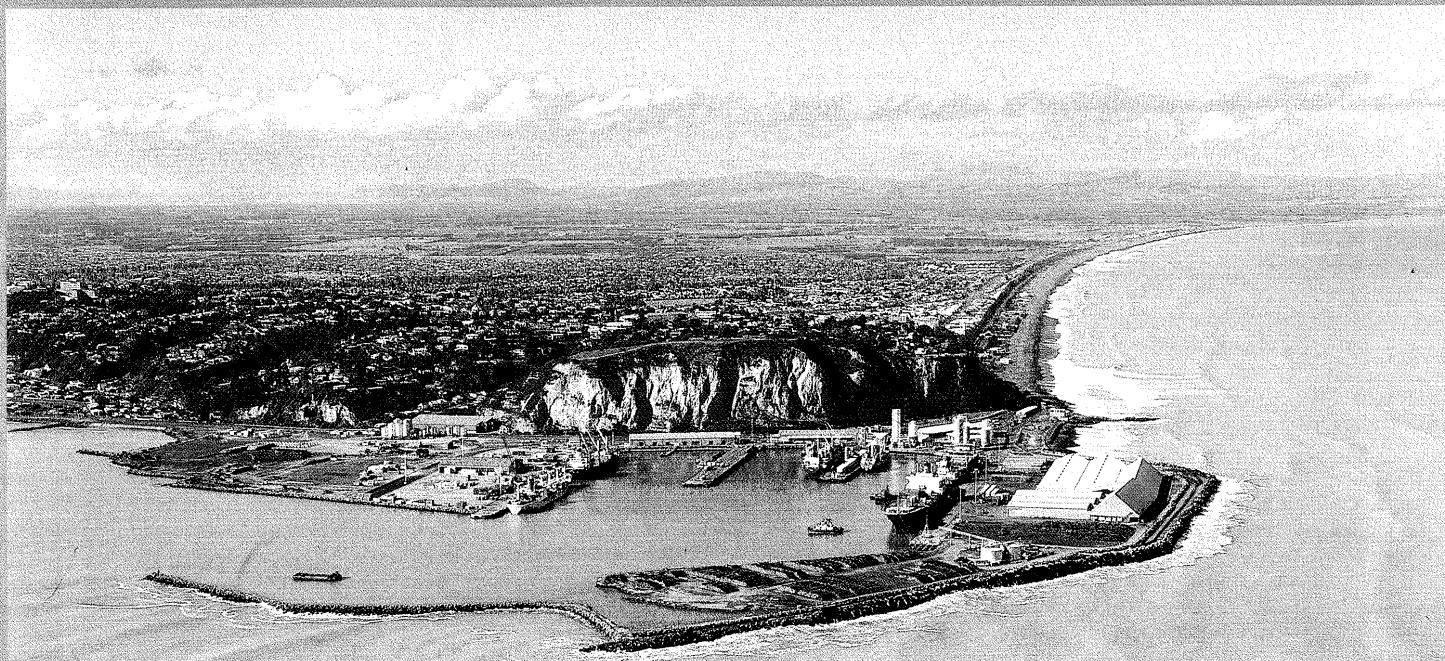
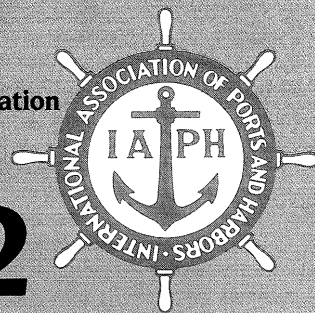


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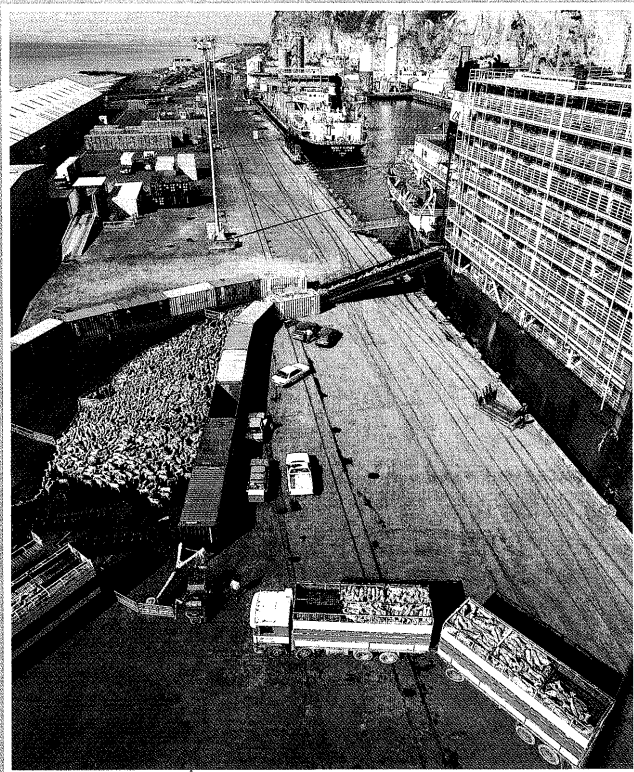
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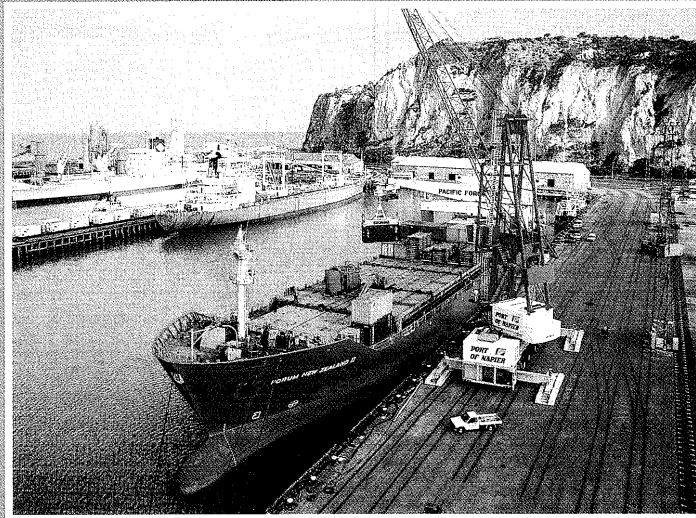
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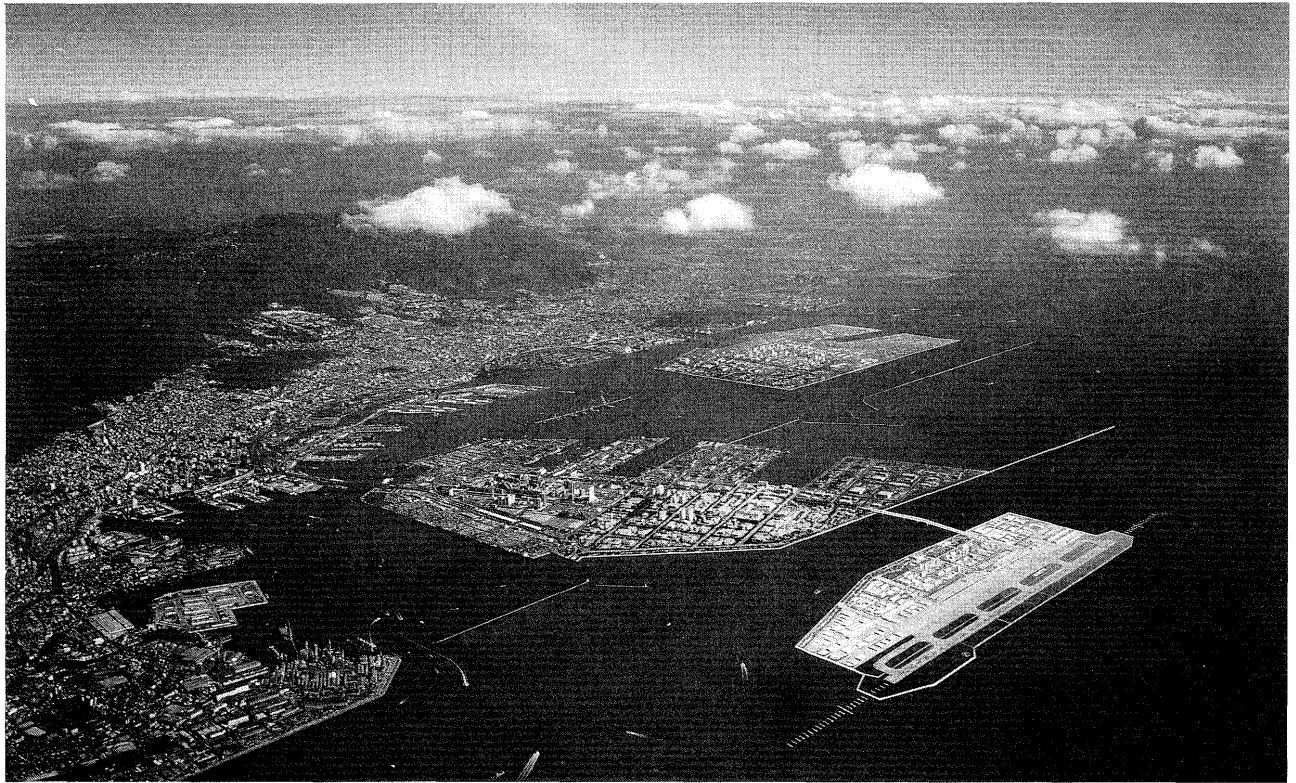


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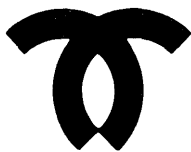


