shipowners are in difficulty, caused by stiff competition. Moreover, the intervention of funds supplied by shippers' contributions would enable compensation to be paid by the shipper as well.

But the limitations of liability established by the 1976 Convention have been considerably influenced by monetary erosion. The maximum purchasing power of the compensation has often fallen to as little as 40% or 50% of the 1976 value. This has proved to be the case for numerous victims — in particular port authorities — for damage to their personnel and their works.

The problem of bunker fuels is surely common to all ships (including yachts with auxiliary engines) and surely the quantity in each ship corresponds to its tonnage? Would covering these pollution risks not be justifiable under the 1976 Convention, rather than creating a new solution?

The future HNS convention could perhaps be greatly alleviated, both with respect to its drafting and its application, by maintaining the transportation of all parcel lots (except mobile tankers) within the scope of the 1976 Convention, thereby reducing the expensive need for NHS agents.

Faced with a new HNS convention, which might be relied on to have reasonably appropriate compensation capacities with two contribution levels (shipowner and shipper), the maintenance of the limitation of liability levels as they are in the 1976 Convention will highlight major disparities in compensation for comparable damage. A case was raised during the session of a car-ferry carrying both passengers, HNS cargo lots and innocent cargo-lots:

- In the case of damage imputable to the transport of HNS, victims would be compensated under the NHS Convention, with priority (2/3 of the limitation of liability) going to the passengers.
- In the case of damage imputable to the ship, compensation would be based on the 1974 Athens Convention and its 1976 and 1990 Protocols on amounts per passenger head, until the ceiling provided in Article 7 of the 1976 Convention for the global liability of the ship came into play.

2. OTHER SUBJECTS

2.1 Maritime Liens and Mortgages

The revision of the conventions currently in force (but with an inadequate number of parties to them) on Maritime Liens and Mortgages has given rise over the past few years to a number of meetings of a joint group of government experts from IMO and UNCTAD.

Their conclusions are to be submitted to a Diplomatic Conference to be held over a three week period from 19th April to 7th May, 1993 in Geneva at the Palais Nations.

2.2 Protocols to the 1969/1971 Oil Convention

The 1984 Protocols to the 1969 Convention on Civil Liability for Oil Pollution Damage and the 1971 Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage have received very few

ratifications. Moreover, it would seem that the intervention of the USA's Oil Pollution Act in 1990 can only crystalize this situation.

However, the major disasters that have occurred over the years have highlighted the inadequacies of the compensation levels provided by the 1969/71 Conventions.

The question was examined once again by a working group constituted from within fund authorities (FIPOL), then by its assembly which involves a large number of member-State representatives. It was considered that the subject could be raised again with some chance of success:

- by reducing the requirements for the number of ratifications and the tonnage they represent that condition the entry into force of the protocols; and
- by maintaining all the provisions of the 1984 Protocols.

The favourable reaction of numerous members of the IMO Legal Committee confirmed this hope. A Diplomatic Conference is to be convened to decide on this matter during the week of 23rd to 27th November 1992.

There will remain, for the purposes of formality, the need to cancel the approbations which the 1984 Protocols have received, at the Diplomatic Conference and the ratification that certain States have made.

There will equally remain the necessity of responding to the delegation of one State which is a major crude oil importer and short sea carrier of crude oil and refined products, by limiting the global levy on its oil industry.

2.3 The Basel Convention on Transboundary Movements

This Convention, which deals with the control of the transboundary movements of dangerous substances and wastes, will enter into force on 5th May 1992.

2.4 Application of the 1969 CLC or (Oil) Convention in cases of bare bottom charters

The CMI (International Maritime Committee) raised the problem of bare-bottom charters, with the dual possibility of inscription on two different registers (that of the owner's State and that of the charterer's) and the respective rights and obligations of the owner and the charterer, within the context of the 1969 Convention on civil liability for oil pollution damage, among other international conventions.

The Committee noted that the question which had not until then caused any difficulty in practice, but merited being more carefully examined.

2.5 Technical Cooperation

IMO wishes to assist developing countries with technical assistance to overcome problems that come within its scope of competence.

As far as the Legal Committee is concerned and on the proposal from a constituted ad hoc working group:

- Assistance for linguistic difficulties would involve translating the texts of IMO conventions and protocols.
- This could include the training of personnel in maritime law.
- The initiative, as far as expressing needs and wishes are concerned, should come from the country that would benefit from such assistance.

Also envisaged is the bringing on streams on a regional level of course to extend the field of those benefitting from such assistance, while reducing the costs.

OPEN FORUM

International Seminar on Regional Maritime Co-operation and Development

**at the Regional Maritime Academy
24th – 28th February 1992**

Sub-Regional Cooperation Between Ports

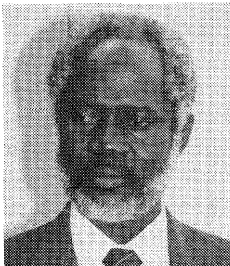
By R.U. Kumedzro

**Chief of Personnel and Administration
Ghana Ports and Harbours Authority**

Introduction

For ports in developing countries, co-operation presents various dimensions of opportunity for the acquisition of knowledge, information and development. This is very true, taking cognisance of the fact that the maritime industry of which ports constitute the nerve centre is a dynamic one.

Technological advancements in ship design and size, changes in shipping organizational and operational structures, and competition have continuously posed greater challenges for ports. Most ports — especially those in the developed countries and those in some developing countries — have undergone



Mr. Kumedzro

a series of transformations which has made it possible for them to manage these changes; and they have therefore acquired, over the years, much experience, knowledge and understanding.

Some of these experiences have been bitter lessons which other ports can avoid by learning from them. The need for cooperation between ports cannot, therefore, be overemphasised.

Co-operation is defined as working or acting together for a common purpose; or taking part in a joint venture. It has been a key concept in the relations between nations and peoples with the objective of ensuring a better future for all through concerted and harmonious action.

The scope of application of co-operation is unlimited and involves almost all aspects of human activity such as politics, art, economics, technology, science, culture, trade and sports. Maritime activities in general, and activities of ports in particular with all their attendant multiplier effects on economic and social aspects of human endeavour, cannot be excluded from consideration when one is talking about co-operation.

Need for International Port Co-operation

The traditional role of ports in promoting international trade and the fact that over 90% of the world's international trade is carried by sea makes it incumbent on the world's seaports to be efficient through sharing of experiences and knowledge. For each port, the cost per tonne of handling cargo must be as low as possible in order to enhance the socio-economic well-being of the people of the area it serves.

The ports sector is, therefore, an attractive field and an excellent domain for co-operation. There is a high degree of inter-dependence and a necessary complementarity of ports, as the activities and maybe the very existence of a port at one end of a trade route depend largely on the activities and existence of another at the other end.

Since ports receive vessels that are essentially international, it is almost impossible for a port to exist in isolation. Developments and changes in ship design and size and cargo packaging must necessarily be matched by corresponding changes in the geography of ports; hence for an individual port, it is difficult to take any decision without taking into consideration the entire world maritime environment.

A number of international port associations exist in different sizes in terms of membership and range of activities but all with the same basic objective, i.e. to foster co-operation. They are nurtured by the parent port association, the International Association of Ports and Harbors (IAPH).

For developing countries, and African countries in particular, the need for co-operation is even greater. Historically, almost all African countries especially those in West and Central Africa have been under colonial domination. Their economies were structured in such a way that whilst they produced and exported bulky raw materials and unprocessed goods, they constituted consumer markets for manufactured products from their colonial masters.

Before independence the pattern of our international trade had already been established, and decades after independence this pattern still exists. The bulky nature of our exports coupled with the distances between us and our colonial masters made it imperative for goods to be transported by sea through the ports.

Trade among African countries was not encouraged, and presently it is almost non-existent. Invariably the transportation network within and between these countries reflects this pattern of international trade, i.e. railway and roads were built to link the raw material-producing hinterlands and the import-consuming centres to the ports. The port, therefore, occupies a central position in the total transport system of the economies of the individual countries.

The need to share experiences is also an important reason for co-operation between ports in the world and in our sub-region at large. The scale of investment needed in providing modern port facilities and services to cater for the ever changing designs and dimensions of vessels and the cargo they transport makes it important for ports to exchange information on investment decisions. Ports in the developed

countries have gone through a wide range of experiences in investing millions of dollars in their bid to attract the so-called round-the-world services to their ports only to be either by-passed or their facilities utilized for only short periods, which resulted in their failure to achieve the minimum level of utilization required of these expensive facilities.

The fierce competition that raged between those ports and the race to become HUB or PIVOT ports left some heavily indebted. Since you are all practitioners in the maritime industry, the case of the United States Lines (USL), which practitioners eventually went bankrupt — and those of some of the container terminal operators in Europe and the Far East must be well known to you.

There are also instances where hundreds of millions of dollars have been invested in creating pivot or hub ports in the Middle East and the Gulf area only to remain largely under-utilised. These are all classic examples of what can happen to our ports if we fail to co-operate and learn from other people's experiences. For our countries in which the marginal social cost of investible funds is very high, experiences shared with the developed countries could be invaluable.

It should be mentioned here that after independence, a number of attempts were made by African countries in the field of co-operation to promote trade amongst themselves, through bodies such as the East African Community and ECOWAS. Although some of these attempts have not been largely successful, they have helped in bringing about an awareness of the benefits that can accrue through co-operation and enhanced international trade.

Some of the ports in the sub-region have immense experiences which they can share with others. A vivid example is the experience gained by the Port of Lome in the creation of a free port.

Possible Areas of Co-operation

There are a number of areas in which ports in the West African sub-region can co-operate effectively to bring about the needed transformation in their transport systems as individual states and as a sub-region.

Harmonisation of Port Management Information Systems

In modern organisations, information is now as vital as financial resources. Reliable, relevant and timely information allows managements to take informed decisions, and in most areas where investment decisions have to be made information is gradually replacing inventory.

For ports, managers continuously need reliable and timely information particularly on port performance indicators and the costs involved in providing facilities and services to users.

A uniform system of port information in the sub-region would allow planners of individual ports to evaluate the performance of their ports relative to other ports. It is gratifying to note that, with the assistance of UNCTAD, two African regional port management associations including the Port Management Association of West and Central Africa (PMAWCA) have developed a uniform system of port statistics and performance indicators which is being widely used.

In Ghana, this system is working very well and it is being used even for billing purposes. Personnel involved in the adaptation and implementation of the system in the ports of Ghana have developed tremendous expertise in this

area which can be drawn upon by other ports in the sub-region and Africa as a whole.

Joint Dredging and Marine Salvage Operations

For most ports in the sub-region, the rate of siltation of the approach channels and the berths alongside is so slow that the employment of a full complement of dredging equipment and staff does not only constitute an under-utilisation of resources but also an uneconomic use of investible funds. In such cases, studies have revealed that it is more justifiable and economical to contract capital and maintenance dredging rather than investing in the purchase of dredging equipment and expertise.

Although differences in management structure and lack of common procedures for awarding contracts may detract from the feasibility of a joint venture, co-operation between a smaller number of ports may be very useful. For example, the total annual requirement for maintenance dredging for three ports might total eleven (11) months (i.e. 6 months, 3 months and 2 months). These three port authorities could agree to an arrangement whereby one port would purchase the dredger and then lease it to the other two ports for three months and two months respectively. The increased utilization of the dredger would lead to lower unit costs and the benefits of this could be shared among the ports concerned.

Similar arrangements could apply to the use of salvage tugs and other specialized vessels/crafts such as floating cranes and hydrographic survey vessels. Not all ports need to own a vessel/craft of every type. Arrangements for pooling the use of such vessels could be an alternative to the traditional contracting of this type of work to foreign companies.

Exchange of Expertise

A group of countries may be able to exchange or loan technically competent staff among the ports of the sub-region. This would be particularly beneficial to small port authorities which have a limited number of staff and expertise. Expertise could cover specialised fields such as port planning, port operations, management information systems, maritime law, equipment selection and maintenance management and administration.

To establish such an exchange would require the following steps:

- the establishment of a register of experts;
- agreement on payment of travel costs and local expenses; and
- agreement on terms of reference and a work plan.

Training

Considerable scope for co-operation exists between ports in the development and conduct of training. Ports need to undertake training to ensure continuity and improvement in performance, and — most importantly — technological changes.

In the training field, various approaches to regional co-operation may be adopted separately or together, such as:

- on-the-job training which may be either ad hoc or institutionalized with particular institutions or instructors developed for specialized purposes; and
- formal training courses, seminars and workshops which

may be run for the benefit of the region's ports, either at a single centre or at different institutions in a co-ordinated programme.

It must be emphasised that while not reducing the advantages derived from staff visiting other ports for the purpose of exchanging ideas and learning in the process, locally developed and conducted training has the advantages of minimal transport and accommodation costs for trainees; furthermore, training is adapted totally to local needs.

Other areas of co-operation could be the development of a common equipment maintenance management policy and the establishment of a regional spare parts exchange pool. These would make possible information exchange on operating, maintenance and financial data on port equipment.

Since port authorities are becoming more aware of their responsibility in protecting the marine environment, regional co-operation in pollution control would also assist port authorities in carrying out this role.

Regional co-operation in combating pollution emergencies caused by accidental spills, for example, could take the form of sharing resources such as dispersants and the use of vessels specially designed for collecting oil spills.

Sister-Port Relationship

Ports within the sub-region could be encouraged to develop sister-port relationships in a scheme co-ordinated from a central point. Such a scheme would allow for the exchange of information and personnel or any forms of co-operation that would enable the ports to derive mutual benefit from their co-operation.

Indeed, some of the ports have taken the lead. For example, Abidjan and Douala have instituted such a relationship. Also, during the recent 6th African Port Symposium, the National Port Authority of Liberia in Monrovia approached the GPHA for assistance. A letter from Monrovia confirming this request and asking for a sister-port relationship is being acted upon.

All the above areas of possible co-operation and many more could be successful when there is a common, and often economic benefit for the various port organisations and the countries concerned.

Above all, co-operation is only possible if there is support at a high political level. In a situation such as obtains in most parts of the developing world when management autonomy is severely restricted, it is impossible to enter into any joint arrangements or exchange staff without approval from higher authorities outside the port managements.

In addition, organizational and administrative skills, good communication and appropriate resources are required for co-operation to succeed at a regional level.

Main Impediments to Co-operation Among Ports

The lack of financial resources is probably one of the main factors impeding the development of co-operation with other ports, such as in the area of visits so that together they could determine harmonized or joint programmes of action.

A close analysis of this problem, however, reveals that it is a state of mind. The real problem rather appears to be that the genuine benefits to be derived from such co-operation are not adequately identified to encourage port managers to earmark part of their scarce resources for such ventures.

A more likely reason for the inability to use funds for co-operation is that national rules often require approval from external sources who may not be in a position to appreciate the need for such expenditure, hence the inability of port authorities to participate in co-operative ventures and to exchange visits and share ideas.

Competition among ports appears to be another factor. However, upon closer analysis competition appears to be more a catalyst for co-operation than a hindrance.

The lack of political will to co-operate is also often mentioned as a factor. However, the success of PMAWCA in its activities and the obvious encouragement the member ports receive from their governments are indications of the willingness of governments to encourage co-operation.