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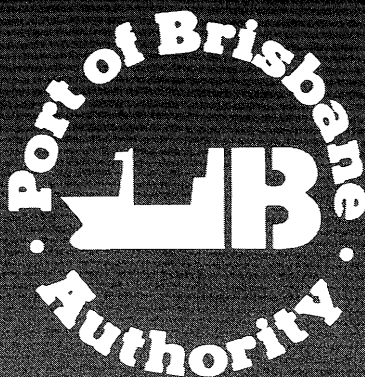
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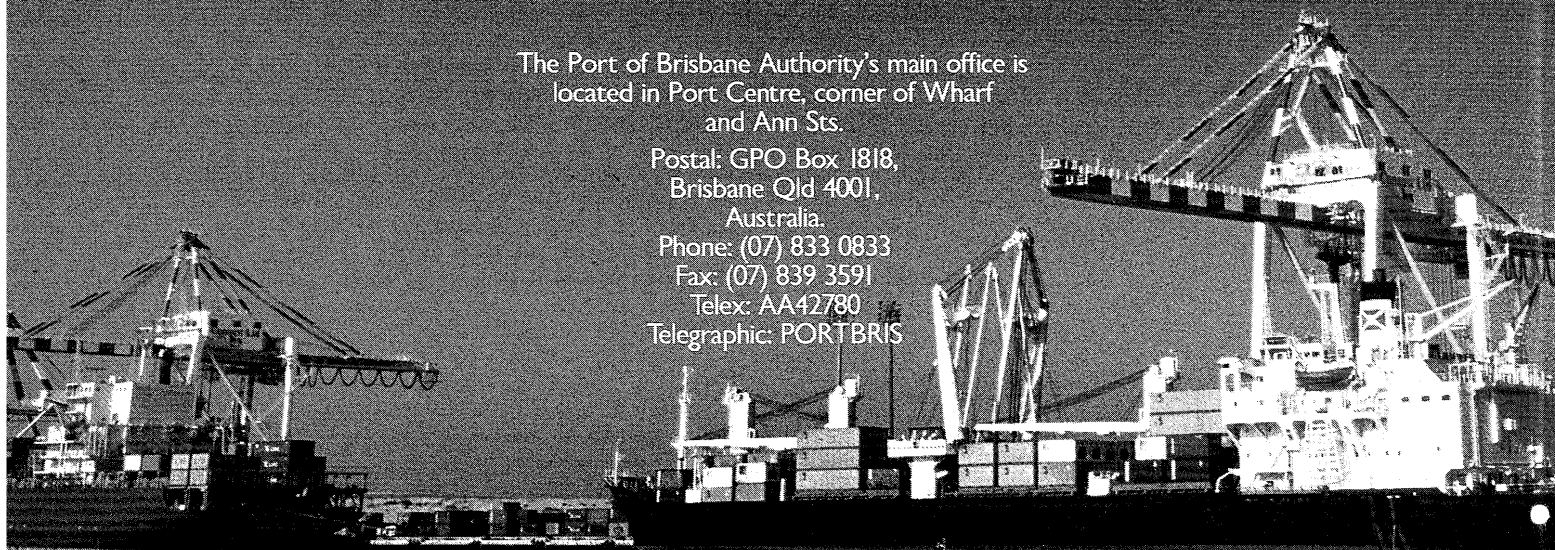
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IAPH ANNOUNCEMENTS AND NEWS

Welcoming Messages

from Charleston



W. Don Welch
Executive Director
South Carolina State Ports Authority

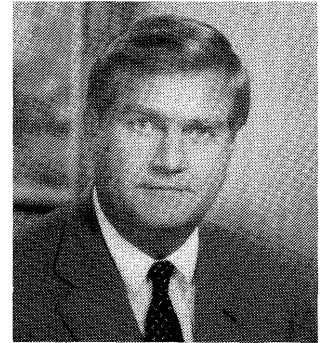
As Executive Director of the South Carolina Ports Authority, I am delighted to welcome you to the Port of Charleston for the 1992 Exco, and other committee meetings. We shall do our very best to assure that your visit to Charleston is both pleasant and productive.

By the nature of our industry, opportunities to meet professionally are relatively few. This makes our meetings in Charleston even more important, both for the good of IAPH, and for the health and progress of the port industry worldwide. We have much good work to do.

Surely, the ability of global trade to function efficiently depends in large part on what we are able to accomplish at our individual ports. However, this same global trade may depend even more so on what we are able to accomplish by working together. Through IAPH our common concerns can be focused, and solutions to common problems can be found. Increasingly, as national economies become more and more interlinked, it is important that ports develop cooperative strategies, and speak with one voice. IAPH is that voice.

Again, I welcome you to Charleston during the week of May 4-8, 1992. We are proud of our city; proud of our port; and very of the fact that you are coming to see us!

Sincerely,
W. Don Welch



Robert V. Royall, Jr.
Chairman
South Carolina State Ports Authority

On behalf of the South Carolina State Ports Authority and the vast community of business and organizations involved in the maritime industry, I welcome you to the Port of Charleston and to the 1992 IAPH Interim meeting.

It is a privilege to be the host organization for such an impressive assemblage of port executives from throughout the world. Plainly stated, without the work each of you do, world commerce as we have come to know it would cease to function. It is a tribute to port executives worldwide that global trade continues to grow, that advances in technology occur at a quickening pace, and that, at the bottom line, the public-at-large has available an array of materials and goods that only a few decades ago was unheard of.

1992 is an exciting year for us in Charleston as we celebrate the fiftieth anniversary of the founding of South Carolina's State Ports Authority. The creation of this governing body, charged with acting in the interests of the entire state, has, over these fifty years, provided the spark and energy necessary to transform Charleston into the world-class container port you will see during your visit.

Throughout this conference and your stay in Charleston, we want you to enjoy our city and our people. You may find us to be a bit friendlier than other American cities and this is in keeping with our tradition of Southern Hospitality. And as you take in the diverse offerings of this city and your conference, please consider that Charleston is not only one of America's oldest port cities, but also one of its most modern.

Again, welcome to the Port of Charleston, in the State of South Carolina, in the United States of America!

Sincerely,
Robert V. Royall, Jr.

Charleston Ready For IAPH Meetings

For the planned meetings of the IAPH Exco and other committees in Charleston in May this year, our host South Carolina State Ports Authority (SCSPA) has been making the necessary arrangements for welcoming IAPH's participants through close coordination with the Head Office Secretariat in Tokyo. The welcoming messages from our hosts, Chairman Robert V. Royall, Jr. and Executive Director Welch are introduced in this issue.

According to Ms. Anne M. Moise, Director of Public Relations at the host organization in Charleston, the IAPH meetings will take place at the Hawthorn Suites Hotel, 181 Church Street, Charleston, SC 29401, where a block of rooms for participants is reserved. The telephone number is 803-577-2644. The FAX number is 803-577-2697.

In her recent communication to the Tokyo Head Office, Ms. Moise indicates that tentative arrangements are in place for the Board Chairman of the host port to host a reception on the evening of Wednesday, May 6, and that plans include a horse-drawn carriage tour of some of the historical and beautiful parts of the City of Charleston on the way to the reception at the Old Exchange Building (which, as our organizer comments, was the first customs office in Charleston and is a lovely and important building). The tour and reception will be from 5:00 p.m. to 8 p.m.

Earlier on the afternoon of Wednesday, May 6, IAPH officers will pay a courtesy call on Mayor Joseph P. Riley, Jr. of Charleston at 2 p.m.

For the spouses and guests, a trip to two plantations is planned on Thursday from 9 a.m. until 3 p.m. They will go by bus to Drayton Hall and Middleton Gardens with lunch

served at Middleton.

On Friday night the Board Chairman of the SCSPA has offered a relaxed dinner at his private island home for the Executive Committee members. A leisurely boat trip will take the invitees to his home on Dewese Island.

Our host will arrange for lunch between meetings from Monday through Friday. Breakfast from 7 to 9 am and afternoon tea/light refreshments from 4 to 6 pm will be offered in the hotel every day.

The IAPH Head Office has requested all the members involved to inform the host port of the situation concerning their attendance or non-attendance as soon as possible so as to enable the organizer to proceed with the necessary arrangements for the meetings in May, while our hosts will remain as flexible as possible in welcoming all the participants and will thus try to keep their doors open for late comers.

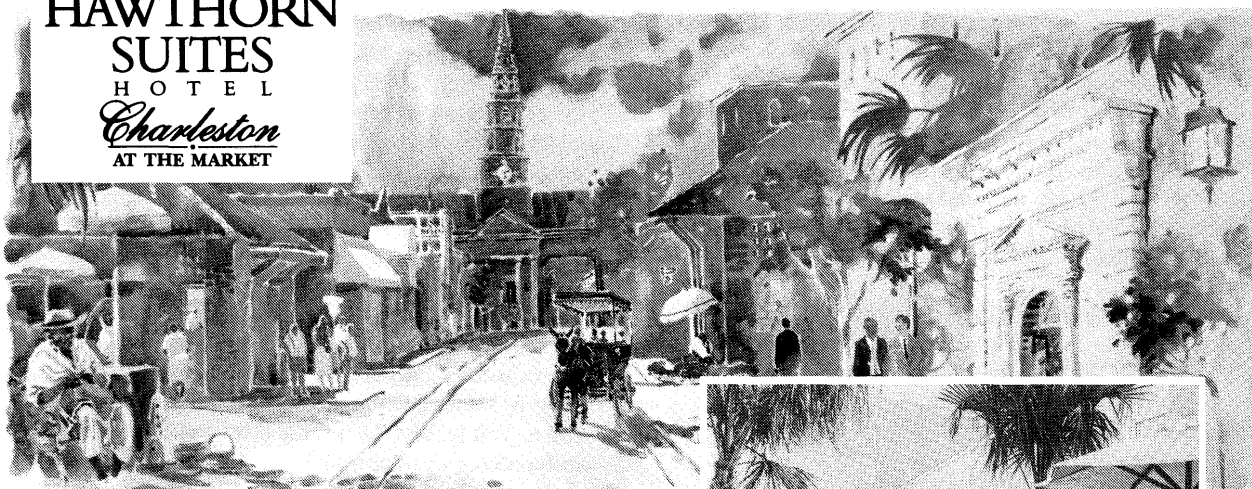
Time Schedule for the Meetings (As of February 10, 1992)