The lack of structures for co-operation is undeniably a serious factor. Thus, co-operation among ports has become more developed since PMAWCA became very well structured in the 1980s. As it is, co-operation in West Africa is better than in other parts of Africa, where the regional associations have not found their feet so well.

The problem of language is probably the most easily recognised factor. The language difficulties which visiting port officials face are well-known. A solution to this problem will be discussed under Strategies for Co-operation.

The lack of communication links between the various countries in the region and the different administrative and operational structures, giving rise to differences in the functions and role of port authorities, are some of the factors that do not contribute towards the facilitation of closer links and co-operation among ports.

The Port Management Association of West and Central Africa (PMAWCA)

It will be appropriate at this juncture to discuss the PMAWCA and some of its successes in the realm of sub-regional co-operation among ports.

From a number of viewpoints, countries in West and Central Africa are similar to a large extent, i.e. economically, administratively, socially and even politically. It is, therefore, natural that they face similar problems which invariably and together serve as an impetus for co-operation in the search for common solutions.

Consultations by these nations in 1972 in Freetown resulted in the formation of PMAWCA, which later became a specialized organ of the Ministerial Conference of West and Central African States on Maritime Transport (MIN-COMAR) after its establishment in May, 1975.

After two decades of the existence of the Association, there are numerous landmarks to show that co-operation among ports can produce positive results that transcend port and national boundaries. Successes have been achieved in a number of areas in port operations and management. These include the following:

In port operations, a model prepared for harmonizing port statistics eventually led to the implementation of the UNCTAD Uniform System of Port Statistics in a number of ports in the sub-region, the harmonisation of the beaconing system and studies undertaken on maritime transport and cargo utilization.

In port management, attempts have been made and research conducted towards the harmonisation of port tariff structures and accounting; and recently far-reaching efforts have been directed towards the computerization of port operations.

In the area of training, a number of seminars, symposia

and workshops on various subjects such as pollution, safety, port operations and management have been organized. The opening of the Regional Maritime Academy in Accra, the Maritime College in Abidjan and the setting up of training centres like the one in Cotonou, Benin are all evidence of co-operation aimed at encouraging the development of the sub-region's maritime industry.

PMAWCA, through its tireless efforts, has been able to foster co-operation with other associations outside the sub-region. At the continental level, contacts have been made with the Administrative Union of Ports of North Africa (UAPNA) and the Port Management Association of Eastern and Southern Africa (PMAESA).

At the international level, the active participation of a growing number of PMAWCA members in IAPH activities reflects the relentless efforts of PMAWCA in helping to foster international co-operation.

A number of events such as firstly, the meeting of IAPH's Executive Committee in a West African country for the first time, i.e. in Abidjan in 1988, secondly the appointment in 1989 of the then President of PMAWCA as Vice-President of one of IAPH's technical committees at the 16th IAPH Conference in Miami, Florida, and thirdly the election by consensus of Mr. J.M. Moulod, Director-General of the Port Authority of Abidjan as President of UNCTAD's second ad hoc Intergovernmental Group of Port Experts Conference in Geneva in September 1990 are all signs of recognition of PMAWCA and its members' efforts and commitment to the international community at large.

Much prominence has been given to the institution of the African Port Symposium, which has become a biennial meeting for all actors in the maritime transport industry with focus on the port sub-sector worldwide.

Last year's Symposium, which took place at the Accra International Conference Centre from 14th to 18th October, 1991 under the distinguished patronage of the Head of State of Ghana, His Excellency Lt. J.J. Rawlings — and of whose Planning Committee I had the singularly distinguished honour of being the Chairman — was a tremendous success. It drew a record level of participation: 298 participants from thirty-one countries and fifteen international organisations, including august international bodies such as the IMO, ILO, UNCTAD, the World Bank, EEC, ECOWAS and ECA.

Whilst consolidating the above achievements, we, as practitioners in the maritime field and citizens of Africa, should not rest on our oars but continue to be innovative and creative in order to meet the challenges of the unpredictable economic environment we operate in.

I suggest that we take a reminder from the warning given to his fellow Roman citizens by the moralist philosopher SENECA in the days of Roman hegemony (under the reign of Emperor CALIGULA):

"OUR GREATEST OBSTACLE IS
THAT WE ARE EASILY SATISFIED
WITH OUR ACHIEVEMENTS."

In a dynamic environment one has to put in ever greater efforts even to remain at the same level. This is the real challenge of our times.

Strategies for Co-operation

I now wish to suggest a few strategies for adoption to enhance or foster co-operation. Firstly, for our sub-regional co-operation to be effective, there must be respect for each

other's integrity. Such respect calls for discipline amongst us.

Discipline itself entails a commitment to our common objectives which are clearly set out in our rules, regulations, constitution and in our resolutions passed during meetings. Thus we must all show commitment to the ideas we favour in our quest for co-operation.

Additionally, an important strategy will be to endeavour to strengthen our power of negotiation by forming a united front against all external demands. In this respect, we must strengthen our links with the other regional associations in Africa e.g. l'UAPNA and PMAESA so as to combine our efforts towards the establishment of a Port Management Association of Africa as well as the formation of an African Region within the International Association of Ports and Harbors (IAPH) and the International Cargo Handling Co-ordination Association (ICHCA). This way, we will strengthen our bargaining power and improve upon our chances of being heard within the world maritime community and the renowned port, shipping and intermodal transport assemblies.

It is only through commitment to our goals and options that we can best protect and safeguard our interests.

PMAWCA could also contribute further towards co-operation by sponsoring and partly financing a personnel exchange programme among member ports. Such part financing would take the form of the payment of travel costs while the host ports would take care of local costs: accommodation, food and local travel.

Finally, there is an urgent need to remove the genuine problems of linguistic barriers dividing our peoples. In this respect, the people from English-speaking countries must learn to acquire a basic working knowledge of French, while our Francophone brothers and sisters must make greater efforts to learn English. It must be noted that 11 (i.e. 65%) of the 17 member countries of PMAWCA are French-speaking.

Furthermore, the four land-locked countries of the sub-region — namely Burkina Faso, Mali, Niger and Chad — who have close links with their brothers to the south and maintain close ties with PMAWCA are all French-speaking. Thus it is only fair to conclude that the part of the Atlantic Ocean which washes the shores of West and Central Africa is also probably Francophone. Hence the need for our Anglophone brothers to "fall in line" and learn to speak French.

Maybe I should quickly add that, on the other hand, taking population as a yardstick, the ratio may well be 50:50 (thank to "big brother" Nigeria). This means our Francophone brothers should equally "fall in line" and join the other half by learning English as well.

Conclusion

A casual look at the political map of the world will reveal the chessboard that is known as Africa. The divisions that are reflected on the map go much deeper: into the political and social up-bringing, the economic structures, the cultures and indeed the very lives of the people, including the way their ports function.

The dictates of the present world political and economic order necessitate a real effort on the part of the people to come together in a concerted effort to rebuild their economies. As part of this effort, there is the need to foster co-operation among the various sectors.

The ports of the West and Central African sub-region

have made considerable impact in this regard.

The discussion I have attempted to provoke during this lecture is, in my view, just the tip of the ice-berg. The points are mere ideas which should serve as a basis for relevant reflection, taken against the background of the problems of the region, the countries and individual ports.

There are financial, material, human resource and, above all, political problems to overcome. However, given the importance of the mission, every sacrifice must be made.

And it is in this contact that I challenge you to reflect on the following saying of the Chinese thinker and sage, SUN TZU;

**"ONE WHO HAS DETERMINED
SOLDIERS ON HIS SIDE IS
SURE OF VICTORY."**

But let me also add as quickly, borrowing the words of a fellow Maritime Practitioner, Mr. Jacob Stolt-Nielsen Jr., Chairman and CEO of Stolt Tankers and Terminals, that maybe we have

"GOOD SOLDIERS, BUT WEAK GENERALS."

The Generals, the Managers of the Industry, must gather more courage and lead their ports from the front into efficiently playing a more effective role in the economic development of their countries and into fostering closer co-operation among themselves.

The now thorny issue facing most ports, namely whether to privatise port activities or commercialise them and the type of management strategies that will be adaptive to the volatile market environment in which ports operate, are important areas where co-operation can yield positive dividends. Most port authorities are currently being confronted with this issue. It is through the sharing of hindsight, insight, ideas and experiences that lasting and plausible approaches can be found to this and other issues.

It is imperative on us, as maritime states, in our efforts at co-operation not to lose sight of the needs and demands from our landlocked neighbours. It is, therefore, necessary that we adopt measures that will facilitate the channeling of traffic of the landlocked countries through our ports.

It is gratifying to mention that a number of members have put policies in place to that effect through measures such as granting preferential tariffs, the provision of infrastructure and the creation of special zones in the ports for use by these countries, etc. These efforts be congratulated and encouraged. All these combine to rejuvenate the old adage that "together we stand, divided we fall."

Finally, I must reiterate that greater success at co-operation in the sub-region can only be achieved if there is conscious support and commitment at high political levels.

Acknowledgement

I wish to extend sincere gratitude to the Regional Maritime Academy and UNCTAD personified by the Principal and Capt. Bob Jones respectively for organizing this important seminar and for inviting me to deliver this lecture.

Above all, I thank you for listening.

Thank you.

Tema

25th February, 1992

Piracy in the Far East Region

**By M. Rajasingam
General Manager
Klang Port Authority**



Mr. M. Rajasingam

(With thanks for his contribution, this office notes that the report was contributed by Mr. M. Rajasingam, who observed the meeting on behalf of this Association — IAPH Head Office)

Introduction

The International Maritime Bureau (IMB) of the International Chamber of Commerce (ICC) conducted a one-day meeting on 27 February 1992 at Kuala Lumpur on the subject of "Piracy in the Far East Region". The objective of the meeting was to discuss the various issues pertaining to piracy as well as to examine and make recommendations to combat the menace.

The meeting was attended by 56 delegates comprising people from the maritime/shipping industries as well as law enforcement representatives not only from affected countries in the Far East but also from Europe and Australia. Also attending as observers were key officers from various Embassies in the Region. The Chairman of the meeting was Mr. Eric Ellen, who is the Director of the International Maritime Bureau.

Background

The shipping/maritime industry in the Far East Region has over the last few years been gravely affected by incidences of piracy. The frequency of piratical attacks is cause for alarm as, not only is it a matter of the cargo loss to be borne by the shipping community, but there is also the question of crew safety as well as navigational and environmental safety to be considered. In 1991 alone, it was revealed that there were no less than two hundred (200) piratical attacks, and such a figure must surely be cause for alarm and concern to those in the industry. The IMB and Royal Malaysian Police had recognised the inherent dangers and problems posed by these attacks and had agreed to jointly sponsor the meeting to review the problems of piracy in the region and, hopefully, to find the solutions for them.

Report of Proceedings

The meeting was attended by officers of the International Maritime Bureau, representatives from the shipping industry and law enforcement agencies of Malaysia, Singapore and

Indonesia, as well as law enforcement officers from Australia. As a prelude to the proceedings, the Chairman, Mr. Eric Ellen, invited representatives from the IMB itself to relate an incident involving the seizure of M.V. "MARTA", which is an example of the long-term seizure of a vessel in order to steal cargo. The incident, as related to the delegates, generated a lot of interest and many clarifications were sought by law enforcement officers from Thailand, Malaysia, Singapore and Indonesia.

Delegates from the shipping industry generally agreed that, following an attack, answers to two common problems need to be found:

- a. To whom to report an attack?
- b. When to report an attack (in view of tight shipping schedules)?

With regard to the above, the representative from the Royal Malaysian Police (Marine Section) gave details of reporting procedures in the event of an attack within its territorial waters. The serious problem always encountered by the enforcement agencies in responding to calls for help from a ship under attack, or even in deploying patrol boats to provide preventive measures, is the question of jurisdiction and the legality of entering the waters of a neighbouring state. Mention was made of the Convention on the High Seas — Geneva, April 1958, which, in Article 23.2, states "The right of hot pursuit ceases as soon as the ship pursued enters the territorial seas of its own country or of a third state".

Some preventive measures were put forth to curb piracy, such as:

- a. the possibility of putting armed guards on vessels; and
- b. the possibility of using vessel personnel for an "anti-piracy look-out system".

The shipping industry's comments on such initiatives were that: (a) taking into consideration that 40,000 to 50,000 vessels use the area per year, it could be quite impractical to take on and disembark guards; the resources needed and the cost involved could be prohibitive; and (b) few vessels have the manpower to operate such a system.

The representative of the Royal Malaysian Police also gave details of reporting procedures for cases occurring within the jurisdiction of Malaysia and Singapore.

The Marine Police Section of the law enforcement group made the following points:

- a. The law enforcement agencies must be informed if they are to be expected to respond.
- b. There is no need to divert the vessel, but the information is vital. It might be possible to send police to a victimized vessel for evidence to be secured and statements to be taken without asking the vessel to deviate from its course.
- c. The law enforcement agencies have a liaison meeting every month.

The remaining part of the law enforcement meeting made the following points:

- a. It is accepted that the law enforcement view may not match the industry viewpoint.

- b. The group members were just speaking in their capacity as policemen and their observations carried no force or authority from the Government.
- c. Reporting of incident is of paramount importance: timely reporting for response followed by intelligence reporting. Shipowners are to be encouraged to report incidents even at a later time.
- d. The education of the crew is important. They must be encouraged to be alert and instructed on the precautions to be taken.
- e. Consideration should be given to technology: the bridge and the Captain's cabin have to be made more secure. Consideration should be given to video cameras and alarms, although the cost implications of this are appreciated.
- f. There should be a standard report form.
- g. With time, efforts being put in by Singapore, Malaysia and Indonesia will bear fruit.

For the industry group, the following points were made:

- a. Weaknesses in the reporting system are acknowledged.
- b. The proposal of the IMB is worthy of consideration — a single focal point is considered a good idea. The cost, spread over the industry, should present no difficulty.
- c. Government and authorities need to be advised of the problems of large vessels navigating in restricted waters. The determination to deal with piracy was emphasised.

RESOLUTION

After extensive discussion, the following Resolution were adopted by the Meeting.

WHEREAS the delegates at the Regional Meeting of Piracy Involving Industry and Law Enforcement held at Kuala Lumpur on 27th February, 1992;

(i) Consider the incidence of piracy on the high seas and armed robbery in territorial waters, together with the possible loss of life and safety of navigation to be unacceptable and are aware of the potential environmental disaster due to vessels not being under competent and continuous control,

(ii) Acknowledge the factors which make the prompt provision of evidence difficult,

(iii) Applaud the awareness shown and the many initiatives already taken by law enforcement agencies in the Region to contain and combat the incidence of piracy and armed robbery on ships;

BE IT HEREBY RESOLVED THAT:

(i) Governments of countries in the Region and elsewhere should be aware of the provisions of the IMO Convention on the Security of Ships which comes into force on 1st March, 1992,ⁿ

(ii) The ship-owning community should be urged to be thorough and consistent in reporting incidents of piracy and robbery,^c

(iii) The IMB (International Maritime Bureau) consider that the creation of a Regional Piracy Centre for industry would, without prejudice to the existing reporting systems of Law Enforcement Agencies, assist in the identification and reporting of incidents and the collation of information.

International Maritime Information

WORLD PORT NEWS

The Concept of Port State Control

(Reproduced from "IMO NEWS")

This paper was written by Captain Zenon N. Sdougos, winner of the International Maritime Prize for 1990

The concept of port State control is enshrined in chapter I, part B, regulation 19, of the SOLAS Convention, as amended. Regulation 19 establishes the following principles:

- every ship is subject to control when in a port of another Party to the SOLAS Convention;
- the control is directed towards verifying the validity of the ship's certificates, which, if valid, shall be accepted;
- if there are clear grounds for believing that the condition of the ship or of its equipment does not correspond substantially with the contents of the certificates or with the provisions of the Convention the ship shall not sail until the defects are corrected.

The right of Contracting Parties to control ships visiting their ports was included in previous versions of the SOLAS Convention and in the International Convention on Load Lines, 1966. In the process of establishing this important concept the 1960 International Conference on Safety of Life at Sea introduced, in one of its Recommendations (Rec. 2: "Special Application of Convention Standards"), the principle that Contracting Governments "should take steps to ensure" that when ports in their countries are visited by ships belonging to countries which are not Parties to the Convention such ships "should be required to conform to standards not lower than those prescribed by the present Convention". This became known as the "no more favourable treatment" principle and has been explicitly or implicitly, included in subsequent legislation.

The Assembly of the Organization

adopted, from 1975 onwards, a number of resolutions [A.321(IX), A.390(X), A.466(12) and A.542(13)] setting out detailed procedures for the control of ships and the enforcement of the requirements of the appropriate conventions, including the provisions of MARPOL 73/78. The above resolutions established a system of information exchange between all concerned in case of deficient ships and the correction of deficiencies, and the submission of reports to the Organization, for consideration by the MSC.

Port State control was initially organized on the basis of a regional administrative agreement between the countries bordering the North Sea. This first step was promising enough to encourage the establishment of a broader arrangement. The Regional European Conference on Maritime Safety, convened in Paris at the invitation of the French Government in December 1980, resulted in the negotiation, under the auspices of the Netherlands Government, of the Memorandum of Understanding (MOU) which set the principles, the procedures and the framework for the implementation of port State control between the 14 Members of the MOU. The Memorandum was approved by the Ministerial Conference (Paris, 26 January 1982) and took effect from 1 July 1982. The committee responsible for the functioning of the MOU had its first meeting on 7-8 October 1982.

The MOU between the 14 European countries may be the only such arrangement which includes many Member States and covers a broad geographical area. However, individual countries in other areas are also exercising their right of port State control in a systematic way. It may be said that a regional arrangement like the MOU is particularly effective because it constitutes a wide network of inspecting authorities, includes many big ports visited by a great number of ships of all nationalities and, with a communication system allowing the speedy exchange of information between members, ensures quick action and efficient

control. Port State control, as an administrative regional agreement or otherwise, when properly functioning, has proved to be effective in identifying sub-standard ships and restricting their operation. "Properly functioning" in this context could mean, *inter alia*:

- that the control is based on existing conventions and their requirements;
- that it does not pretend to be a law-making but only a law-enforcing arrangement;
- that it is served by qualified inspectors able to exercise their professional judgment as to whether the ship can proceed to sea without presenting an unreasonable threat to the marine environment or endangering its safety and the safety of those on board;
- that the rules are applied without discrimination and, as far as possible, in a uniform way.

IMO has contributed considerably to the success of port State control by establishing the framework and the procedures for the conduct of the control. It is, therefore, a logical sequence that IMO should encourage and assist the establishment of other regional agreements with a view to achieving a global coverage, if possible. Such regional agreements could develop around national port State control services already operating in the region.

Assistance could be given for training the inspectors with the aim of achieving uniformity in the application of the rules. Experience from port State control would, no doubt, have a beneficial influence on flag State control. World-wide application would rather emphasize the administrative character of port State control, exchange of information between regions would increase the effectiveness of control, and the annual regional reports would provide IMO with valuable statistical data. It would be pertinent in this context for IMO to consider updating

the guidelines for port State control to deal with the recently adopted amendments to SOLAS, chapter VI, concerning general and special provisions for bulk cargoes other than grain. These provisions call for information from the shipper on the condition of the cargo prior to loading and, in the case of concentrates or cargoes which may liquefy, additional information is needed in the form of a certificate. Past experience has shown that the master would need assistance from the port authorities in obtaining such information in a reliable form. He would also need assistance and co-operation from the loading terminal in determining a loading plan and such important particulars as weight distribution and loading speed. Some of these factors may have played a role in accidents involving bulk carriers.

Double-hull, Mid-deck Tanker Designs Win Support from IMO Body

The mid-deck and double-hull tanker designs offer equivalent protection against oil outflow when the whole range of probable groundings and collisions is considered cumulatively. This is the major conclusion of a report on comparative tanker designs prepared by a steering committee established by IMO.

The report will be considered in March by the Marine Environment Protection Committee (MEPC), which is planning to adopt amendments to MARPOL 73/78. The amendments are expected to have a significant impact on the design of both new and existing tankers.

The proposal that MARPOL 73/78 be amended was made by the United States in November 1990. Originally

the proposal was that double hulls should be made mandatory for new tankers. Although this received general support, several delegations expressed the view that other designs which offered equivalent protection against accidental oil spills should be accepted as an alternative.

A specific design proposed by Japan as an alternative is the mid-deck tanker. Ships of this design are fitted with wing ballast tanks to provide protection against collision and the cargo tanks are arranged so that there is an upward pressure at the bottom of the full: if the full is ruptured this pressure prevents most of the oil on board from escaping into the sea.

The double-hull concept simply means that the cargo tanks are separated from the outer hull by means of a space large enough to absorb low-speed impacts.

In 1991 the MEPC prepared draft amendments to Annex I of MARPOL 73/78. These are regulation 13F, dealing with new tankers, and 13G, which will apply to existing ships.

In July last year the MEPC also agreed that a study should be carried out under the general management of IMO into the comparative performance of double-hull and mid-deck tankers.

The study, which was financially supported by the oil and tanker industry, involved classification societies, shipbuilders, model testing basins and other industrial and environmental groups. The steering committee held five sessions and was chaired by Dr. Lorenzo Spinelli of Italy. Mr. Yoshio Sasamura of Japan was project manager.

The steering committee held its last meeting at IMO headquarters from 8 to 9 January and in its report concludes that, while the two basic tanker designs could be considered equivalent, each

gives better or worse outflow performance under certain conditions.

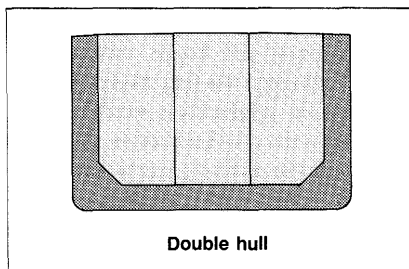
Other conclusions were:

- in groundings which would result in the rupture of the bottom shell plating of double-hull and mid-deck tankers but not the inner bottom of double-hull tankers — approximately 80% of the total grounding accidents resulting in hull penetration — no oil spill will occur in double-hull tankers, but some oil spill, normally small in relation to the ship's deadweight, would occur in mid-deck tankers;
- in groundings which would result in the rupture of the bottom shell plating of double-hull and mid-deck tankers and the inner bottom of double-hull tankers, the amount of oil outflow of mid-deck tankers, calculated on assumptions using reasonable values of current and tide, is less than that of double-hull tankers;
- in collisions which would not result in the rupture of the inner hull, no oil spill will occur; mid-deck tankers have less probability of such collisions because of the wider wing tank spaces needed to meet the segregated ballast capacity requirements;
- the amount of oil outflow of double-hull and mid-deck tankers after collisions which result in the rupture of the inner hull will depend on the actual tank arrangements.

Draft regulations 13F and 13G have already been circulated to IMO's 135 Member Governments and this means that they can be formally adopted at the MEPC meeting which runs from 2 to 6 March. However, it is expected that changes will be made before this is done.

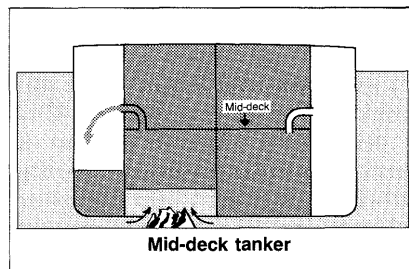
Draft regulation 13F (for new tankers) already permits mid-deck tankers as an accepted alternative and also other alternative designs providing the same level of protection which may be approved by the MEPC in future.

Draft regulation 13G will prescribe measures to be taken for existing ships to prevent pollution in the event of collision or stranding. These may include modifications, phasing out after certain ages, and strengthening of



Double hull

The double-hull concept is designed to provide all-round protection of the cargo against relatively low-energy impacts.



Mid-deck tanker

The mid-deck concept is designed to prevent oil outflow by equalizing the pressure inside and outside the cargo tanks.

surveys.

MARPOL 73/78 has so far been ratified by 70 countries whose fleets represent about 90% of world merchant tonnage. All of these will be required to enforce the new regulations (unless sufficient objections are received to stop the amendments entering into force at all), and it is expected that the new regulations will therefore make a major contribution to the prevention of pollution at sea resulting from tanker accidents. (IMO News)

Ship Security Treaties Enter Into Force

Two international treaties designed to combat terrorism and other unlawful acts against shipping will enter into force on 1 March 1992. The main treaty deals with offences against the safety of ships and persons on board and the other is a supplementary protocol to extend the regime of the main convention to offences against fixed platforms on the continental shelf.

The two treaties were adopted in 1988 at a conference convened in Rome by IMO. The proposal that the convention be developed was made by three Member States: Austria, Egypt and Italy.

The conference adopted the Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation and the Protocol for the Suppression of Unlawful Acts Against the Safety of Fixed Platforms Located on the Continental Shelf. The preamble to the Convention says "unlawful acts against the safety of maritime navigation jeopardize the safety of persons and property, seriously affect the operation of maritime services and undermine the confidence of the peoples of the world in the safety of maritime navigation."

The Convention lists the offences covered — e.g. seizure of ships by force, acts of violence against persons on board ships and placing of devices on board a ship which are likely to destroy or damage it.

The main purpose of the Convention and Protocol is to ensure that appropriate action is taken against any person committing these offences. Governments which ratify the Convention are obliged to make them punishable by appropriate penalties. They are also

required to take action when the offences are committed on board a ship flying their flag, in their territorial waters or by one of their nationals.

A State may also take action if the crime is committed by a stateless person who normally lives in its territory, if a national of the State is a victim of the offence, or where the offence is committed in an attempt to force that State to perform or refrain from any act.

The convention requires Parties either to extradite the offender or to submit the case to their own authorities for prosecution. States may consider offences covered by the Convention extraditable, even where no extradition treaty exists between the State in whose jurisdiction the offender is found and the State requesting extradition. For this purposed, the convention treats the offences "as if they had been committed not only in a place in which they occurred but also in a place within the jurisdiction of the State Party requesting extradition."

The Convention also provides for measures designed to encourage co-operation between States and requires those taking action under it to provide relevant information to IMO.

The Protocol is designed to extend the principles of the Convention to offences occurring on fixed platforms on the continental shelf. It was agreed to deal with offences against ships and against fixed platforms in two separate instruments in order to permit States to accept one or the other or both, as they may wish.

Conditions for entry into force of the two treaties were fulfilled on 2 December 1991, when France became the fifteenth country to deposit an instrument of approval. The convention has now been accepted by Austria, China, France, The Gambia, Germany, Hungary, Italy, Oman, Norway, Poland, Seychelles, Spain, Sweden, Trinidad and Tobago, and the United Kingdom.

The Protocol has been accepted by the same countries except The Gambia.

The two treaties are among a series of measures taken by IMO to deal with unlawful acts against merchant shipping. In November 1985 the IMO Assembly adopted a resolution calling upon the MSC to develop, on a priority basis, measures to ensure the safety

of passengers and crews on board ships. The decision was given added importance by the adoption in December 1985 of a resolution by the General Assembly of the United Nations calling upon IMO "to study the problem of terrorism aboard or against ships with a view to making recommendations on appropriate measures."

In 1986 the MSC adopted a number of measures for strengthening port and onboard security, which were circulated to IMO Member Governments.

New Separator to Satisfy Any Pollution Limit

A new separator called Clearwater, now being introduced by Merlin Teknologi of Kristiansand, Norway, is claimed to purify bilge and ballast water and industrial waste waters to an unprecedented low of less than 5 ppm or 0.0005% oil.

The Clearwater will satisfy any pollution restriction by a wide margin. The strictest limit set by the International Maritime Organization is that of 15 ppm oil in bilge and ballast discharge in coastal waters. The limit for water discharge to the sea from North Sea offshore platforms, currently 40 ppm, is expected to be tightened in the near future.

Not even land-based industry or refineries have any limit as low as the 5 ppm of the new separator.

The separator has no filters or coalescing elements, needs no prewarming of the oily water, works unattended, is self-cleaning, has modest maintenance needs and is easy to install, even as a retrofit.

The units for ship installation, cleaning from 1 to 5 cubic metres of bilge or ballast water per hour, work in two stages. A static pre-separator removes most of the oil before the water is pumped to a centrifugal section for final treatment. The only water outlet is that for purified water on the centrifugal section. The automatic shut-down valve is ppm-controlled.

Skid-mounted units for refineries and offshore platforms, normally supplied without the pre-separator, can purify 15 cubic metres per hour. After having provided enthusiastic support for the development of this unit, Phillips Petroleum Company is now funding a giant 100 m³ design.

The Clearwater has been met with an encouraging response from oil companies, shipping and industry. The fact that thirteen units had been ordered as of January 1992 reflects the tightening of pollution restrictions now evident all over the world.

The separator was designed and patented by Vindholmen Services, while further engineering and marketing are provided by its subsidiary Merlin Teknologii.

The Americas

Canadian Cargo Activity Concentrated at 20 Ports

While shipping activity is widespread in Canada, most of it — 75 percent in 1990 — is concentrated at 20 ports, according to Statistics Canada's latest review of Canadian shipping activity. Furthermore, seven ports — Vancouver, Sept-Iles/Pointe-Noire, Montréal/Contrecoeur, Port-Cartier, Québec/Lévis, Halifax, and Saint John — alone account for almost half of Canada's waterborne cargo traffic.

The review also indicates that Canadian shipping activity has slumped since the 1988 record high, losing ground in 1990 for the second consecutive year, as shown below:

Canadian Shipping Activity

1987 — 90

(Millions of Metric Tons)

	1990	1989	1988	1987
International				
Exports	159.0	159.1	171.1	159.0
Imports	73.3	80.3	78.9	68.0
Total	232.3	239.4	250.0	227.0
Domestic	120.7	124.0	139.9	135.1
Grand Total	353.1	363.4	389.9	362.2

Source: Statistics Canada, Shipping in Canada 1990, p.12.

Other highlights of Statistics Canada's 1990 review:

- International shipping activity accounted for 66 percent of all cargo and 52.9 percent of all vessel movements at Canadian ports.