Day	Morning	Afternoon
MON (May 4)	COPSSEC Sub-Comm. Ship Marine Safety Dredging Task Force Port Safety & Environment Port Planning	COPSSEC Sub-Comm. Ship MS DTF PSE PP
TUE (May 5)	CIPD COPSSEC Sub-Comm. CLPPI More Technical Comm.	CIPD COPSSEC Sub-Comm. CLPPI More to be scheduled
WED (MAY 6)	Membership Finance	Constitution and By-Laws Strategic Planning Comm. (2:00 — Courtesy Call to the Mayor of Charleston by the officers)
THU (MAY 7)	Exco	Exco
FRI (MAY 8)	Exco	Exco

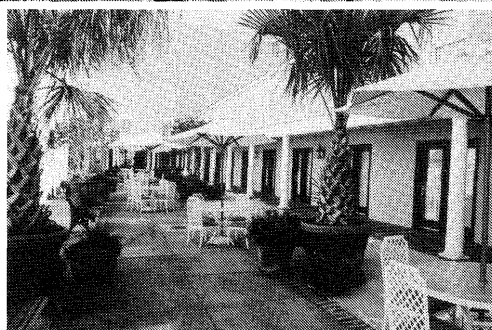


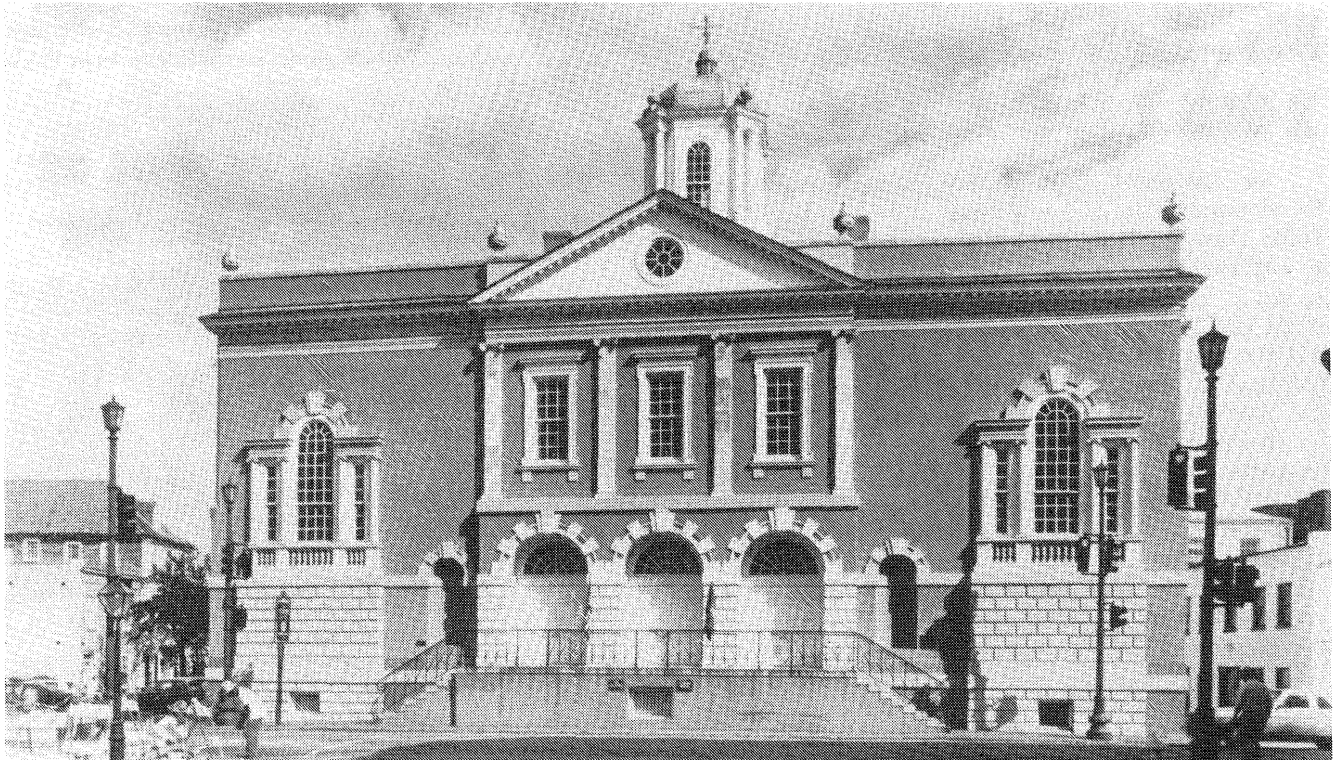
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Your accommodations at the Hawthorn Suites Hotel are conveniently located on Church Street, in the heart of Charleston's historic district.



The comfortable lobby and accommodations await you at the Hawthorn Suites. Hawthorn Suites Hotel is located at 181 Church Street, in the middle of the historic market area.

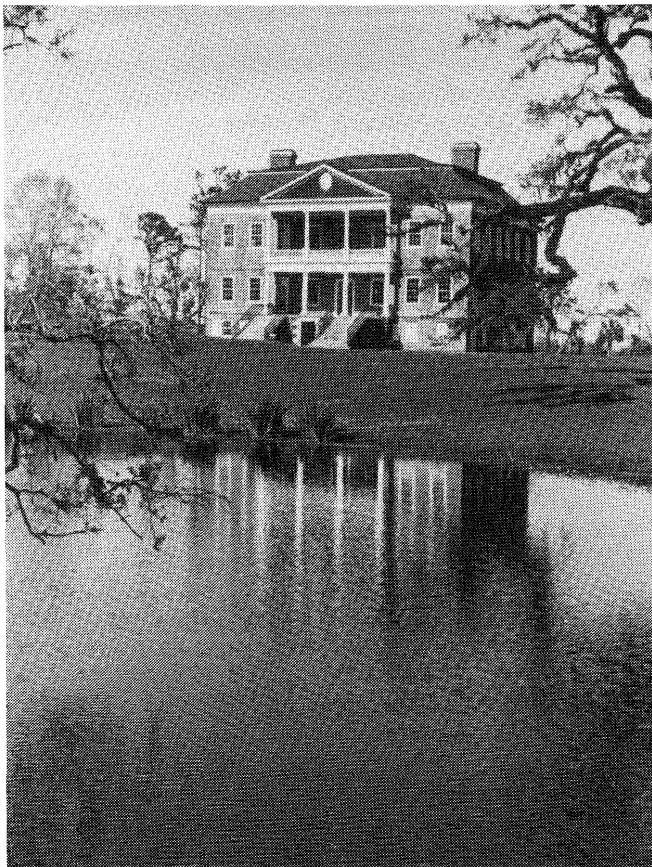




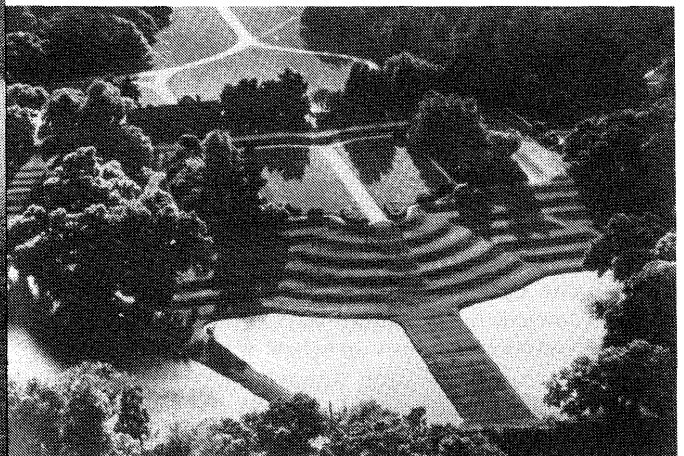
Dating to 1761, the Old Exchange Building symbolizes the importance of Charleston as a commercial shipping center. Originally, it was the site of a Customs House. Carriages will take meeting participants to the Old Exchange Building for the IAPH Chairman's reception.



Carriages tours through Charleston's historic district are just one way to enjoy all that the city has to offer.



Drayton Hall, one of Charleston's many plantation houses and a National Historic Landmark, will be highlighted during an outing for spouses.



The Butterfly Lakes at Middleton Place represents one of the finest examples of Colonial era formal gardens.

Mr. Lee Attends 14th LDC Meeting

Mr. Dwayne G. Lee, Deputy Executive Director — Development, Port of Los Angeles and Chairman of the IAPH Dredging Task Force, accompanied by Mr. Joseph E. LeBlanc, Jr., an attorney from New Orleans, who has served as legal counsel for IAPH at consultative meetings of the LDC, attended the Fourteenth Consultative Meeting of Contracting Parties to the London Dumping Convention (LDC) which was held in the IMO Headquarters in London last November.

It was the first LDC in which Mr. Lee participated as the IAPH representative since taking over from Mr. Herbert Haar, Jr. from the Port of New Orleans as the DTF Chairman at the IAPH Conference held in Spain last May.

In his letter sent to the IAPH Secretary General late last year, Mr. Lee states, "I find the responsibility challenging and hope I can live up to the expectations of IAPH in fulfilling those responsibilities. My short exposure convinces me that it is imperative for IAPH to be represented in this forum."