- About 5.3 percent of Canada's import/export cargo (12.3 million tons in 1990, 12.1 million tons in 1989) and 1.1 percent (1.3 million tons in 1990, 1.4 million tons in 1989) of its domestic cargo moved in containers. Three ports — Montréal/Contrecoeur, Halifax, and Vancouver — together accounted for 90 percent of all containerized cargo

and 95.6 percent of all containerized import/export cargo shipped through Canadian ports in 1990. Saint John led in domestic containerized cargo with some 372,000 tons.

- Domestic cargo (e.g., that moving between Canadian ports) fell 2.7 percent to 120.7 million tons, its lowest level in six years. Resurgent wheat traffic was insufficient to overcome losses in other domestic cargo sectors caused by "the generally weak state" of the Canadian economy. Especially hard hit was the domestic forest product trade, a major component of Canada's coastal shipping business.

- Leading domestic waterborne commodities were wheat (12.9 percent); logs, bolts and other wood products (11.6 percent); fuel oil (11.1 percent); iron ore (10.5 percent); pulpwood (9.8 percent); and gasoline (8.0 percent). This category includes cargo moved between Canadian ports (wheat from Thunder Bay to Montréal or Québec, for example) for transshipment overseas.

- Thunder Bay was Canada's highest volume domestic cargo port in 1990, followed by Montréal/Contrecoeur, and Québec/Lévis.

- International cargo dropped 2.9

Table 1
Cargo Loaded and Discharged at Canada's 20 Leading Ports 1990
(Metric Tons, 000s omitted)

Rank	Port	DOMESTIC			INTERNATIONAL			DOMESTIC AND INTERNATIONAL		
		Loaded	Discharged	Total	Exports	Imports	Total	Loaded	Discharged	Total
(1)	Vancouver	2,296.5	855.3	3,151.7	57,017.5	4,319.8	61,337.3	59,314.0	5,175.1	64,489.1
(2)	Sept-Iles/Pointe-Noire	3,566.9	787.3	4,354.2	16,226.9	765.4	16,992.3	19,793.8	1,552.7	21,346.5
(3)	Montréal/Contrecoeur	1,807.6	5,798.6	7,606.5	6,213.4	7,305.6	13,519.0	8,021.5	13,104.5	21,125.4
(4)	Port-Cartier	2,544.5	1,846.9	4,391.4	14,577.1	1,612.3	16,189.4	17,121.6	3,459.2	20,580.8
(5)	Québec-Lévis	2,613.5	3,424.2	6,037.7	4,204.3	6,882.5	11,086.8	6,817.8	10,306.7	17,124.5
(6)	Halifax	2,946.5	1,063.2	4,009.7	5,501.1	7,328.9	12,829.9	8,447.6	8,392.1	16,839.7
(7)	Saint John	1,865.2	316.2	2,181.4	4,942.3	7,320.2	12,262.6	6,807.6	7,636.4	14,444.0
(8)	Thunder Bay	10,644.5	342.1	10,986.6	2,533.9	409.7	2,943.6	13,178.4	751.9	13,930.2
(9)	Prince Rupert	432.3	359.1	791.3	11,655.5	28.1	11,693.6	12,097.7	387.2	12,484.9
(10)	Hamilton	383.1	5,612.3	5,995.4	838.4	5,026.4	5,864.8	1,221.5	10,638.7	11,860.2
(11)	Come by Chance	13.0	11.3	24.3	3,726.2	4,164.7	7,890.9	3,739.1	4,176.0	7,915.2
(12)	Nanticoke	538.5	2,582.4	3,120.9	58.1	4,386.6	4,444.6	596.6	6,968.9	7,565.5
(13)	Baie-Comeau	328.9	2,246.1	2,575.0	3,016.2	1,386.8	4,403.0	3,345.1	3,632.9	6,977.9
(14)	New Westminster(*)	1,666.6	2,104.1	3,770.7	1,092.5	1,132.3	2,224.8	2,759.1	3,236.5	5,995.6
(15)	Sorel	30.0	3,032.7	3,062.8	1,476.6	797.2	2,273.8	1,506.6	3,829.9	5,336.6
(16)	Howe Sound	1,343.0	3,983.8	5,326.8	—	—	—	1,343.0	3,983.8	5,326.8
(17)	Vancouver Island, East	1,436.5	3,596.6	5,033.1	—	—	—	1,436.5	3,596.6	5,033.1
(18)	Sarnia	1,408.3	643.2	2,051.5	1,300.0	1,604.2	2,904.2	2,708.3	2,247.4	4,955.7
(19)	Sault Ste. Marie	363.2	328.4	691.6	594.3	2,881.8	3,476.1	957.5	3,210.2	4,167.8
(20)	Port Alfred	—	224.8	224.8	167.8	3,228.4	3,396.1	167.8	3,453.2	3,621.0
Total		36,228.8	39,158.8	75,387.6	135,151.8	60,581.0	195,732.8	171,380.6	99,739.8	271,120.4
All Other Ports		24,131.6	21,201.6	45,333.2	23,887.5	12,715.0	36,602.5	48,019.0	33,916.6	81,935.6
GRAND TOTAL		60,360.4	60,360.4	120,720.8	159,039.3	73,296.0	232,335.3	219,399.7	133,656.4	353,056.1

*Fraser River

SOURCE: Statistics Canada, Shipping in Canada 1990, P.61

percent compared to 1989, with exports virtually unchanged from 1989 and imports declining by 8.7 percent (mainly due to reduced shipments of coal and ore from the United States).

- Waterborne exports — 159 million tons in 1990. Shares by region/country of destination: United Kingdom (5.1 percent); Asia and Oceania (37.3 percent); Europe (20.3 percent); Middle East and Africa (6.1 percent); Central and South America (4.1 percent); United States (27.1 percent).

- Top export commodities: coal (19.4 percent); iron ore (18.4 percent); wheat (11.6 percent); lumber and sawn timber (4.4 percent); potassium chloride (4.0 percent); fuel oil (3.6 percent); gypsum (3.3 percent).

- Waterborne imports — 73.3 million tons in 1990. Shares by region/country of origin: United Kingdom (11.6 percent); Europe (14.5 percent); Middle East and Africa (10.4 percent); Central and South America (12.9 percent); Asia and Oceania (5.3 percent); United States (45.2 percent).

- Leading import commodities: crude petroleum (26.5 percent); coal (19.0 percent); fuel oil (7.8 percent); other non-metallic mineral products (6.5 percent); iron ore (6.3 percent); aluminum ore and basic products (5.3 percent); miscellaneous chemicals (3.7 percent).

- A total of 109,755 vessel movements occurred at Canadian ports in 1990, with international vessels accounting for 58,024 movements (compared to 58,787 in 1989, 62,049 in 1988, and 58,678 in 1987).

(AAPA Advisory)

Glimpsing Ahead — The Global Perspective

By Hans Anderson

Mr. Hans Anderson — Managing Director of Eurolist International — shares his European perspective on upcoming economic and transportation issues. An active member of the global shipping community for many years, his firm now provides consultation services for several international ports, including the Port of Vancouver.

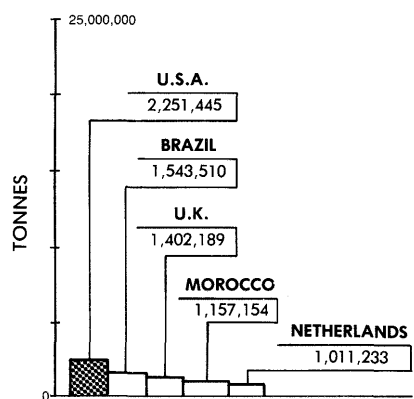
(Reproduced from "PORT NEWS — Vancouver Port Corporation")

Last year was a momentous one. The Cold War finally ended, and the break-

up of the former USSR began. A surprisingly hot, if brief, war was fought in the Middle East, where an unprecedented alliance of nations assisted in the defeat of Saddam Hussein's occupying army in Kuwait. Civil war broke out in Yugoslavia and after many false alarms, was halted by year's end — but for how long?

FOREIGN AID PROVIDES SHORTTERM STIMULUS

Against this stormy background, it is hoped that 1992 will be a quieter year, though the situation in Eastern Europe remains inherently unstable. The biggest short term problem facing the members of the newly formed Commonwealth of Independent States (CIS) will be the provision of enough food to feed their people. Failure to do so will bring riots or worse. Other priorities such as educating people to think in a



Principal Western Trading Nations ~ 1991

capitalist way and the construction of workable transport and distribution networks will take much longer — some say a generation at least. For the foreseeable future, foreign aid appears to be the key, and already U.K. Prime Minister Major is calling for a greater effort, though this is currently being resisted by President Bush. Whatever transpires, considerable quantities of foodstuffs and technological aid will eventually have to be shipped both eastwards across the Atlantic, giving some heart to that severely depressed and overtonnaged sector, and also westwards across the Pacific in order to supplement the separate efforts being made in Europe.

LONGTERM HARDSHIP FOR TRANSATLANTIC TRADE ROUTES

What then of traditional trade pat-

terns? We see the once overwhelming might of the U.S. economy being challenged by an increasingly unified Europe under the banner of the European Community, and by the relentless ascent of the Far East. The U.S. will increasingly have to look to the latter as its old trade associations with Europe decline, the more so as it reduces its military presence there, whilst trade between Europe and the Far East is expected to expand considerably — both factors resulting in a further decline in the transatlantic market.

North/South trade has traditionally been weaker than East/West, and is not being helped by the continuing poor economic situation in Australasia, where recession has been biting much harder than elsewhere, forcing several operators to drop out altogether, and others to re-align. At present, there is little sign of improvement in that area, but recent developments in South Africa should produce trade benefits in time, and the expanding Chilean economy will result in increased trade with the West Coast.

INCREASING COMPETITION FOR CONTAINER CARRIERS

Returning to the operators, hardly a week passes without news of yet another slot-sharing agreement as carriers struggle to reduce costs in the face of increasing global competition — competition that has led to massive ordering of new container tonnage over the past three years, mainly in the larger bracket of 2,600-4,400 TEUs.

Much of this is coming on stream this year, precisely at a time when overall economic recession is affecting loadings, and the threat of overtonnaging — already at critical level on the North Atlantic — now hangs over both the Pacific and Europe-Far East routes. In the latter case, the situation is not helped by the recent decision of Hyundai to re-enter the trade later this year, reportedly in partnership with another European or U.S. operator. Scrapping offers little help as most of the tonnage is too new, and if offered, would quickly be snapped up by outsiders to produce yet more competition.

FUTURE UNCERTAIN FOR CONFERENCE ARRANGEMENTS

With no firm evidence of rate hardening, the present position is not a

happy one for carriers, although it delights shippers, who seek the best of all worlds by continuing to call for the abolition of conferences as well. The European Commission has already examined the situation under its competition rules and, although stalling at the present, is expected to move towards a decision soon. This will please Senator Line's aggressive chairman, Karl-Heinz Sager, who favours a European Stabilization Agreement for the Far East trade, with trade lane agreements allowing carriers to adjust capacity as required to a common set of rules, but without price equality.

Conferences are also under threat from another direction, with member lines of the North Europe-U.S.A. Rate Agreement (Neusara) looking at alternatives such as the Eurocorde agreement, which involves talks with independent carriers on capacity reduction. Looking further ahead, some experts are predicting that global sea transportation will end up in the hands of half a dozen mega-carriers who will provide a 'greyship' service to mega-hub ports, with the rest of the players relegated to a feeding role. Certainly those with the deepest pockets are most likely to stay the course, but the efforts of all carriers to reduce costs will increase through the extension of the sharing principle from vessel slots to shore-based equipment and port facilities.

Technically, we are unlikely to see the same degree of ship-type development — especially containership development — that we have seen over the past 25 years. However, new electronic data systems will multiply rapidly

as part of operator's 'new' service packages.

Whatever happens, the situation in Eastern Europe remains crucial to everything. The sheer enormity of the problem is such that only a global effort can hope to solve it, and it would take a brave person to even attempt to predict the possible outcome.

Mr. Bellefontaine Elected Chairman of AAPA

Mr. David Bellefontaine, President & Chief Executive Officer of the Halifax Port Corporation, has been elected Chairman of the American Association of Port Authorities (AAPA). The election took place in Washington during the AAPA's spring meeting; the appointment will take effect this fall. Mr. Bellefontaine has been a Board Member of the AAPA for the past seven years and is currently serving as Chairman-Elect of the Association's Canadian delegation.

The Halifax Port Corporation will be hosting the AAPA's 82nd Annual Convention in Halifax in September 1993.

World Class Terminal For Roberts Bank

The Vancouver Port Corporation (VPC) is pursuing plans for a state-of-the-art container terminal at Roberts Bank — a flagship project in PORT 2010, the port's longterm land use/land management plan.

Forecasts indicate that during the next few years, the Port of Vancouver's container terminals in the inner harbour will be near capacity. To remain a player in this highly competitive market, VPC is proposing a new terminal at Roberts Bank, which would double the container handling capacity of the port. To be prepared for increased demand, the Port of Vancouver will require the proposed facility to be operational by 1995.

Hi-tech features and services, highlighted in the plans of the proposed facility, are expected not only to meet future customer demand, but also to help avert business loss to U.S. ports.

The terminal is being proposed as a multimodal facility with a combined import/export capacity of 500,000

TEUs constructed on an 87.5 acre site, adjacent to Westshore Terminals Ltd. The majority of containers are expected to be shipped by train (70%), with the balance distributed by truck to regional destinations.

A computer controlled container transport centre, two berth capacity, five loading cranes, on site rail and truck loading facilities and a road extension of Deltaport Way to service Roberts Bank are some of the main features envisioned for the proposed facility.

The total estimated project cost would run about \$206 million, including terminal infrastructure and operating equipment. VPC does not plan to operate the Roberts Bank container port itself, and is seeking joint-venture partners.

Crucial to the project will be the new terminal's link to an "all-Canadian" rail system dedicated to the movement of specialized container trains across the country — and easy access to the U.S. via rail subsidiary line.

To meet this schedule, terminal design, project financing and required regulatory, environmental and public reviews must be completed in 1992. These steps would be followed immediately by a two-year construction period for the berths, terminal infrastructure, and road works.

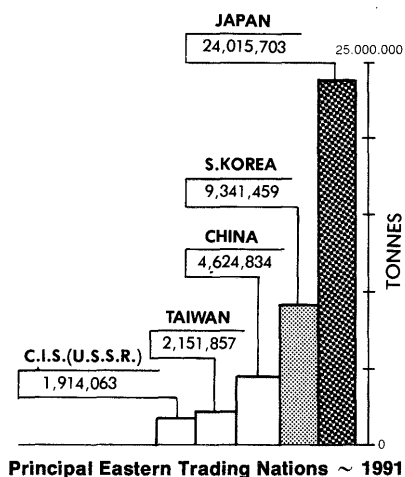
The Vancouver Port Corporation is setting a vigorous pace to develop facilities like this one, which promises to be a leader in world container trade.

(PORT News — Vancouver Port Corporation)

Japan Largest Market For US Wood Products

U.S. exports of solid wood products in 1991 declined by one percent below the 1990 record level to \$6.42 billion, according to the U.S. Department of Agriculture (USDA). The decrease, says USDA, was "largely attributable" to a \$314 million decline in log exports. The biggest loss were log exports to Japan, which fell by 2.3 million cubic meters (CUM) or \$235 million "after the flurry of purchases in late 1990 followed by the drop in construction activity in 1991."

Nevertheless, the U.S. wood products trade surplus grew by 8.5 percent to \$1.32 billion reflecting an even steeper decline in imports — down by



three percent to \$5.01 billion. It was the third year in a row that the U.S. has garnered a surplus in this trade.

Japan remained the largest single market, taking 41 percent of total U.S. solid wood product exports. Exports of processed products (e.g., all solid wood products except logs and chips) to Japan were valued at \$801 million, down from the 1990 level of \$821 million. Exports of softwood logs declined to Japan and the world to 9.5 million CUM, valued at \$1.31 billion.

The European Community was the second largest U.S. market in 1991, taking exports valued at \$1.13 billion, U.S. softwood lumber shipments to the EC rose marginally to one million CUM (or \$289 million) despite EC threats to restrict the importation of green lumber.

(AAPA ADVISORY)

Savannah Channel Widening Completed

Widening of the Savannah River shipping channel from 400 to 500 feet has been completed allowing vessels greater maneuverability and safety margins.

The \$15 million channel widening project concludes the second phase of a three-part harbor improvement program at the Port of Savannah. The first phase, a \$70 million new concrete cable suspension bridge permitting ships 185 feet of unrestricted vertical access at mean high water, was finished in April 1991.

Deepening of the channel from 38 to 42 feet, the final harbor improvement, has received funding approval from the Georgia General Assembly and is now at the federal review level.

"The channel widening is another symbol of the Port of Savannah's commitment to serving its customers worldwide and maintaining a cost effective means for exporting Georgia goods," said Georgia Ports Authority (GPA) Executive Director George Nichols.

The 5.6-mile-long widening project, supervised by the U.S. Army Corps of Engineers Savannah District, reached from the King's Island Turning Basin adjacent to the GPA Garden City Terminal to the Fig Island Turning Basin downstream. Work was performed by the Corps' contractor, American Dredging Co. Only a 1,000-foot section of the channel near the

old Talmadge Memorial Bridge remains to be widened once its pilings are removed.

Channel widening was completed without interfering with the spawning window of the striped bass from March 16 to May 31. Another Corps project, the filling of New Cut in the Back River, was also completed in March. This measure which received \$626,000 in funding from the GPA, will help reduce salinity and restore the striped bass population in the upper reaches of the Savannah River.

Funding for FOCUS 2000 First Phase Approved

Funding for the first phase of the Georgia Ports Authority's (GPA) \$350 million FOCUS 2000 Savannah River channel deepening and landside ports improvements program has been approved by the Georgia General Assembly.

The \$88 million first phase of FOCUS 2000 includes funds for deepening the Port of Savannah channel from 38 to 42 feet, completion of an existing container berth, additional warehousing and storage areas, a container crane upgrade program, and improvements to the Port of Brunswick's Mayor's Point Terminal.

The maritime infrastructure improvements, which are part of Gov. Zell Miller's Georgia Rebound program were initiated by the GPA to fulfill the needs of its global ocean carrier customers and to maximize Georgia's export potential.

"We are pleased at the leadership shown by our government in making this investment which will satisfy the needs of our customers worldwide well into the next century," said GPA Executive Director George Nichols.

FOCUS 2000, a comprehensive, market-driven harbor and landside improvement program for the ports of Georgia, will last throughout the '90s. Its initial phase will be funded through \$63 million in bonds approved by the General Assembly and \$25 million in GPA funds. GPA will repay the principle and interest on the bonds to the state through its operating revenue.

First among FOCUS 2000 priorities will be the deepening of the Savannah river channel from 38 to 42 feet to accommodate the next generation of container ships. The U.S. Army Corps

of Engineers studies published to date show that deepening is in the federal interest and will have no adverse environmental impact. Federal reimbursement is expected for part of the estimated \$43 million project.

Landside, projected increases in container traffic will require construction of three new container berths. Two will augment the existing six container berths at Containerport in Garden City and one new container berth will be constructed at Ocean Terminal. More warehousing and outdoor container storage areas also will be constructed to back up the new berths.

Complementing the three planned nearly 1,000-foot long container berths will be a crane upgrade program. At Containerport, six of the nine existing container cranes will be upgraded for increased height and outreach extended to 130 feet from the dock fender to work the large container ships that will soon be calling Savannah. Trolley speeds will also be enhanced to further increase container pick productivity. This upgrade program will be in addition to a new container crane that was already brought on-line at Ocean Terminal in 1991 for the handling of combination container/breakbulk ships. Other FOCUS 2000 projects in Savannah include a new dock for a liquid bulk berth facility.

At the Port of Brunswick, shipping demand for forest products necessitates expansion of the present berthing and cargo storage capacity at the Mayor's Point Terminal. FOCUS 2000 calls for the existing 1,000-foot long berth to be lengthened by 195 feet to permit the handling of two large vessels simultaneously. The 235,000-square foot transit shed at Mayor's Point will be enlarged by 70,000 square feet to store more forest products and other cargoes.

The GPA terminals at the Ports of Savannah and Brunswick currently generate 38,000 jobs statewide and \$112 million in state and local taxes. During the next 10 years, FOCUS 2000 will create 20,000 additional jobs in Georgia. Tax revenues derived from the public port terminals would increase to \$173 million. With FOCUS 2000 improvements, waterborne commerce is projected to increase from \$4.3 billion in 1991 to \$6.6 billion in 2000, with an attendant growth in income from \$856 million to \$1.3 billion.

Capital Improvements At France Road Terminal

The Port of New Orleans' capital improvements program is helping reshape the France Road container terminal. Currently two projects are under way and one has been completed at the facility, which handled over 2.3 million cargo tons in 1990.

The biggest project, a \$14 million flood protection system, is in the design and engineering stage. Although some drainage improvements have already been completed, the Port has decided to increase the floodwall's height to 14 feet above sea level and to build it closer to the Industrial Canal. This decision will allow the existing floodwall, which is set back on the property, to be removed, therefore enabling better utilization of the land at the rear of the France Road container facilities.

Another project, an intermodal facility, is in the design and layout stage. It was suggested by the Strategic Rail Study, a report prepared by a coalition of consultants. In addition to the intermodal rail facility, the plans call for improvements that would allow for better rail access to France Road. This would immediately benefit customers of the six major trunk lines and the Public Belt Railroad that serve the container facility.

Also scheduled for construction within the next six months, is a re-configuration of the entrance lanes of France Road at Almonaster Avenue. This will facilitate easier access to and from the terminals.

Major improvements to the Sea-Land Services Inc. container terminal facility have already been completed. The project consisted of paving the marshaling yard, improving the lighting, refurbishing the exterior of the office building, renovating reefer plugs and adding a new refrigerated container washing facility.

In addition to these projects, funding has been approved for miscellaneous improvements to the Sea-Land Services Inc. container terminal in the future.

(Port of New Orleans Record)

NY&NJ: '91 Exports Up, Import Volume Drops

Although oceanborne general cargo exports from the New York-New Jersey

Port last year reached their highest level in 18 years, they were not sufficient to offset last year's drop in imports. A summary of the Port's 1991 oceanborne foreign trade was released by Ms. Lillian Liburdi, director of the Port Department of The Port Authority of New York and New Jersey.

Buffeted by the economic effects of the national recession and Gulf War, the total volume of oceanborne general cargo declined by a little more than three percent to just under 12 million long tons.

"The national recession sharply curtailed the appetite of American consumers for foreign goods. On the other hand, the Port benefited from the increased competitiveness of American products, the decline of the dollar, and solid growth of some trading partners in South America and Europe," she stated.

"Our Port's maritime industry contributes \$18 billion to our gross regional product and supports 180,000 jobs. The long-term economic health of our region depends on it," she added.

Foreign oceanborne general cargo volume, both export and import, ebbed in 1991 to 11,985,647 long tons, a drop of 3.2 percent from the previous year. This brought the Port's import/export ratio more favorably into balance in 1991, moving to 64 percent /36 percent from 68 percent/32 percent the previous year.

Significantly, the value of the Port's general cargo, both exports and imports, reached \$45.9 billion, up 4.5 percent from the \$43.9 billion value in 1991.

"Unusual events during the year both here and abroad resulted in a significant drop in the import volumes of building materials, coffee and orange juice, all of which had a marked effect on our tonnage," said Ms. Liburdi.

As a result, the New York-New Jersey Port's share of the North Atlantic general cargo market slipped to 39.3 percent from 39.9 percent while its U.S. market share eased to 7.5 percent from 7.9 percent.

Ms. Liburdi further noted the New York-New Jersey Port handled a total of 42,042,410 long tons of oceanborne foreign trade, both general cargo and bulk, down 14 percent from the previous year. Yet, the value of this total oceanborne trade rose 0.4 percent over last year to \$50.4 billion.

Work Barge Active at Morehead City Terminal

The *Mitchell Ray* moves camels at the North Carolina State Ports Authority's Morehead City Terminal.

The "camels" at Morehead City are two small barges placed as spacers between the dock and a ship so that the bulk loader arm can be located properly over the ship.

The *Mitchell Ray* is a work barge, built by the Morehead City Terminal maintenance department at the Bulk Handling Facility.

Originally constructed to be used in dock repair work, the *Mitchell Ray* now is moving the camels to their proper location when bulk ships are moored.

"The work barge has proven very effective, even in bad weather and strong tides," said Morehead City Terminal Manager Don McMahan.

The bottom of the work barge is made out of 2 30-inch round dredge pipes, and the base is made out of steel. She is 22-feet long, 10-feet wide and has a 12-inch draft. She is equipped with a depth finder, all navigation lights, a 90 horsepower outboard engine and is registered with the North Carolina Wildlife Commission.

The *Mitchell Ray* is named for Mitchell Morris, Maintenance Supervisor at the Bulk Handling Facility.

Seattle Top NW Port in Dollar Value of Trade

The Port of Seattle again reigns as the top Pacific Northwest port as measured by dollar value of import/export trade for 1991. According to the U.S. Bureau of Census Foreign Waterborne Trade Statistics, the dollar value of goods coming through the port exceeded \$26 billion, bettering the Port of Tacoma by almost \$2.5 billion. The Pacific Northwest is the real winner, however, as almost \$50 billion in goods combined flowed through its two container ports last year.

The figure positions Seattle fourth in the nation behind only the Ports of Los Angeles, New York, and Long Beach. This marks the third consecutive year that POS has eclipsed the \$26 billion mark.

"We constantly look for ways to increase the diversity and value of goods

that come through our Port," said Mr. Frank Clark, managing director, Marine Division. "Within the last month, we've seen Bayliner boats shipped to Japan, transit buses off to Taiwan, and pre-fab hotel rooms shipped to Russia."

The top export commodities by dollar value in 1991 included: hides, industrial equipment, paper, frozen fish, grains and cereals, aluminum, and cotton. The top imports were: wearing apparel, office machines, motor vehicle parts, electronic equipment, telecommunications equipment, footwear, and video games.

The Port of Seattle is an economic catalyst to the entire Puget Sound Region. It develops and manages commerce through the Seattle harbor, Seattle-Tacoma International Airport,

warehousing and distribution centers, Shilshole Bay Marina, and Fishermen's Terminal. The Port impacts over 80,000 jobs in the region, and handles over \$30 billion a year in two-way trade.

Mr. Shera New Pres. Of Tacoma Commission

Mr. Ned Shera was elected 1992 president of the Port of Tacoma commission, succeeding Commissioner John McCarthy.

Mr. Shera, a former Washington State legislator, was first elected to the Port Commission in 1988. He recently retired as president of his own Tacoma-based insurance brokerage firm and has served as chairman of the board of the Association of Washington

Business.

"We have seen great success in attracting cargo to our region," said Mr. Shera. "Our future challenge will be to accommodate new growth, satisfy our existing customers and minimize the tax burden for Pierce county citizens."

Africa/Europe

Antwerp: Rapid Growth Of Container Traffic

The rapid growth of the container traffic in Antwerp is once again confirmed by the recently released TEU figures for 1991. A total of 1,761,422 TEUs in 1991 compared to 1,549,113 in 1990 represents a rise of 13.7% in the container business passing through Antwerp. When expressed in tonnes the container trade accounted for 18,933,222 tonnes in Antwerp, a rise of 14.4%.

A geographical breakdown of the figures shows that North and Mid America accounted for 740,032 TEUs in both directions, and thus continues to be the most important source and destination for Antwerp's container traffic. Moreover trade with these regions rose by 18.3% in 1991. The balance between incomings and outgoings is also striking, with 367,673 TEUs incoming and 372,359 outgoing. In tonnage terms the two regions accounted for over 7.9 million tonnes.

The second most important region is that formed by the European countries, which accounted for 326,000 TEUs (up 0.8%) or 3.2 million tonnes (up 5.5%). Hot on Europe's heels are the Far East and Middle East, regarded as a single region in the statistics. Last year shipments to and from these regions came to 2.9 million tonnes, a rise of 13% over 1990, whereas the rise in TEU came to 16.5%. The fastest growing region of all is Africa, with a rise from 1.86 to 2.6 million tonnes of container traffic.

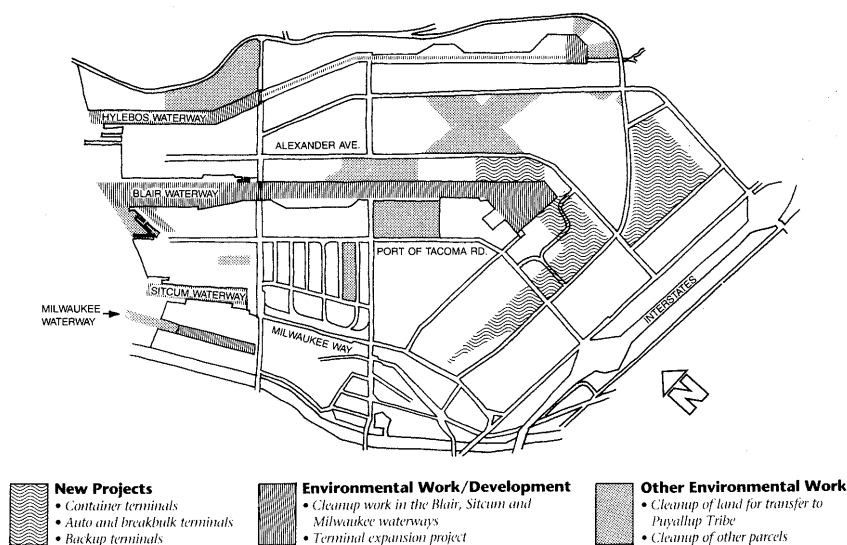
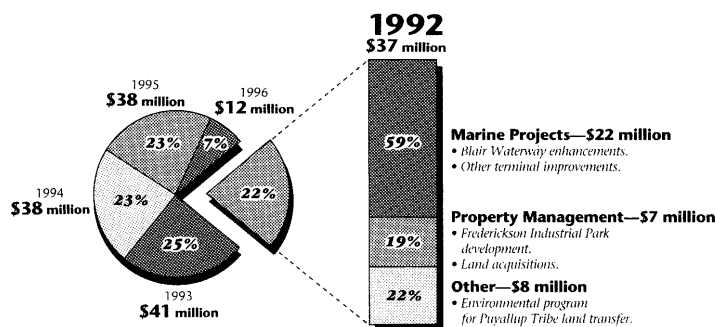
'CHL Innovator' First BIBO Ship at Le Havre

Under the term "BIBO" which is the short form of "Bulk in — Bags out", state-of-the-art technology is hidden as regards port cargo-handling and

Tacoma Gearing Up for Future Growth

In 1992 the Port is embarking on the first year of a five-year, \$166 million capital improvement plan. The plan calls for terminal expansion, environmental improvements and transfer of land to the Puyallup Indian Tribe. Here is a look at upcoming improvements.