Prior to his attendance, Mr. Lee had submitted a position paper to the IMO setting forth IAPH's views regarding the use of the precautionary approach in the management of dredged material disposal under the LDC. In this submission Mr. Lee has presented IAPH's position, which has consistently stressed importance of scientific data and economic considerations in protecting the marine environment, against a background of deepening public concern on this issue.

The paper submitted from IAPH and Mr. Lee's report on his attendance to the IMO meeting as well as the related documents containing the draft conventions, are reproduced later in this issue.

IAPH Ready to Cooperate With EC

One of the subjects discussed at the recent meeting held in Glasgow and attended by some IAPH members in the African/European region was to see if there is any area in which IAPH could serve the European Community in the field of port- and transport-related matters in view of the fact that the EC region includes IAPH member ports.

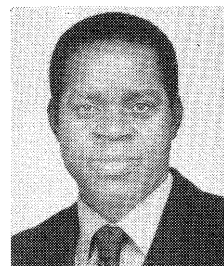
The participants at the Glasgow meeting supported the idea that the initiative should be taken by the European officers of IAPH in informing the appropriate EC officer that IAPH would be willing to provide all possible information and expertise if so required.

In this connection, Mr. Jean Smagghe, Third Vice-President of IAPH, wrote to Mr. Karel van Miert, Commissaire Charge des Transports, EC Headquarters in Brussels, towards the end of last year, introducing the aims of IAPH and its endeavours on behalf of ports throughout the world. In his letter, Mr. Smagghe stated that IAPH would be willing to cooperate with the EC towards exchanging views and information on port issues wherever the two organizations can work in support of common interests. This proposal was followed up by President Mather and the Secretary General, who confirmed that IAPH would be willing to do anything it can in cooperation with the EC

within the context of its international perspective, although it will fully respect all new regional arrangements to be made within the EC.

Mr. Okundi Present at Environment Session

Mr. Peter Okundi, Managing Director, Kenya Ports Authority, who has been appointed as IAPH Liaison Officer to UNEP, was preparing to attend the third session of UNEP (United Nations Environment Programme), which is scheduled for February 3 — 5, 1992 in Nairobi. Prior to his attendance, Mr. Okundi had sought inputs from his IAPH colleagues on the matters he should address at the planned meeting. In response to Mr. Okundi's call, Mr. Jean Smagghe, Chairman of COPSSSEC, and Mr. Paul Valls, Chairman of the CLPPI, respectively supplied their views and the committees' findings concerning environmental matters.



Mr. Okundi

Membership Notes:

New Members

Constantza Port Administration [Regular] (Romania)

Address: Incinta Port Constantza-Gara
Maritima
Constantza COD 8700
Mailing Addressee: Mr. Pistolea Vasile
General Manager
Telex: 14218
Tel: 91/611540
Fax: 1616695

Logistrade [Class D] (France)

Address: 10 Rue de la Neva
75008 Paris
Mailing Addressee: Mr. Claude Mandray
Chief Executive Officer
Tel: (1) 43 80 14 72
Fax: (1) 42 67 78 48

Changes

Bundaberg Port Authority [Regular] (Australia)

Address: M.S. 108, Bundaberg, 4670
Queensland
Tel: (071) 59 4233, (071) 59 4253
Fax: (071) 59 4655

Fremantle Port Authority [Regular] (Australia)

Mailing Addressee: Mrs. Kerry Sanderson
Acting General Manager

Korea Ocean Research & Development Institute [Class D] (Korea)

Address: ANSAN P.O. Box 29, Seoul 425-600
Mailing Addressee: Mr. Young-Tae Chang
Senior Research Scientist
Ocean Industries Dept.

The IPD Fund: Contribution Report

Contributions to the Special Fund For the Term of 1990 to 1991 (As of Feb. 10, 1992)

Contributors	Amount
Paid:	(US\$)
Associated British Ports, U.K.	3,000
Nagoya Port Authority, Japan	2,748
UPACCIM, France*	1,989
Port of Copenhagen Authority, Denmark	1,000
South Carolina State Ports Authority, U.S.A.	1,000
Vancouver Port Corporation, Canada	1,000
Puerto Autonomo de Valencia, Spain	1,000
Port Authority of New York & New Jersey, U.S.A.	1,000
Hiroshima Prefecture, Japan	630
Niigata Prefecture, Japan	610
Osaka Prefecture, Japan	585
Kobe Port Development Corp., Japan	584
Osaka Port Terminal Development Corp., Japan	584
Nagoya Container Berth Co. Ltd., Japan	554
Penta-Ocean Construction Co., Ltd., Japan	502
Marine Department, Hong Kong	500
Port Authority of Jebel Ali, U.A.E.	500
Port of Montreal, Canada	500
Port Rashid Authority, U.A.E.	500
Stockton Port District, U.S.A.	500
Port of Tauranga, New Zealand	500
Port Autonome de Dakar, Senegal	480
The Japanese Shipowners' Association, Japan	438
Japan Port & Harbor Association, Japan	400
Public Port Corporation II, Indonesia	300
Toyama Prefecture, Japan	291
Japan Cargo Handling Mechanization Assoc., Japan	280
Fraser River Harbour Commission, Canada	250
Port of Melbourne Authority, Australia	250
Port of Palm Beach, U.S.A.	250
Port of Quebec, Canada	250
Saeki Kensetsu Kogyo Co. Ltd., Japan	250
Ghana Ports & Harbours Authority, Ghana	250
Pacific Consultants International, Japan	238
Bintul Port Authority, Malaysia	200
Gambia Ports Authority, the Gambia	200
Nanaimo Harbour Commission, Canada	200
Port of Redwood City, U.S.A.	200
Mauritius Marine Authority, Mauritius	200
City of Muroran, Japan	155
Public Port Corporation I, Indonesia	150
Port Authority of the Cayman Islands, West Indies	100
Port Authority of Thailand, Thailand	100
Total	US\$25,218
Pledged:	
Empresa Nacional de Puertos S.A., Peru	100
Total	US\$100
Grand Total	US\$25,318

* Union of Autonomous Ports & Industrial & Maritime

Chamber of Commerce (the Association of French ports) on behalf of the Ports of Le Havre, Bordeaux, Dunkerque, Marseille, Nantes-St. Nazaire, Paris and Rouen

Report of the IAPH Observer Upon Attendance at LDC

**International Maritime Organization
25-29 November 1991**

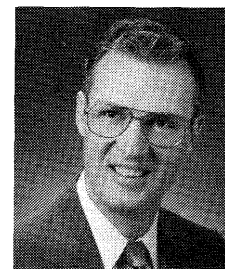
By Dwayne G. Lee
Deputy Executive Director —
Development, Port of Los Angeles
Chairman, IAPH Dredging Task Force

During the week of 25-29 November 1991, I attended the Fourteenth Consultative Meeting of Contracting Parties to the London Dumping Convention (LDC) as the IAPH observer. I was accompanied by Joseph E. LeBlanc, Jr. of the firm of Nesser, King & LeBlanc in New Orleans, Louisiana, who has served as legal counsel for IAPH at consultative meetings of the LDC. The meeting was attended by 35 Contracting Parties, 9 observer countries, 3 United Nations agencies, 5 governmental organizations, and 10 non-governmental organizations (NGO's). This report will summarize the discussions at the meeting upon agenda items of concern to IAPH ports.

1. IAPH Submission to LDC 14

IAPH submitted an information paper to the Fourteenth Meeting (LDC 14/INF.20) which set forth IAPH's views regarding the use of a precautionary approach in the management of dredged material disposal under the LDC. A copy of the IAPH submission is attached to this report as Enclosure 1. In presenting the paper, I expressed IAPH's support for use of a precautionary approach and IAPH's belief that assessment of suitability of dredged material for disposal at sea — through use of the Dredged Material Guidelines in conjunction with appropriate parts of the draft New Assessment Procedure (NAP) and the Annex III Guidelines — reflected such an approach.

There has been a growing emphasis at recent consultative meetings and in other international fora upon the prevention of pollution at the source through use of clean production methods, product substitution, and waste production audits. I called the attention of the Meeting to the limited control that ports have over the contamination of sediments in harbors and waterways and expressed IAPH's support for



Mr. Lee

the use of measures that would reduce inputs of pollutants from these other sources into the marine environment. I also pointed out that with a precautionary approach, environmental contamination should not simply be transferred to other parts of the environment through other disposal routes and economic considerations should be taken into account in selecting the appropriate disposal option. In this regard, I noted the distinct funding limitations to which most ports are subject as public agencies or bodies.

The decisions reached at the Meeting regarding use of a precautionary approach are described in Section 6 of this Report and are consistent with the positions taken by IAPH.

2. The draft New Assessment Procedure (NAP)

The Fourteenth Meeting received comments from a number of countries and NGO's upon the trial use of NAP authorized at the Thirteen Consultative Meeting. Two NGO's — Greenpeace International and Friends of the Earth International — submitted criticisms of the NAP and called for its replacement by a much stricter protocol which they refer to as the "Solid Waste Assessment Procedure" (SWAP). Detailed consideration will be given to comments upon the NAP and the SWAP at the next meeting of the ad hoc Group of Experts on the Annexes to the Convention, which is scheduled to meet at IMO in London on 10-14 February 1992.

The SWAP proposed by Greenpeace and FOEI would impose much more stringent limitations upon the ocean disposal of dredged material. It would sharply limit — and perhaps even prohibit — the use of "special care" measures for highly contaminated dredged material and could be construed to impose impossible obligations upon ports to reduce or eliminate upstream sources of pollution. IAPH will present a technical paper at the meeting of the ad hoc Group of Experts which will respond to the criticisms of the draft NAP and will offer appropriate comments upon the SWAP. This submission will be of major importance in protecting port interests in future dumping activities.

3. Revision of the Dredged Material Guidelines

The need for revision of the Dredged Material Guidelines adopted at the Tenth Consultative Meeting (Resolution LDC 23 (10)) will be the subject of discussion at the fifteenth meeting of the Scientific Group to be held at IMO on 11-15 May 1992. One of the subjects brought up at the Fourteenth Meeting was the role of the NAP in relation to revision of the Guidelines, particularly with regard to whether revision of the Guidelines should await final adoption of the NAP. Although different views were expressed, the consensus was that while the priority of the Scientific Group should be assigned to final adoption of the NAP, review of the Dredged Material Guidelines could be undertaken concurrently and should take into account appropriate components of the NAP. It will be important for ports to resist any attempt to incorporate the NAP in its entirety into the Guidelines since many provisions of the NAP are inappropriate for dredged material.

4. Update of the 1989 Survey on the Disposal of Dredged Material

I reported upon IAPH's agreement to carry out and report, in cooperation with IMO, an update of the 1989 IAPH survey on the disposal of dredged material. A separate letter

will be sent by IMO to IAPH to address this requested update.

5. Preparation of a Dredging Bibliography

IAPH, the Central Dredging Association (CEDA), and the Permanent International Association of Navigation Congresses (PIANC) have agreed to work in cooperation with IMO to establish bibliographic services on the environmental aspects of dredging. A Dredging Bibliography Work Group will be established and chaired by Chuck Hummer of CEDA. IAPH will participate in the Work Group through a representative of the International Association of Dredging Contractors (IADC). PIANC and IMO will also join in this effort. The Work Group will define the purpose, scope and proposed audience of the dredging bibliography, a proposed plan of finance, custodianship of the bibliographic materials once they are assembled, and a schedule for completion of the work. This "definition" phase will take place during the next six months.

6. Adoption of a Definition of the Precautionary Approach

One of the major agenda items at the Fourteenth Meeting was the application of a precautionary approach to environmental protection within the framework of the LDC. During the intersessional period since the Thirteenth Meeting, the IMO Secretariat retained the services of Dr. Ellen Hey, Erasmus University, Rotterdam, the Netherlands, who prepared a study entitled "The Precautionary Approach and the LDC" (LDC 14/4). Dr. Hey's paper contains a comprehensive analysis of different definitions and descriptions of the precautionary approach and identifies elements of a definition that might be used for purposes of the LDC. Additional papers addressing the role of a precautionary approach under the Convention were submitted by Greenpeace (LDC 14/4/1), IAPH (LDC 14/INF. 20), and the United States (LDC 14/INF.23). Much of the debate centered around opposing views as to the meaning of a "precautionary approach," i.e., whether such an approach requires a prohibition against dumping at sea if there is any scientific uncertainty as to the impacts from the activity or whether adequate assessment techniques exist to make reasonable determinations that, in appropriate cases, dumping at sea will not result in adverse harm to the marine environment.

Finland submitted a proposed definition of the principle of precautionary action (LDC 14/INF. 32) for consideration by the Meeting. A Working Group was established to consider development of a definition or description of a precautionary approach in the context of the Convention and to suggest the means by which such an approach could best be implemented. Joseph LeBlanc, the IAPH legal advisor, participated in the Working Group, which deliberated in four sessions over two days. Four basic themes emerged on which the Working Group was able to build a consensus. First, it was felt that inherent in the concept of a precautionary approach was recognition of the utility and limitations of science. In this respect, a precautionary approach was seen as an essential tool for policy makers in taking decisions in the face of scientific uncertainties. Second, it was recognized that the work of the Scientific Group and other bodies, as well as the decisions of the Consultative Meeting, contributed to the application of a precautionary approach. Third, there was a strong commitment to the prevention of pollution at source through

the application of clean production technologies and waste minimization and a recognition that it made more sense environmentally and economically to prevent a problem from occurring than to deal with it after the fact. Finally, there was considerable discussion of a comprehensive ("holistic") or integrated approach to waste management which, inter alia, stressed the need to assess the overall and comparative detriment to the environment when considering different disposal options.

IAPH had an active involvement in the drafting of the proposed definition of a "precautionary approach" that was adopted by the Fourteenth Meeting. A copy of the Resolution setting forth the definition is attached to this Report as Enclosure 2. It addresses the issue of scientific uncertainty in the following way:

In implementing the London Dumping Convention the Contracting Parties shall be guided by a precautionary approach to environmental protection whereby appropriate preventive measures are taken there is reason to believe that substances or energy introduced in the marine environment are likely to cause harm even when there is no conclusive evidence to prove a causal relation between inputs and their effects.

The Resolution specifies various steps to be taken by Contracting Parties in implementing a precautionary approach to environmental protection, including prevention of pollution at the source, evaluation of environmental and economic consequences of alternative methods of waste management, encouragement of full use of scientific and socioeconomic research, and undertaking measures to reduce risks and scientific uncertainty and to ensure that potential adverse impacts of dumping are minimized and adequate monitoring is provided. The meeting also directed the Secretary General of IMO to bring this resolution to the attention of the Preparatory Committee for the 1992 UNCED.

7. Amendments to the London Dumping Convention

Toward the end of the meeting, the delegate from Nauru proposed that the Fifteenth Consultative Meeting be designated an "Amendment Conference" to formally incorporate into the Convention recent actions taken by Contracting Parties to ban the dumping at sea of high level and low level radioactive waste and industrial waste and to require the phasing out of incineration at sea. This was urged as particularly timely since the Fifteenth Meeting will be the twentieth anniversary of the signing of the LDC in 1972. This was seen as an opportunity to emphasize the progress toward environmental protection that has been made since the inception of the Convention. However, because the process of amendment is so time-consuming and cumbersome, the Meeting decided to defer consideration of the issue until the Fifteenth Meeting of Contracting Parties next year.

8. Future Work Programs Under the LDC

I am attaching as Enclosures 3, 4, and 5 copies of the list of substantive items proposed for inclusion in the agenda of the Fifteenth Consultative Meeting next year (LDC 14/WP.7), the future work program of the Scientific Group for its fifteenth and seventeenth Meetings (LDC 14/WP.7), and the status of intersessional and future work on the Long-Term Strategy of the London Dumping Convention

assigned by the Thirteenth Consultative Meeting (LDC 14/13). These provide a good list of future agenda items that should be followed by IAPH.

There will also be continued interest in the adoption of numerical sediment criteria for use in determining the suitability of dredged material for disposal at sea. IAPH has taken the position that while such criteria may be useful in some contexts as a guide, there are sufficient differences among sediment and dump site characteristics that such criteria cannot be applied as a fixed standard. IAPH must continue to resist the adoption of fixed numerical standards and support application of the Dredged Material Guidelines as the preferable assessment tool.

9. Conclusion

The decisions taken at the Fifteenth Meeting reflect a growing trend under the LDC — which has been driven to a large extent by actions taken in other international fora in recent years — toward a more stringent regulation of dumping at sea, with many countries and NGO's favoring a complete cessation of all dumping activity. Although exceptions have thus far been made for "clean" dredged material, IAPH can expect greater attention to be focused upon the impacts from dredged material disposal, with efforts being made to impose greater restrictions upon dumping at sea. Indeed, in view of the recent phase-out of incineration at sea and the bans upon dumping of high level and low level radioactive waste and industrial waste, and considering the increasing support for a ban upon the sea disposal of sewage sludge, dredged material will likely be the only substance allowed to be dumped at sea. The adoption of greater restrictions upon dredged material disposal would present a major dilemma for IAPH ports who must rely upon dumping at sea for their continued operation — particularly those ports who are faced with dredged material having some degree of contamination. Past experience has demonstrated that even contaminated sediments can be safely disposed at sea at properly managed dump sites and with the use of appropriate special care measures. IAPH must continue to support and advance this view.

Many of these issues will be addressed during the next intersessional period leading up to LDC 15. Important decisions may be made regarding the final form of the NAP, whether all or part of the SWAP proposed by Greenpeace will be adopted, what measures may be required of ports to reduce pollution at the source from upstream sources, and what impact these requirements may have upon the proposed revisions to the Dredged Material Guidelines. In June, the 1992 UNCED will also be held in Brazil. The outcome of this conference can be expected to have a major impact in establishing international environmental policy for the coming decade. These are developments that must be closely followed by IAPH in its continuing commitment to the protection of port interests.

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December 1991

International Maritime Organization

**Fourteenth Consultative Meeting
Of Contracting Parties to the
Convention on the Prevention of
Marine and Other Matter
25–29 November 1991
Agenda Item 4**

**LDC 14/4
24/October 1991
Original: English**

Precautionary Approach and London Dumping Convention

Submitted by the International Association of Ports and Harbors (IAPH)

I Introduction

1.1 The International Association of Ports and Harbors (IAPH) is pleased to attend this Fourteenth Meeting of Contracting Parties to the London Dumping Convention to participate in the discussion of matters relating to the disposal at sea of dredged material. The work of the Fourteenth Meeting includes, under agenda items 4, a continuation of discussions at previous meetings relating to the precautionary approach, with consideration being given to the adoption of a definition of this approach and methods for its implementation under the Convention.

1.2 In this submission, IAPH sets forth its views as to the role of the precautionary approach as it relates to the disposal of dredged material at sea.

2 Components of a Precautionary Approach Under the LDC

2.1 IAPH has received two submissions to the Fourteenth Meeting — one by the Secretariat (LDC 14/4) and the other by Greenpeace (LDC 14/4/1) — which provide a useful summary of the work conducted in other international fora regarding the development of a working definition of the “precautionary approach” and methods for carrying out this concept in practice. Two common elements are found in virtually all proposals: (1) an emphasis upon the use of clean production methods, including raw materials selection, product substitution and clean production techniques and processes; and (2) the use of waste production audits, waste minimization techniques, and methods of recycling to further reduce inputs of contaminants into the marine environment.