(Pacific Gateway)



maritime transport. This technique consists of loading bulk cargo on board vessels equipped with their own facilities of sacking and unloading of bagged goods.

When the announcement was made of the introduction in Le Havre of this way of dealing with white sugar trades, S.H.G.T., the operator in charge of the exports of refined sugar carried out in bags so far, and the Port of Le Havre Authority were led to implement new investments: a third silo of a storage capacity of 15,000t and a weighing tower were built by the operator while the Port Authority was in charge of providing a new bulk sugar conveyor and loading equipment. Installed in the Joannès Couvert quay, this type of equipment offers the possibility of loading ships at a rate of about 700 tons per hour.

Operated by the C.H.L. shipping line in Singapore, the *CHL Innovator* was in March the first vessel to use this new terminal. This is a bulk carrier 175 m long, 25.50 m wide and having a draught of 10.15 m, converted to be able to lead sugar in her four holds "covered" with stainless steel, a revetment in compliance with the requirements of the transport of foodstuff products, and to bag it before unloading owing to 6 bagging machines each of them served by two crew members (sacking and sewing). The discharge, at a hourly rate of 300t, can be carried out directly onto truck, wagon, barge or in warehouse.

On the occasion of this first call, the *CHL Innovator* loaded 19,000t of bulk sugar in Le Havre bound for Algeria. The Operations were carried out with representatives from SHGT, the ship's agent and two shareholders of C.H.L., TNT Shipping (Australia) and ED & F Man (Great Britain). No doubt that this call will be followed by many others, since one vessel a month is planned to call. This call made it possible to run in the facilities and reach the necessary rates, while Chamar was in charge of cargo-handling operations.

Good Results for Port Of Amsterdam in 1991

The Port of Amsterdam can look on a good year. Transshipment reached a total of 32.28 million tons, an increase of 3% over last year, according to port management figures. More than half of total transshipments, 16.8 million

tons, consisted of dry bulk goods (up by 21.7%). Liquid bulk goods reached 12.4 million tons (down by 16.7%). The volume of general cargo handled grew by over 15% to 3.1 million tons.

In 1991 the number of vessels berthing in the Amsterdam port rose to 5,104 from 4,725 in 1990. Gross tonnage rose from 33.8 to 35.4 million tons. The cruise ship industry is showing increasing interest in including Amsterdam in its logbooks. Last year the number of cruise ships visiting the port increased to 77 from a mere 57 in 1990.

Amsterdam is also proving to be a very attractive place to establish business, seeing that some 46.2 new hectares of ground were issued for this purpose. This brings the total amount of land still available to approximately 110 hectares.

Roll on/Roll off Alive And Well at Gothenburg

Nearly one half of the general cargo passing through the Port of Gothenburg is roll on/roll off cargo. The ro/ro scene at Gothenburg is one of many forms: deep-sea, short-sea, passenger/cargo, and railcar transports are all to be found here.

A pioneer ro/ro port in the 1930's, Gothenburg has since written its name in the book of ro/ro history several times. One occasion is special this autumn: the 25th anniversary of the first loading of the first Atlantic container Line vessel on September 1st-5th.

The first port of call for the 'Atlantic Span' realized several firsts that day. The first made-to-purpose deep-sea container berth in Europe was com-

General Cargo Sector: Transshipment of general cargo last year saw a growth of 15.3% reaching a total of 3.1 million tons. Of this 718,000 tons were conventional cargo; 9.8% more than last year. The port's container traffic remained virtually stable at almost 814,000 tons (+ 1%). There was a strong increase in both roll-on/roll-off transport and unit cargo, up 24.6% to 989,000 tons and 33.6% to almost 560,000 tons respectively.

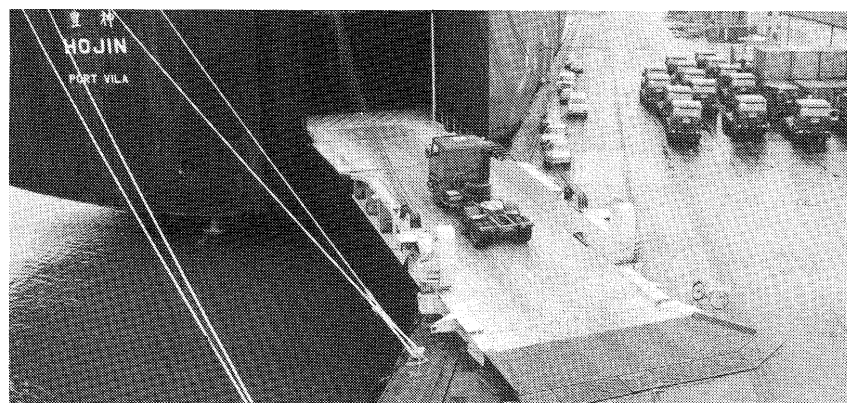
Forecast: Forecasts are difficult to make for the coming year. In 1992 Amsterdam Port Management expects an increase in the transport of cars as a result of the arrival of a new brand of car and an increase in import of agri products from South Africa. The import of oil products is expected to remain an uncertain factor.

missioned, as was the first of the Port's container cranes, a Paceco Portainer built under license.

The ACL vessel was, of course, of the combination type — part lift on/lift off, part roll on/roll off — that has been a successful concept with the North Atlantic trade ever since.

First dedicated long-distance ro/ro's

The first generation ACL vessels meant that ro/ro entered the deep-sea arena on a large scale, but there was more to come. The Eriksberg shipyard at Gethenburg produced a triad of deep-sea ro/ro's in the early 70's. they were the first dedicated long-distance ro/ro's built. Meant for the US West coast-to-Australia trade, the first of the three, the 'Paralla', took on a posi-



Gothenburg is a diversified ro/ro port with nearly one-half of its cargo turn-over in the ro/ro sector. The picture shows lorries being loaded for export to Asia in the Port's Free Port facility.

tioning load at Gothenburg's Lundby harbour in January, 1971. So the first deep-sea ro/ro-only load was rolled aboard.

Closeness to the markets has meant a lot to Gothenburg port. You can hardly get closer to the oceans in Sweden without wetting your feet. And part of the idea with unit loads is, of course, that they lend themselves to smooth shifts between transport modes. This minimized the adverse effect of long overland hauls. The effects of unitization can be clearly traced in the statistics of the Port. In twenty-five years, the unit-load portion of general

cargo in the port went from five per cent to ninety per cent.

Special: the Älvsborg Harbour

Although Gothenburg has ro/ro activities in several parts of the port, the Älvsborg Harbour is special: it was designed in the 70's to act as a roll on/roll off harbour, which it still is. The main part of Älvsborg is today used by Tor Line, a North Sea freighting giant that has been rolling cargo since 1966 — with the first load taken in a Gothenburg's Skandia Harbour in March that year.

Tor Line has one or two daily sailings

to the United Kingdom and the European Continent. One of the base cargoes is forest products from among others STORA mills; another is Volvo vehicles, n b in both directions; Volvo's main assembly factory is situated at Gothenburg, but the company has Belgian and Dutch factories as well, and a dealer's agreement with Renault.

Älvsborg is also the terminal where you will be able to view the Port's most unconventional ro/ro liners. The Vänerlinjen special ro/ro's are custom-built to fill the River Göta locks up to Lake Väner — there are 20 centimetres on each side between the ship's side and the lock's wall. The 'Shuttle Göteborg' and the 'Shuttle Karlstad' carry paper and sawn wood downriver to Gothenburg and oil upriver. The passage, one-way, takes 16 hours.

Nearby is the home berth of the Wilhelmsen Lines. At Berth No. 643, loads for Australia, New Zealand and the US are rolled aboard the large ro/ro's that follow the design tradition of the 'Paralla'. Thus, a few hundred yards part the extremes — local river ro/ro's and around-the-world liners.

Passenger and cargo ferries

To a Gothenburger, the white ferries of the port's Denmark and Germany traffic are most certainly passenger vessels, albeit they carry passenger cars. But to industry they are great cargo shuttles; actually, the ferries that berth in central Gothenburg carry some two million tons of cargo a year, which is nearly one-fourth of all general cargo shipped via Gothenburg in a year. The passage to Denmark is a three-hour one while the Germany passage takes some 12 hours.

Admittedly, though, ferries such as those to Denmark and Germany do carry passengers, a lot of them. Including the passenger lines to Great Britain and the Netherlands, they are nearly five million per annum.

Railferry with a winning combination

To make Gothenburg's supply of ro/ro varieties complete, there is a rail service from the centrally located Free Port to Frederikshavn twice daily. From a slow start, the Stena Line and the Port of Gothenburg have built a railferry service that is attracting increasing volumes.

A good thing during the tough



One of the deep-sea destinations served by ro/ro's out of Gothenburg is North coast South America including the Caribbean. Seen here unloading at the Port's Skandia Harbour is one of the vessel that Laser Lines employ in that service.



With the exception of the passenger/cargo ferries berthing in the city part of the port, most of Gothenburg's ro/ro's are to be found in the Älvsborg Harbour, dominated by the Tor Line terminal. Custom-built for ro/ro, Älvsborg is well equipped with quay ramps but lack permanent crane support.

start-up years has been the flexibility of the tonnage used. Stena has been using the 'Stena Scanrail', which is a combined rail-and-rubber ferry. When railcars have been low, the vessel could be filled with lorries and trailers instead.

The main port of the Nordic countries has a definite ro/ro accent. Its main port facility nowadays, the Skandia Harbour, started life in March, 1966 with a trailer for the UK being towed aboard the 'Tor Anglia'. To-day, half of the port's general cargo volumes are rolled aboard or ashore, and there are plans for more connections.

New ro/ro link considered

A medium-distance shuttle service, offering fast transit times and swift unloading and loading, is being considered by the Swedish manufacturing industry, the shipping industry, and the Port of Gothenburg AB. The idea is to form a service that will call at Continental Europe from the side, which means that the service should land south of Holland. In this way, with lateral access to that port's catchment area, some of the infrastructural problems of the North Continent will be avoided.

This so-called Euroshuttle project is thought of in terms of ro/ro, and this means that the roll on/roll off concept is still very much in the plans for the future — as is the Port of Gothenburg.

Better Lashing Method By Gothenburg Workers

An industrial approach to a manual operation has won six Gothenburg harbour workers the equivalent of £12,500 and a better motivation in everyday work. The new method, rewarded by the Port of Gothenburg under its suggestion scheme, deals with the lashing of export paper to cassettes at the Port's STORA terminal.

The six harbour workers, forming an early and a late shift, prepare loads of paper reels and packs of sheet paper for North Sea shipment (Swedish forest product giant STORA uses Gothenburg as an export train ad lorry is unitized at the terminal. The units used are 40-foot steel pallets called cassettes.

Previously, electric hoisting platforms were used to give lashing personnel access to the top of the individual loads (some 4-6 metres up). Problems



Gothenburg harbour workers have re-arranged a lashing routine for paper, thereby speeding up the work and earning themselves and the port company money. As seen in this picture, cassettes with paper reels are placed in a row and a combined access and materials platform is handled by a fork-lift truck.

included batteries getting exhausted before shift's end and an insufficient load capacity of the hoisting platforms, the effect being that lashing equipment had to be picked up in small portions.

The new method demands very little or no investment but some reorganizing. Invited to organize the work as they pleased, the six harbour workers first placed cassettes in two rows instead of placing them as individual 'islands' around the shed. Then they equipped a fork-lift truck with a working platform that spanned the distance between the rows of cassettes. The platform is used for access to the top of load and an intermediate storage area for lashing material.

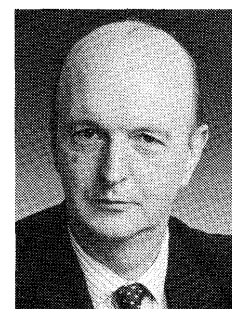
The teams work high and low simultaneously. While one man is placing edge protectors and lashing bands around the top of loads, with a lifeline attached to the ceiling, the rest of the team secures the bands to the platform and operates the fork-lift.

The new lashing methods are cutting costs equivalent to £200 per working day for the Port of Gothenburg AB. The Port sees the new routine as a proof of a knowledge present but not released. The personnel performing the actual work often has the best solutions to a more rational way of handling things.

The harbour workers that devised the new method say the confidence shown by management to re-organize work was a motivation boost. Also, they find that the work has since become more interesting, with the team mem-

bers taking a greater interest in the total transport and handling chain of which they are part.

ABP Holdings Pre-tax Profit £31 Million



*Sir Keith Stuart
Chairman
Associated
British Ports
Holdings PLC*

As the Company indicated in a statement made on 15 January 1992, the 1991 financial results were adversely affected by the difficult trading conditions in the UK property market. Other part of the Group's business, however, have performed well. After property provision, pre-tax profit for 1991 was £31.0m compared with £60.2m in 1990.

The continuing growth of the Group's ports and transport activities resulted in profits of £76.1m (1990: £59.5m). Tonnage handled at the Group's ports increased to a record 106m tonnes (1990: 101m tonnes).

Income from investment properties rose from £15.3m in 1990 to £20.5m in 1991.

Property development activities made an overall loss of £29.0m, after

provisions of £29.7m (1990: loss of £5.4m, after provisions and re-organization costs of £8.3m).

Interest charged to the profit and loss account was £36.6m (1990: £9.2m), but the amount of interest capitalized in the year was reduced from £35.8m to £12.8m. Only £2.7m of interest was capitalized in the second half of the year.

Earnings per share were 12.4p (1990: 22.5p).

Dividend

Because of the underlying strength of the Company's position, the directors are recommending a final dividend of 4.9p, which, together with the interim dividend of 3.1p per share declared on 12 September 1991, makes a total of 8.0p per share for 1991 (1990: total dividend of 7.25p).

Balance Sheet

Net borrowings decreased by £63m during 1991 to £332m at 31 December 1991 and represented a gearing level of 54.5% on the £609m value of the Group's shareholders' funds, including the noted surplus on valuation of port land (1990: 63.8%).

The balance sheet has benefited from a strong cash generation from port operations and £103m of property sales (including Aldwych House for £75m). A total of £40m was spent on completing property developments and investments, and £29m on capital expenditure for the ports and transport activity.

£100m million was raised in July through the issue of 11 7/8% Euro-sterling Bonds due 2011 and short-term borrowings were correspondingly reduced. The Group's borrowings are now mostly on a long-term basis with £175m repayable in over 19 years, £14m in 6 to 15 years, £133m in 3 to 5 years and only a net amount of £10m within 2 years.

Ports and Transport

Commenting on the results, Sir Keith Stuart, Chairman, said: "Despite the recession in the economy, our ports business performed well, with total tonnage rising from 101m tonnes in 1990 to 106m tonnes in 1991, although income in the second half was a little lower than in the first half. In addition to increases in existing trades and the arrival of new customers at our ports,

the Group's port investment programme is bringing further expansion in capacity and business."