2.2 Ports have limited control over the contamination of sediments in harbours and waterways. Contamination is caused by inputs from other sources, such as upstream industrial discharges, vessel spills and releases, and non-point

sources of pollution (e.g., pesticide and stormwater runoff). IAPH supports the use of any measures that will reduce inputs of pollutants from these other sources into the marine environment. This is the most effective way of controlling contamination of river and harbor sediments. Although ports are rarely in a position to exercise management or operational control over separate and independent sources of pollution and cannot impose legal or regulatory requirements of this nature, IAPH has also taken the position that where, uniquely, a port might be in a position to influence upstream activities and developments, IAPH would encourage such ports to exercise this influence and would, through its member ports, encourage national governments to increase their efforts to eliminate discharges of pollutants into waterways and oceans.

2.3 Many ports in the United States and elsewhere are also able to utilize waste minimization and recycling processes in handling their dredged material. For example, many ports in the United States attempt to reduce the amount of dredging that must be undertaken to maintain their shipping channels safe for navigation. In other cases, ports are able to find beneficial uses for dredged material, such as for beach nourishment and the construction of offshore subaqueous berms that attenuate wave forces to reduce shoreline erosion and reduce hazards to navigation. Through the application of MARPOL requirements, ports also process wastes produced by ships in their harbors which reduces future contamination of sediments that must eventually be dredged. IAPH supports the use of waste minimization methods, recycling processes, clean production techniques, and waste production audits as an integral part of the precautionary approach.

2.4 The debate about the precautionary approach has also drawn attention to competing philosophical differences about

the control of marine pollution. Some parties view the concept as prohibiting disposal at sea if there is any uncertainty as to impacts from disposal and unless there is proof that no harm will result to the marine environment. Other parties recognize that, while absolute certainty may not exist, in many cases there is sufficient scientific knowledge to allow an evaluation of the effects of disposal at sea and to make a reasonable determination as to whether this can be safely carried out. In IAPH's view, the differences between these two approaches are less pronounced when dealing with dredged material. Because the contamination of marine sediments is controlled by inputs from other sources, dredged material does not lend itself to the use of clean production techniques or waste minimization measures in the same manner as industrial wastes. There is not the same opportunity to choose between different approaches in the management of dredged material disposal. Research is currently underway in an effort to develop practical treatment technologies for contaminated dredged material. However, at present, ports are faced with an unavoidable need to dispose of dredged material under circumstances when prevention and minimization are no longer an option.

2.5 All ports require periodic maintenance dredging for continued operation. Dredging is also necessary for the construction of new channels and harbors for planned port expansions. Many ports depend upon disposal at sea of this dredged material. These ports are faced with the need to evaluate the dredged material to determine its suitability for disposal at sea. The great majority of dredged material is clean, i.e., it is free from any significant level of contaminants. Its disposal at sea at appropriately selected sites presents no threat of harm to the marine environment. Only a small percentage of dredged material is contaminated. It is necessary to assess whether this dredged material can be safely disposed at sea or whether more environmentally preferable methods of disposal are available.

2.6 IAPH has always supported the view that appropriate technical standards currently exist for evaluating the safety of sea disposal of dredged material and that such disposal, at appropriately selected and managed sites, is consistent with the precautionary approach. There has been more experience in assessing and monitoring the effects of sea disposal of dredged material than any other substance. During the past 10 years, IAPH has worked closely with Contracting Parties and with the Scientific Group in studying the unique properties of marine sediments that bind contaminants so that they are not available to the marine biota and the effectiveness of various "special care" techniques that can be used to safely dispose of contaminated dredged material. This work and submissions by other Contracting Parties have led to the development of Special Guidelines for the Disposal of Dredged Material. (LDC Resolution 23 (10)).

2.7 The Scientific Group has also developed a draft New Assessment Procedure (NAP) which is recognized as containing the technical components of a precautionary approach. (Note by the Secretariat, LDC 14/4 ¶1, p.1). The use of the Special Guidelines for Dredged Material, in conjunction with appropriate parts of the NAP and the Annex III Guidelines, provides a sound technical basis for making reasonable assessments of the impacts from the disposal of dredged material at sea. This approach is consistent with the precautionary approach, which examines whether there is reason to believe there will likely be significant or irreversible harm to the marine environment. The test must

necessarily be one of "reasonableness," i.e., whether a reasonable prediction of likely impacts can be made taking into account the limitations of scientific uncertainty. This view of the precautionary principle was recently endorsed by the Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP) in its strategy paper on the Protection and Management of the Oceans (GESAMP XX) (1990, Annex IV, II.5) (LDC 13/INF.8). In IAPH's view, any definition of the precautionary approach must allow a reasonable assessment of environmental impacts where, as in the case of dredged material, there is a sound technical basis for this to be done.

2.8 Another essential element of the precautionary approach is the principle that environmental contamination should not simply be transferred to other parts of the environment via other disposal routes. This is an important component of the precautionary approach that was recognized by Contracting Parties at the Thirteenth Meeting. (LDC Resolution 40 (13)). This concept is closely linked with the principle that there should be equal consideration of all disposal options and that the disposal option of least environmental detriment should be selected. IAPH has long supported such a holistic view of dredged material management. In many cases the sea disposal option will be the environmentally preferable disposal method for dredged material. Under those circumstances, the precautionary approach would allow disposal at sea.

2.9 There has also been a convergence of views that economic considerations must be taken into account as an important element of the precautionary approach. This is noted by Dr. Ellen Hey, lecturer in public international law, Erasmus University, Rotterdam, in the study she prepared for the Secretariat ("The Precautionary Approach and The LDC") which is attached to LDC 14/4. In considering different definitions and descriptions of the precautionary approach, Dr. Hey notes that "... (the idea generally seems to be that sound decision-making in the environmental field requires a scientific input and that, given scarce financial resources, economic considerations have to play a role when it comes to determining the measures that are to be taken." LDC 14/4. ¶2.2, p. 5. Dr. Hey also notes general agreement as to the need "to reach a balance between preventing possible these effects on the environment and the costs involved in preventing these effects: not all risk of harm or damages is to be avoided at all costs. Id. ¶2.3, p.6 Economic considerations are of crucial importance to IAPH ports. Most ports are public bodies and are subject to accountability standards of publicly entrusted funds. Cost factors must be taken into account in considering the availability of disposal options.

2.10 In discussing the possible elements of a definition of the precautionary approach, Dr. Hey points to both "the importance of having a sound scientific basis for decision-making" and "the importance of having a sound economic basis for decision-making." (Id., ¶2.5, p.7). She also notes general agreement upon taking a "holistic" approach to environmental protection and finds the following common ground in the two competing views of the precautionary approach:

- the need to protect the marine environment and human interests within the framework of a holistic approach to the environment;
- the need for a comprehensive (i.e. holistic) scientific and economic information base, neither of the ap-

proaches advocates that science should be disregarded or that money should be wasted;
— the importance of environmental impact assessment, clean technology, best available technology, and best environmental practices, and monitoring.

(Id., ¶3.5, p.9).

2.11 IAPH supports these elements of the precautionary approach. They are of fundamental importance to the decision-making process which ports face in assessing the suitability of dredged material for disposal at sea.

3 Application of the Precautionary Approach Under the London Dumping Convention

3.1 Previous meetings of Contracting Parties and the Scientific Group have recognized that the NAP contains the technical components of the precautionary approach. Dr. Hey also notes that many provisions of the Convention reflect the precautionary approach or could well be part of a policy based upon this approach. (Id., ¶4.1, p.9). It has always

been IAPH's position that the current approach for regulation of dredged material under the Convention — through application of the Special Guidelines for Dredged Material in conjunction with appropriate parts of the NAP and the Annex III Guidelines — is fully consistent with the precautionary approach.

3.2 If the Fourteenth Meeting considers the development of a more formal definition of the precautionary approach, in IAPH's view the definition should include the considerations discussed above with respect to dredged material. The development of guidelines or procedures to implement the precautionary approach should also include use of the Special Guidelines for Dredged Material, appropriate parts of the NAP, and the Annex III Guidelines in assessing the impacts from the disposal of dredged material at sea.

4. Conclusion

4.1. IAPH invites Contracting Parties to take these views into account in its discussions regarding the precautionary approach at the Fourteenth Meeting.

(Enclosure 2)

LDC 14/WP.7

Annex Draft Resolution LDC (14)

The Application of a Precautionary Approach to Environmental Protection Within the Framework of the London Dumping Convention

THE FOURTEENTH CONSULTATIVE MEETING,

HAVING REGARD to the responsibilities of Contracting Parties, especially in relation to Article 1 and 2 of the London Dumping Convention, and

AWARE of the concern regarding the health and preservation of the marine environment,

AWARE ALSO that the quantity, diversity and complexity of chemical compounds entering the environment make it difficult to determine the overall threat to the environment,

RECOGNIZING that human activities and social development need to be managed in a manner that will limit contamination of the marine environment by wastes and other matter, and thereby to ensure that the viability of marine ecosystems and the legitimate uses of the sea are sustained for the benefit of present and future generations,

RECALLING resolution LDC. 40 (13) of 2 November 1990 on the Protection of the Oceans and All Kinds of Seas, Including Enclosed and Semi-Enclosed Seas, and Coastal Areas,

RECALLING also UNEP decision 15/27 of 25 May 1989, by which the Governing Council of the United Nations Environment Programme recommended the principle of precautionary action, the Governing Council's decisions SS.II/4B of 3 August 1990 on a comprehensive approach to hazardous waste, and decision SS.II/6 of the same date for the effective global protection of ocean and coastal ecosystems,

RECALLING FURTHER the decisions taken in other international fora on a precautionary approach to environmental protection,

MINDFUL that existing pollution control approaches, under the London Dumping Convention, have been strengthened by shifting the emphasis from a system of controlled dumping based on assumptions of the assimilative capacity of the oceans, to approaches based on precaution and prevention,

RECOGNIZING FURTHER the work on the development of an improved framework for the implementation of the London Dumping Convention,

AGREES:

1 that in implementing the London Dumping Convention the Contracting Parties shall be guided by a precautionary approach to environmental protection whereby appropriate preventive measures are taken when there is reason to believe that substances or energy introduced in the marine environment are likely to cause harm even when there is no conclusive evidence to prove a causal relation between inputs and their effects;

2 that Contracting Parties shall take all necessary steps to ensure the effective implementation of the precautionary approach to environmental protection and to this end they shall:

- .1 encourage prevention of pollution at the source, by the application of clean production methods, including raw materials selection, product substitution and clean production technologies and processes and waste minimization throughout society;
- .2 evaluate the environmental and economic conse-

- quences of alternative methods of waste management, including long-term consequences;
- .3 encourage and use as fully as possible scientific and socio-economic research in order to achieve an improved understanding on which to base long-range policy options;
- .4 endeavour to reduce risk and scientific uncertainty relating to proposed disposal operations; and
- .5 continue to take measures to ensure that potential adverse impacts of any dumping are minimized, and that adequate monitoring is provided for early detection and mitigation of these impacts;

INVITES the Secretary General of the International Maritime Organization to bring this resolution to the attention of the Preparatory Committee of the 1992 United Nations Conference on Environment and Development.

LDC 14/WP.7

Annex Draft Resolution LDC (14)

Control of Transboundary Movements of Wastes for Disposal at Sea

THE FOURTEENTH CONSULTATIVE MEETING,

NOTING the aim of the London Convention to take all practicable steps to prevent the pollution of the sea by the dumping of waste and other matter that is liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea,

NOTING FURTHER that the aim of the Basel Convention is to reduce to a minimum the generation of hazardous wastes and other wastes, to control the transboundary movement of such wastes and their disposal and to ensure their environmentally sound management in order to protect human health and the environment,

TAKING into account that resolution 2 of the Basel Conference requested the Contracting Parties of the London Dumping Convention to examine the need for a review of the existing rules, regulations and practices with respect to dumping of hazardous and other wastes at sea in the light of the Basel Convention with a view to recommend any additional measures needed within the London Dumping Convention, including its annexes, in order to control and prevent dumping of hazardous and other wastes at sea,

CONSIDERING that the question of the applicability of the Basel Convention to dumping at sea arises only with regard to:

- .1 a transboundary movement of hazardous waste, as these terms are defined by the Basel Convention, or
- .2 Article 4, paragraph 6 of the Basel Convention

which provides that the export of hazardous wastes or other wastes for disposal within the area south of 60° South latitude, whether or not such wastes are subject to transboundary movement, is not allowed,

CONSIDERING FURTHER that such cases, in practice, are not frequent given that there are only few documented cases where wastes have been exported for the purpose of dumping at sea and will become less frequent in the light of resolution LDC.43 (13) calling upon the Contracting Parties to adopt individual or regional commitments to cease the dumping of industrial wastes before 31 December 1995, and therefore there is no need at present to develop any additional standards regarding transboundary movements of hazardous wastes,

RECALLING resolution LDC.11 (V) concerning the export of wastes for incineration at sea and the need for adequate controls for the disposal of these wastes, and resolution LDC. 39 (13) requesting Contracting Parties to consider terminating the practice of incineration at sea of noxious liquid substances by 31 December 1994,

CONSIDERING ALSO that Article 210 of the United Nations Convention on the Law of the Sea provides that dumping within the territorial sea and the exclusive economic zone or onto the continental shelf should not be carried out without the express prior approval of the Coastal State and that, consistent with this provision, resolution LDC.29 (10) calls on Contracting Parties exporting waste for sea disposal to provide advance notification of any intended movement of such wastes and to obtain the prior consent of appropriate national authorities in any country receiving such waste,

RECALLING FURTHER that resolution LDC.29 (10) also urges Contracting Parties to endeavour to ensure that wastes exported for a purpose other than sea disposal are not ultimately disposed of at sea unless done in compliance with the requirements of the London Dumping Convention,

RECOGNIZING that resolution LDC.42 (13) calls upon Contracting Parties to prohibit or not to permit the export of wastes for dumping at sea, particularly those wastes containing substances referred to in Annexes I and II of the London Dumping Convention, to States not Party to the Convention; and urges all Contracting Parties to the London Dumping Convention to also become Parties to the Basel Convention,

1. BELIEVES that the disposal at sea regime embodied by the London Dumping Convention and its annexes as well as the resolutions, regulations and guidelines that have been adopted by the Contracting Parties to implement the Convention ensures the control and prevention of dumping of hazardous wastes at sea and constitutes the global waste management regime regarding dumping at sea;

2. REQUESTS the Parties to the Basel Convention, in developing technical guidelines for the environmentally sound management of wastes subject to the Basel Convention, to take into account the London Dumping Convention and appropriate regional agreements on the control of marine pollution by dumping at sea, and to keep the Contracting Parties to the London Dumping Convention fully informed of the development of such guidelines; and

3. URGES all Parties to the Basel Convention to also become Contracting Parties to the London Dumping Convention.

On Customs/Trade Cooperation Against Drug Trafficking

By Alex J. Smith
IAPH European Representative

Introduction

As a follow up to previous initiatives, the Heads of Governments of the Group of Seven (G7) countries, at their economic summit held in London, United Kingdom, in July 1991, invited the Customs Cooperation Council (CCC) to promote the strengthening of cooperation between customs and international traders and carriers in order to improve the capacity of law enforcement agencies to target illicit drug movements without hindering the legitimate circulation of people and goods.

In consequence, CCC sponsored an international seminar in Brussels on 14 and 15 November 1991 to consider related issues. The Seminar was attended by delegates from 39 nations and representatives from 16 major transport associations including the International Association of Ports and Harbors.

Certain of the international transport associations present had previously agreed Memoranda of Understanding (MOUs) on cooperation between customs administrations and companies involved in the international movement of people and goods aimed at preventing smuggling, particularly drug smuggling. This seminar's *raison d'être* therefore was to establish how MOUs had been progressed at national level and the next steps to be taken in their evolution.

That objective was seen as of particular importance in so far as MOUs had only been progressed in 12 countries at the date of the seminar. It was therefore important, urgent and imperative that ways and means be found to effect their wider and effective implementation.

National delegates and international trade association representatives were given the opportunity to speak briefly on the positions and viewpoints adopted by their respective governments/associations. The IAPH Statement is attached.

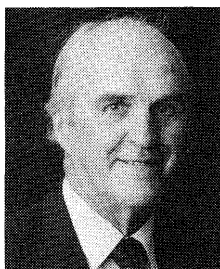
Frank and wide ranging discussions which were then held over the period of the seminar established preliminary views on a series of related questions. These questions became the subject of more detailed consideration at a working group meeting held again in Brussels during the period 16-18 December 1991. IAPH was also represented at that working group meeting. A further working group meeting will be held in February 1992 to finalise recommendations.

Relevant Questions

The questions referred to earlier, the answers to which will form the substance of the customs/trade response to G7's request are listed here under:

1. What should be the main aims of cooperation?

2. What tactical effects should cooperation have?
3. Should cooperation be encouraged through voluntary agreements such as MOU or should it be required via legislation?
4. Does ratification of the 1988 Vienna Convention imply that a country endorses the policy of customs/trade cooperation?
5. Should cooperation agreements, such as MOUs, be with trade associations or with individual companies?
6. Could a cooperation agreement in one country be made applicable in several countries?
7. Should cooperation agreements be solely with carriers or should customs establish MOUs with others involved in the supply chain?
8. If drugs are found by customs onboard a ship, aircraft, etc., who is accountable?
9. How should carriers who cooperate with customs receive special treatment?
10. If companies spend money on increasing their security systems, what benefit will there be?
11. Do customs need sanctions with which to penalise commercial operators if drugs are found?
12. Does the working group need to make recommendations about the nature of administrative sanctions applied by various customs administrations on carriers?
13. Should cooperative carriers benefit from mitigation if drugs are found on their vessels, aircraft, etc?
14. Should it be compulsory for customs administrations to have mitigation facilities?
15. In considering mitigation, should customs take into account the carrier's cooperation or failings in other countries?
16. Should the CCC take the opportunity of this initiative to present a customs/trade business statement to G7?
17. How can the CCC take this work forward after the Munich G7 economic summit?



Mr. Smith

Sequence of Events

The findings and recommendations of this customs/trade initiative will be discussed by CCC's Enforcement Committee in March 1992 and subsequently by CCC's Council in June 1992.

In the event of Council approval of the recommendations, they will be included in CCC's report to the meeting of G7's Heads of Governments at their Economic Summit meeting in Munich during July 1992.

An IAPH Commentary on the Aims and Objectives of the CCC's MOU Seminar

The International Association of Ports and Harbors (IAPH) is an authoritative world-wide association of port authorities. It comprises more than 230 regular members mostly port authorities and 111 associate members of varied business sectors related to ports. The membership encompasses more than 81 maritime countries.

IAPH objectives are those you might expect would apply to any creditable international maritime trade association. IAPH seeks to attain these through a range of activities. For our present purposes, however, it would be appropriate to highlight one of these activities namely the promotion of cooperation among ship owners, shipping lines and other concerned parties on behalf of ports and harbours to assist in the development of water-borne transportation and marine industries in general.

Ports do see themselves as natural interfaces with the

variety of organisations and activities which make direct and often indirect use of the facilities of port areas.

Please also note that I do not preclude the possibility of an interfacing role viz a viz other than maritime transportation modes. Some of the IAPH member ports for example have responsibilities for airports, road and rail haulage organizations.