Southampton underlined its position as one of the UK's leading container ports by achieving a record throughput of over 400,000 container units in 1991 through Southampton Container Terminals, ABP's joint venture with P&O Containers Limited.

In February this year, ABP announced an agreement in principle to become a 49% shareholder in Tilbury Container Services Limited. This acquisition will enable ABP to broaden its activities in the field of deep-sea container trades, in partnership with P&O Containers Limited. The Southern Africa European Container Service is moving from Southampton to Tilbury in mid-1992, but at Southampton Container Terminals other business is expanding and further investment is in hand to increase capacity.

Other developments at Southampton in 1991 included the introduction of ferry services from Southampton to Cherbourg by Sealink Stena Line, further increases in cruise traffic and the opening of a new fruit-handling terminal.

Port capacity in the Humber was significantly increased with the re-opening of the 190-acre Alexandra Dock at Hull in July. In October, Grimsby was selected by Toyota Motors (UK) as the principal port for exporting vehicles manufactured at its new Derby plant, due to start production in late 1992.

Commenting on the recent cancellation of the proposed scheme at Immingham to provide coal import facilities for National Power plc and Power Gen plc, Sir Keith Stuart said:

"The decision to cancel was prompted by a late request from Power Gen to defer completion of the necessary agreements which had already been the subject of over 18 months' negotiations. We could see no valid reason to accept this request which would have meant keeping "on hold" our other expansion plans for this deep-water site. Immingham, the busiest foreign-trading port in the UK, again handled a record throughput during 1991 and it is essential that additional capacity is provided as soon as possible. We are now working on alternative schemes for a variety of trades, to exploit the unique advantages of the site at Im-

mingham for which we have Parliamentary powers for deep-water development."

At Barry, Dow Corning announced plans to invest £150m to expand its manufacturing capacity. This will lead to increased trade for the port and make Dow Corning's Barry plant one of the largest producers of silicones in the world.

The new Riverside Quay at King's Lynn is now almost complete and will be operational by summer 1992. This will double the size of vessel able to use the port.

Property Development

The majority of the property development work in progress at the beginning of 1991 has now been completed. The cost of property development held as current assets within the balance sheet has been reduced from £294m in December 1990 to £127m in December 1991. This reduction is the result of substantial provisions made against the values of development properties in the 1991 accounts, to reflect current depressed market conditions, the sales of properties, including Aldwych House, and the transfer of further income-producing properties to the investment portfolio.

Despite the general lack of movement in the property market, a number of development projects achieved some progress during the year, in particular, projects on port land. At Cardiff, ABP has pre-let to the Welsh Health Common Services Authority a 150,000 sq ft office block to be built on the 40-acre Capital Waterside site.

Property Investment

Income from port land has continued to rise. Further lettings were achieved at Town Quay, Southampton, and on the first phase of St Andrew's Quay, Hull, which is now fully let.

Several income-producing retail and office schemes have been transferred to the investment portfolio, including offices in St Martin's Lane, London and at Trinity Court, Rickmansworth. The schemes so transferred have been independently valued at the year-end at £54m, representing a reduction in value of £29m compared with the previous book value.

Grosvenor Square Properties' 50% interest in the London Pavilion has now

been sold at a price in line with the book value in the 1991 balance sheet.

Valuation of Investment Properties

Healey & Baker valued all the Group's investment properties and land held for future development at 31 December 1991 and reported a further £19m increase on book values of properties at ports. There was a £40m decrease in the value of other properties and this, together with the fall of £7m in the value of investments in joint ventures, resulted in a net reduction of £28m which has been deducted from the Revaluation reserve.

Prospects

On prospects for 1992, Sir Keith comments:

"Our ports business has continued to perform well in the first months of 1992, although we do not expect any dramatic increase in activity until the current recession in the UK economy and elsewhere is reversed. In the medium to longer term, however, the investments presently in hand at our ports offer the prospect of further expansion in this part of our business.

"On the property side, as a result of the actions taken in 1991, including the provisions made against the costs of property developments, we are now in a strong position to ride out the current depressed state of the property market, although the cost of interest will remain high until further sales of properties are achieved. Longer-term prospects for property investment income and for further profitable developments on our land at the ports are encouraging."

Asia/Oceania

Fremantle: Efficiency, Reliability Top Priority

As part of its progress towards restructuring, the Fremantle Port Authority recently announced its new Mission Statement, aims and objectives for the new structure.

Acting General Manager Kerry Sanderson said the mission statement signified a commitment as a team to

port users, aimed at maximizing efficiency and reliability.

"The FPA will now take on the role of strategic port manager and will operate commercially viable business units," Mrs. Sanderson said.

The Mission Statement is:

To ensure the provision of reliable, efficient and financially viable port services and facilities for users.

The broad objectives following the statement are:

- to ensure that Port Services are responsive to the needs of users and are reliable and efficient;
- to provide an environment to enable employees to work with commitment and enthusiasm and in safety to achieve corporate objectives;
- to ensure the provision and maintenance of reliable port facilities to meet use needs on a commercially viable basis;
- to achieve financial viability at competitive prices;
- to determine, develop and maximise business and trade opportunities;
- to ensure that hazards and risks are managed within acceptable international, national and state standards.

"I believe the Authority has an exciting time ahead which will see it return to profitability and achieve its aim of becoming Australia's most reliable and efficient port," Mrs. Sanderson said.

"Major management changes have been made and our people are working hard to turn around the organization's performance in 1992/93 to that it emerges commercially stronger and more viable.

"Our corporate goal is to turn Fremantle into the most efficient port in Australia, which should have a beneficial flow-on to the local community and the State's economy."

The Authority's restructuring, which includes a downsizing programme of 40 per cent from around 650 to a target of 425 staff, has progressed very well.

Mrs. Sanderson said that currently, there were about 500 employees at the FPA, with another 40 expected to exit through WIRA. Further employees have lodged applications to leave.

(Fremantle Port News)

Multi-million Dollar Development: Geelong

If activity in the Port of Geelong is any indication, Australia is beginning to pull out of its recessionary woes!

Multi-million dollar development plans for the next two years include the building of a specialist dry bulk handling facility at Oyster Cove, and major dredging works to increase the draft of all approach channels and those of the inner harbour.

Tenders closed on February 21 for the construction of stage one discharge facilities at Oyster Cove.

The project, which has won strong backing from several major users, including NSW based Omya Southern Pty. Ltd., is due for completion during late 1992.

Tendering for the supply and installation of cranes to replace the Siwertell dry bulk unloader at Lascelles Wharf will close on April 16 and, if approved by the PGA Board following a feasibility study, should be completed by June 1993.

The stage three outloading facilities at Oyster Cove is at pre-feasibility stage and is heavily dependent on the viability of two potential major trades.

Consulting firm Maunsell Pty. Ltd. has been commissioned by the Port Authority to undertake an Environment Effects Study for the proposed \$26 million dredging of Corio Bay channels.

The study will involve extensive community consultation and will cover all technical and environmental considerations.

A ministerial decision on the project is expected by the end of 1992 and pending a go-ahead, work should be completed by September 1993.

(Portside)

Yokohama Aggressive To Better Environment

Yokohama harbor is taking the offensive with a massive clean up and greening campaign. As shipping traffic increases, officials acknowledge they must not let the environment deteriorate.

The harbor expansion attracts more and more attention from residents and local businesses, and there is a general consensus that environmental problems

should be tackled early, rather than late.

The harbor/bay environment control program focuses mainly on the following three goals: (1) The greening of the area; (2) The cleaning up of the area; and (3) The removal of abandoned ships.

1. The Greening of the Harbor Bay Area

Expanding the greenery of Yokohama harbor has a twofold benefit: It creates a good view for tourists, and protects against natural calamities and problems associated with a quickly expanding city.

A full-scale greening project began in 1973. The most recent plan is to have about 138 hectares over 59 separate areas completed by the year 2000. About 40 hectares already have been completed over 44 areas.

From now, the main greening areas will be Seaside Park in the MM 21 area, the Nippon-Maru Memorial Park, the central park and west park in the Daikoku Pier area, the Port of Yokohama Symbol Tower park by Honmoku Pier, and other parks throughout the city.

Residents use these parks as recreational areas for strolling, fishing, hiking, cycling and other sports.

2. The Clean Up of the Harbor/Bay Area

After storms sweep through the harbor, foliage and tree limbs collect with the other trash, creating a barrier for ships. Along with the obvious shipping hazards of a clogged harbor, the trash is a constant eyesore. Yokohama harbor officials intend to clean up such problems with the six ships specially designed for cleanup operations they use to clean the entire harbor every day, including Sundays and holidays. About 5,700 tons of trash were collected in 1990. The ships also clean up the ocean floor periodically.

In case of an environmental mishap, neutralizers and absorbing mats are ready to clear oil spills and sea pollution. A maintenance crew is always ready to go should an emergency situation develop.

3. The Removal of Abandoned Craft

Unknown ship owners have abandoned more than 120 ships in the 20

or more rivers and canals in the city limits, according to statistics compiled in January 1992. These abandoned ships consist of working boats, cruising boats, fishing boats, and barges.

The unwanted vessels block the lanes for other ships and give the waters a rundown look. Yokohama has worked on the removal of these ships before, and has been able to remove 79 thus far. While the city continues to tackle this problem, there is still much work to be done. One problem is that ship owners, not wanting to pay the removal fee, secretly leave the draft behind.

An ordinance, put out by the City of Yokohama on October 1, 1991, appealed to residents to be on watch for abandoned ships and try to locate the owners of any ships found. Owners

would be told to remove the ships immediately, and ships without owners should be identified as abandoned and removed.

This ordinance helps speed the clean up process, but stricter rules will be enacted to punish those who abandon their craft. Hopefully, this will stop the increasing trend of ship abandonment. The removal of abandoned craft is not cheap. Estimated costs are ¥1.4 million to ¥1.5 million per ship. The entire 1991 cost of removing these ships was more than ¥75 million.

Along with these clean up programs, Yokohama also plans to hold in August an international seminar with the United Nations ESCAP/IMO on the best ways to develop environmentally sound ports. (Port News)

Large Landfill Project Underway at Yokohama

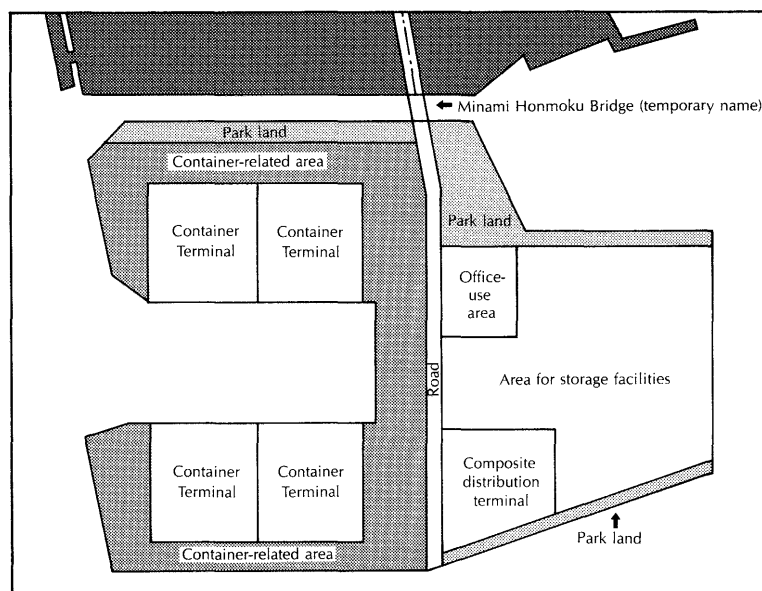
Minami Honmoku Pier received licenses to create a landfill in January 1990, and the pier has been under construction ever since. The project, which will claim 217 hectares of land, is one of the largest landfill projects in the world.

Most recently, the seawall of block number one of five was completed and the landfill began on October 16, 1991. The entire area is divided into five blocks, with each block undergoing separate construction. Areas of the ocean where landfill projects are underway have a water depth of 40 meters in some places.

The project calls for vast amounts of landfill material: About 70 million cubic meters. The fill will include excavated soil from other construction sites, dredged material from the harbor, and ashes from incineration plants. The excavated soil will take up about 50% of the landfill space.

The landfill construction will take about 10 years to complete, and will finish the process of making Minami Honmoku Pier an all-around trading terminal. It will also prepare the pier to handle the needs of foreign container transportation.

The whole terminal complex will use 217 hectares of reclaimed land, and will include four berths big enough to accommodate Over-Panamax contain-



erships. Each berth will be 350 meters long and have a width of 400 meters. The total area of the terminal will be 56 hectares. The container terminal pier-side water depth will be 15 meters, deep enough for berthing ships of 60,000 dwt.

When completed, the terminal will have 12 large gantry cranes that will be able to handle eight million tons of freight annually. Moreover, storage grounds and greening grounds will be prepared, and new ideas for an air freight terminal with customs facilities will be considered. *(Port News)*

New Cranes to Kelang Container Terminal

The first of 2 newest units of post-panamax cranes purchased by Kelang Container Terminal (KCT) was discharged from the carrying vessel, Dock

Express 12, at about 11:00 on Thursday 12, March 1992. The second unit which arrives by the same carrier is scheduled to be unloaded at about the same time the following day.

KCT placed the order for the Hyundai-Paceco units with Hyundai Heavy Industries (HHI) of Korea in January 1991. The contract provided for delivery in a commissioned state and ready for commercial use of the first and second units by late May and late June 1992 respectively. Upon their successful discharge, both units will be placed under the charge of technical personnel of HHI for commissioning procedures and tests before being officially handed over to KCT. When these cranes enter service, KCT will be operating with a total of 8 units, 3 of which are manufactured to post-panamax standards.

The cranes will be the first units in KCT to be driven by mains power and

the first designed with 100-ft leg span, the first 6 units being diesel electric with 50-ft leg span. The cranes have an operational outreach of 40.2 metres and will be able to service post-panamax container vessels with beams of up to 40 metres with container stowage of 9 layers below deck and 5 layers above deck. The two units cost \$30.3 million.

KCT's Crane No. 7 & 8 – Hyundai – Paceco Post Panamax Cranes

Principal particulars/dimension

Outreach	: 44.30 m
Operational outreach	: 40.20 m
Lifting height above quay	: 32.60 m
Lifting height below quay	: 16.80 m
Backreach	: 10.70 m
Wheel span	: 30.48 m
Clearance between legs	: 16.00 m
Clearance under portal	: 12.45 m
Overall length	: 27.70 m

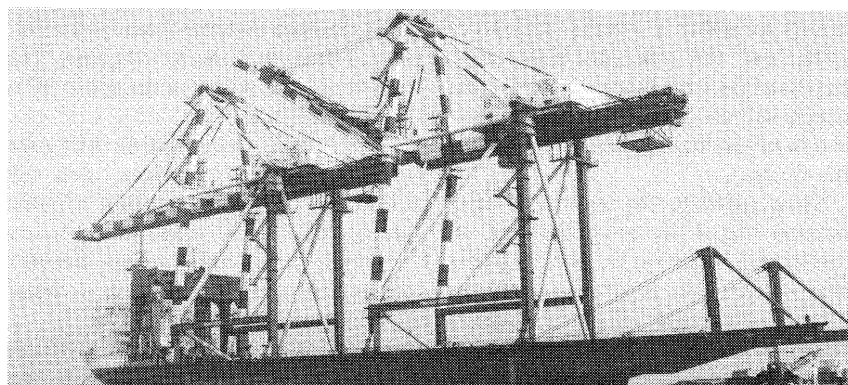
Speeds

Main hosts with load	: 50 m/min
Main hosts without load	: 120 m/min
Trolley travelling	: 180 m/min
Gantry travelling	: 45 m/min
Boom hoist	: 10 min/cycle
Total weight	: 778.50 ton

Port Master Plan Study For Penang Commission

PPC will engage a consultant early next year to undertake a Port Master Plan Study for Penang Port Commission (PPC).

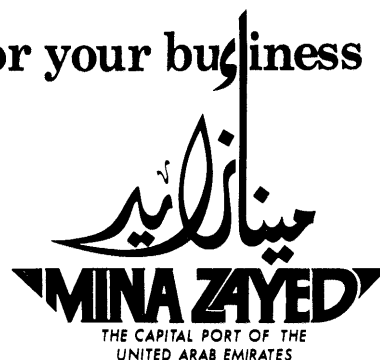
Towards this end, it has invited



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qualified consulting firms to submit detailed technical and financial proposals to carry out the study in accordance with the Terms of Reference.

Those interested to participate are required to submit their proposals by 12 noon (Malaysian Time) on December 31, 1991.

Among others, the study will consider Penang Port's prospects as a mainline facility in the context of its role in the Bay of Bengal region and in particular, the Northern Triangle (comprising North Sumatra, Southern Thailand and the North Western Malaysian states of Perlis Indera Kayangan, Kedah Darul Aman, Perak Darul Ridzuan and Pulau Pinang).

The study will also develop a marketing programme for the Port. In addition it will review operations of the ferry service of the PPC.

The objectives of the Master Plan Study are as follows:-

1. To conduct a detailed micro and macro analysis of the role of Penang Port for the next 20 years in the context of the industrial and agricultural development policies and plans of Penang state in particular, and of northern Peninsular Malaysia in general.
2. To assess and analyze, in detail, the impact of planned and proposed transport projects on the configuration and shape of the hinterland of Penang Port.
3. To ascertain, in detail, the potential cargo throughput at Penang Port for the period 1991-2000 by the various categories of cargo types and to provide broad projections on growth of throughput for the subsequent 10 years (up to 2010).
4. To appraise the infrastructure (especially transport) facilities in the Port's hinterland, in order to locate and highlight critical bottlenecks that might potentially develop between the Port and the main production and consumption centres in its hinterland.
5. To assess the emerging trends in global and regional shipping and their likely impact on Penang Port.
6. Based on the foregoing, to recommend the specific facility requirements for the Port for the period 1991-2000, and to assess their economic and financial vi-

ability, including environmental considerations.

7. To indicate in broad terms the facilities that may have to be constructed during the period 2001-2010 to cope with the growth in traffic.
8. To undertake a detailed analysis of the ferry operations of Penang Port in order to devise an optimum set of policies and programmes towards this component of the PPC's operations.

The last Port Master Plan was undertaken by E.G. Frankel Inc. mid-70s.
(*BERITA pelabuhan*)

Appeal Against Dumping Disallowed at Auckland

"This is not a time to be talking about winning or losing but rather one for recognizing that the commercial needs of the port users and the wider community have to be met. At the same time though, the port like other businesses must recognise environmental considerations."

This was the reaction of the Chief Executive of Port of Auckland, Mr. Robert Cooper when the Planning Tribunal announced its decision regarding marine disposal of harbour dredgings.

Mr. Cooper said that the company would study the decision fully, and there were a number of other matters yet to be resolved, which would be progressed with the other parties.

The Planning Tribunal has upheld an Auckland Regional Water Board decision to allow Ports of Auckland Ltd. to dump harbour dredgings in the Hauraki Gulf.

The Tribunal's decision disallowed an appeal against the dumping by the New Zealand Underwater Association.

The regional water board granted a two-year water right to the ports company allowing 270,000 cu m of spoil to be dumped about 3 km from the Noises Islands, a popular fishing and diving spot in the gulf.

The company argued that there was an urgent need to dredge and dispose of sediment from around its wharves to ensure the continued safe operation and commercial viability of the port.

The company has also applied for a 15-year water right to dump an annual maximum of 790,000 cu m of spoil. the

water board has still to decide on that application.

The Marua Society appealed against the water right for the 270,000 cu m dumping but later modifies its case to seek additional conditions. Greenpeace did not appeal, and the Royal Forest & Bird Protection Society withdrew its appeal.

The Planning Tribunal hearing, presided over by Judge D.F.M. Sheppard, took place over nine days in July and August and evidence was heard from scientific witnesses and Maori, environmental and recreational groups.

The Tribunal's decision supported the company's evidence on fishing impact, the quality of disposal materials, land disposal options and arrange of associated issues.

Judge Sheppard said that the evidence supported the case that there would be no discernible impacts on fish populations at the site. The company had accepted the condition restricting disposal in the snapper spawning months, even though commercial fishing did not cease at that time.

"The expert witness called on behalf of the Minister of Agriculture and Fisheries was willing to accept that the effect of loss of benthic organisms at the site on populations of snapper would be relatively minor because the organisms are likely to be fairly widespread in the inner gulf and because snapper have a flexible diet."

The Court had been told that storm events could produce more turbidity than spoil disposal would, and fish avoid disturbances in the water by rapidly swimming away. There would be no more disruption to snapper behaviour or to snapper spawning from the proposal disposal operations than was caused by the everyday activity of fishing vessels.

The disposal site in fact occupied a very small area in relations to fish populations of the Hauraki Gulf, and the overall impact on the feeding of fish such as snapper would be insignificant.

Judge Sheppard also said that the claimed effects on fisheries by those opposed to the application were overstated.

"We do not accept that sediment from the dredging disposal would accumulate around the Noises, because sediment which is naturally in the waters does not. We find more plausible the opinion

that the disposal of dredgings would not significantly alter any of the re-suspension and transport mechanisms currently operating in the area. We find that the proposed discharge would not be likely to result in accumulations of sediment in the rocky habitats of the Noises Islands. However, we record that the applicant has accepted the appropriateness of monitoring there."

Judge Sheppard said that he concluded although the benthos of the site would be buried, and would take a couple of years to recover, there would not be lasting effects on marine life of the site or on the biota of the water column; that there would be no significant effects on fish populations, fisheries, shellfish or shellfisheries of the Gulf; that measurable accumulations of sediment would not occur beyond the site and would not result in biological effects at any appreciable distance from it; that the discharge would not be likely to result in accumulations of sediment at the Noises Islands; and that there would not be significant effects on water clarity.

"Concerning market perceptions of contamination of seafood from the Hauraki Gulf, we adopt the opinion ... that to the extent that the dredgings contain toxic materials, they are already in the water of the Waitemata Harbour; and given the mobile nature of fish, that issue already exists. We agree that market perceptions do not necessarily depend on rational assessment. We also accept ... (the) ... opinion that wholesale effects on the food chain are unlikely, because the discharge is local, and the changes to the water column would also be local."

Judge Sheppard also discussed the options of land disposal in general, including de-watering ponds, road and rail transport options for removal of the silts, and the environmental difficulties associated with those; slurry pipelines; the high salt concentrations and increased contaminant mobilisation involved with on-land disposal which could result in contamination of ground water, toxic surface run-off into fresh water streams, toxicity to plant and soil invertebrates colonising the site, and contaminant accumulations in plants and organisms as the sale leaches out of the sediments.

"In the light of the foregoing considerations, we have concluded that

disposal on land of dredged sediments from the port of Auckland would involve major environmental effects, very considerable cost and other significant difficulties."

However, Ports of Auckland is making steady progress in actioning the dredging disposal approvals gained prior to Christmas. The appeal period on the Planning Tribunal's decision has now elapsed, and 12 Maori tribes around the Hauraki Gulf have lodged an appeal to the High Court. If this is accepted, it may be six months or more before it can be heard. In the meantime, a marine dumping permit has been issued by the Ministry of Transport.

The company's dredging application, which is now required under the new Resource Management Act, has been lodged and will be considered by the Auckland Regional Council next month.

The tender documents for the dredging work have been prepared and tenders will be called as soon as all approvals have been obtained.

PSA's Pilots Deployment System

By Goh Kah Seng
Engineering/Marine Systems Dept
Port of Singapore Authority

Pilotage services are provided as part of the comprehensive range of marine services available at the Port.

The task of scheduling and deploying pilot resources to assist ship masters in navigating the port waters, is undeniably a challenging one. The planner has to keep track of his deployment plan for 20 to 30 pilots, chart their progress, and be ready to make modifications to his plan whenever a job amendment takes place. His plan must meet PSA's target of 96% of the pilotage orders within half an hour.

The average number of vessel movements per month has increased from 4,500 to over 7,000 in the last ten years. Demand for pilotage services is expected to increase by another 20% in the next five years.

More Efficient Scheduling With PDS

The Pilots Deployment System (PDS), an integral subsystem of the Computer Integrated Marine Opera-

tion System (CIMOS), has been implemented to meet the anticipated demand. The PDS automates the scheduling process with the help of information technology.

The man-machine interface of the PDS, known as the De-Chart (Deployment Chart) serves as a graphical work tool for the planner. It helps him to identify suitable pilots for the jobs, and to examine scheduling constraints. The system also suggests potential job connections. More importantly, the deployment plan is graphically displayed for easy reference.

Besides monitoring the progress of the jobs, the De-Chart also reduces the entry as the schedule is automatically updated in the mainframe. With the help of the PDS, the planner is now better equipped to schedule pilots more efficiently.

Future Enhancement

PDS will eventually assist the planner to generate an accurate schedule. By the second half of 1992, non-container pilotage jobs which cover almost 75% of pilotage demands will be scheduled at the touch of a button. By the end of the year, pilotage schedule for container vessels jobs will also be automatically generated. (*Port View*)

PAT Plans to Run Duty-free Shop

The Port Authority of Thailand (PAT) plans to set up a duty-free shop in the Bangkok Port to render a full range of port services.

The PAT is now preparing to seek permission from the Customs Department for the establishment of a duty-free shop in the Bangkok Port. The 450-square-metre shop would be opened on the ground floor of the existing bonded warehouse building, according to Vice Adm. Somnuk Debaval the PAT's Director General.

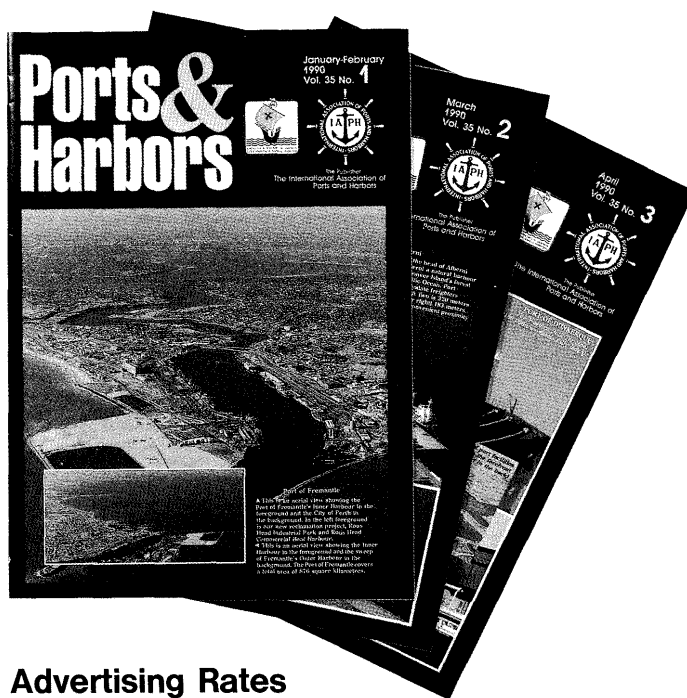
He also disclosed that in the initial stage, PAT will operate the duty-free shop itself. Later, the agency will form a joint venture with private sector to run the business. Recently, the PAT has appointed a working committee to work out a draft terms of reference for the project bidding.

Most of the goods sold in the shop are ship supplies and only the crewmen are allowed to buy goods in the shop on a pre-order basis.

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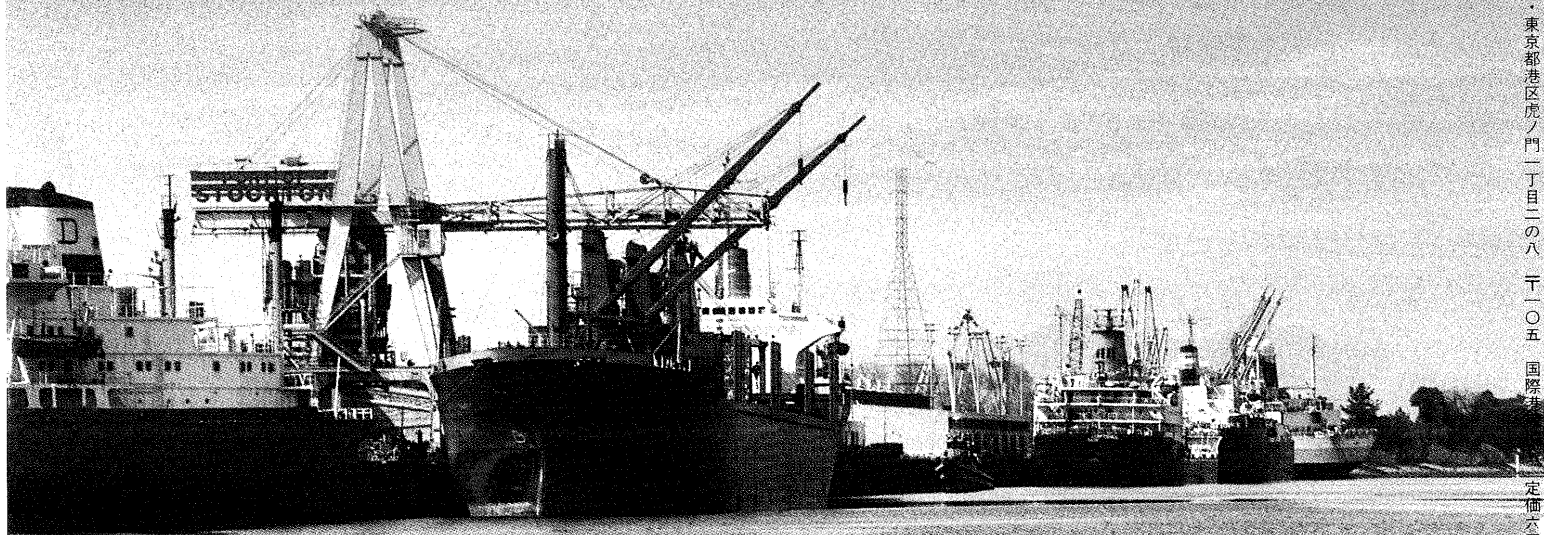
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