IAPH has consultative status as a non-governmental organisation with a number of UN agencies and other inter-governmental organizations. One of these is the Customs Cooperation Council which is recognised by IAPH as playing a pivotal role in international trade and in the fight against the illegal trafficking in drugs.

IAPH's Trade Facilitation Committee handles procedures and documentation related to the facilitation of trade through ports and harbors, including the communication and processing of data on a local, national or international basis. It will therefore be understood that the Trade Facilitation Committee has close links with customs organisations at national level and of course with the CCC.

It was therefore entirely natural for that Committee to find itself at the sharp end of the expression of a collective port view point on what began to be seen at an expanding drug problem.

Given the rate and scale of that expansion and also what was very obviously an international maritime trade involvement, the international port community had to be seen to playing an active role in a fight against this evil traffic in drugs.

The Committee therefore embarked on a series of discussion which culminated in this exchange of a Memorandum of Agreement between IAPH and the CCC in 1987.

The four key crucial agreements were:

- 1 to strengthen further the cooperation between the two organisations;
- 2 to examine and develop together ways in which co-operation and consultation between ports and customs authorities could be improved with a view to combating customs fraud, in particular, drug smuggling;
- 3 to seek to ensure a better understanding by ports of customs authorities' tasks and problems and vice versa, thereby facilitating a productive exchange of information between the two parties; and
- 4 to consider practical ways in which the ports' personnel and their agents might assist customs authorities in the detection of customs offences, in particular those relating to drug smuggling.

A working paper outlining guidance to both ports and customs authorities was finalised and agreed by both parties in November 1989.

IAPH circulated the guidance document to member ports world-wide in November 1989. Every encouragement has been and continues to be given for the implementation of its substance.

IAPH's actions in these respects have not entirely been governed by altruism. IAPH is very outspoken in its condemnation of this evil traffic. IAPH has found it necessary however to stress the applicability of certain basic principles in any Agreement drawn up between customs authorities and member ports. These are:

- a) the prime responsibility of ports lies in the safe and expeditious handling of private and commercial vessels,

cargo and passengers;

- b) ports should not be asked to act as law enforcement entities;
- c) customs administrations are aware that some information in the possession of ports may be considered "commercially confidential", while ports should treat custom's enquiries about persons and goods as confidential. For those reasons, any information supplied either by customs administrations or ports should be treated by the recipient as confidential; and
- d) recognizing the grave consequences of drug trafficking for their own operations as well as for society in general, ports may wish to enter voluntarily into formal Agreements with customs administrations to support or implement these guidelines. Such Agreements would not remove any existing legal obligations on either part.

These basic principles effectively recognise commercial and port operational realities.

In the two years since the initial publicising efforts, it is fair to say that concrete positive results are so far limited. IAPH's assessment as to why that should be has been harshly realistic.

It is possible that the urgency of the need to deal with the problem jointly with others — as forcefully pointed out by speakers this morning — has not been as effectively accepted by IAPH members as would have been hoped. Complacency to some extent may therefore have crept into the approach which was taken.

The problem however should not be seen solely as the result of a lapse on the part of ports either generally or individually.

Ports generally are not entirely convinced that their respective customs authorities are thus far as familiar with seaport operations and their very demanding requirements as might have been wished. Nor broadly, do customs seem to be taking initiatives to acquire that familiarity.

Moreover, individual unilateral action by ports based purely on altruism can adversely affect competitive positions. Ports, understandably, will therefore be reluctant to go down that road. They do need to be assured that their collaboration with others notably customs, to combat this evil traffic is on an even-handed basis across the spectrum of the world's ports.

Please remember also that inter-port competition can be and very much is a transnational phenomenon.

Seemingly arbitrary selection by customs of a port or group of ports for special attention without the most careful explanation can be and where it has happened has been viewed with grave suspicions. The end product of such action can be counter productive.

IAPH must also take account of a widely held view amongst members that the best option is surely to eradicate the problem at source. The source for our present purposes could be construed to be the ship. We may suppose that the use of X-ray machines, sniffer dogs, close circuit television onboard and ashore may be included amongst the weaponry to be deployed. Such equipment, of course, costs money. Funding can be a major problem and must be addressed.

It would be wrong and entirely misleading were this commentary to end on a pessimistic note.

IAPH member ports are addressing the general and specific problems of this grave issue. Some, as in New Zealand and imminently, Australia are developing standard ap-
(Continued on Page 19)

OPEN FORUM

An EC-funded Study on the Response to Proposed New Container Dimensions

By **Ricardo Garcia Leandro**
Manager, IDOM Consultant, Bilbao, Spain

(This paper, originally presented to the Intermodal '91 conference, has been contributed in favor of "Ports and Harbors" by the author.)

In this presentation I will relate our experience and our conclusions concerning the opinion on the increasing size of containers. Data corresponds to each country studied and for each means of transport. The presentation is divided into three parts:

1. Description of the study
2. Positioning matrices
3. General conclusions

The origin of our study was the ISO TC104 Committee proposal for new container standards. The ISO proposal was based on **technical efficiency** arguments.

The main goal was to adapt container size to pallets more commonly used: 1200 x 1000 millimeters and 1200 x 800 millimeters. This adaptation would improve the internal stowage of the container and, in consequence, it would result in greater competitiveness of the intermodal system itself.

Another goal was to adapt the container size to the decreasing cargo density trend.

The aim of our study was to investigate the **non-technical parameters**: economic impact of larger containers, cost of infrastructural modifications required, capability of different countries to undertake those changes, cost involved in operation with different sizes, and impact of larger containers on the economies of transport and on the environment.

The proposed container was 49' x 8.5' x 9.5' and the half size 24.5' x 8.5' x 9.5'.

The project was divided into **6 modules**. Studiengesellschaft undertook the project management, the general data gathering and the investigation within Eastern and Western Europe. At IDOM, we undertook the investigation of the remaining three modules:

- USA, Canada
- Japan, Australia, New Zealand, Korea
- Developing Countries. Asia, Africa, Latin America.

The study was **performed** in one year by a team of 20 consultants. We mailed 4000 questionnaires and made 400 personal interviews in 30 countries all over the world.

We have **investigated** the impact of larger containers

not only on shipping lines but also on:

- Ports and intermodal stations,
- Road transport,
- Railway transport,
- Inland waterways transport,
- Economies of transport

The **final report** is divided into 30 country reports, 5 general reports and one executive summary.

Our conclusions are presented in the form of **scenarios**. One represents the future development of each country's intermodal system without larger containers (Scenario 1), the other with larger containers (Scenario 2). With this simple idea we have been able to distinguish the impact of increasing the size of containers from the impact of the containerization itself. The summary chart is annexed at the end of the report.

In order to present this information in a clearer manner, we have introduced variables relating each traffic development to the impact of new containers. We have prepared **5 matrices** showing relations between intermodality development and the impact of larger containers related to:

- Economies of transport
- Railway
- Road traffic
- Ports
- Global Positioning Chart.

I will centre the attention on the **Global Positioning Chart** that summarizes the position of each country taking into account all means of transport.

The **X-axis** shows the stage of intermodality development. The lower degree of development to the left and the higher to the right. The **Y-Axis** shows the attitude towards larger containers. The higher a country is placed in the axis, the greater the acceptability of larger containers is. **All countries or areas studied are placed** according to these two criteria.

Then the matrix is divided into **four quadrants**, each one can be discussed:

Quadrant I. High degree of intermodal development and high opposition towards larger containers. Japan, Australia, New Zealand, South Africa, Hong Kong and Taiwan are the countries included. This appears as a contradiction. A developed intermodal system should ask for larger containers. This **contradiction** is due to the following reasons:

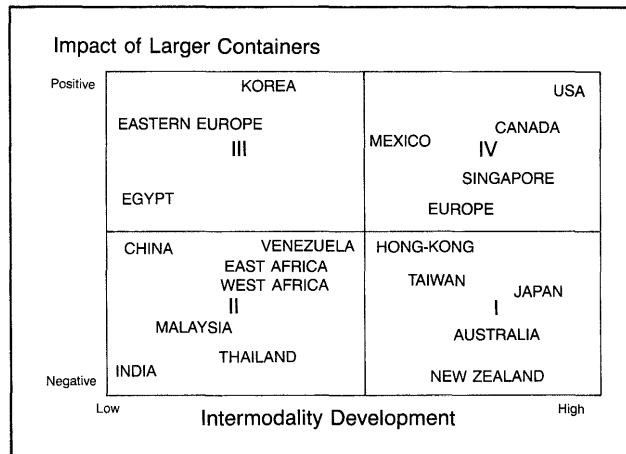
1. Some of these countries have **pallet dimensions better adapted** to the present 20' and 40'. Such is the case of Japan using pallet standards based on 1100 mm or Australia based on 1168 mm.

2. The **container traffic is not large enough** to justify the high infrastructural investment to adapt roads, ports and railways to larger containers. This is the case of New Zealand which has a sharp orography. New Zealand is the world's leader in tunnel and bridges per inhabitant. This phenomenon also occurs in part of South Africa, Australia and some European countries.

3. The third reason is also geographical. In the **island nations**, where the internal haulage is not very important, different sizes of containers are simply a distortion in ports.

Such is the case of Hong Kong, Taiwan and also Japan.

4. The **concept of intermodal transport is completely different**. This is the case of Japan and some influenced Pacific areas. The standard container for domestic transport is 12' and the most common cargo vehicle is the 5-ton lorry. This is what we called space saving distribution systems.



Quadrant II. Low degree of intermodal traffic development and **negative impact** of larger containers. Here we may include East and West Africa, Venezuela, China, India, Thailand and Malaysia. The following reasons have been detected:

1. These countries are now making a great effort for their own intermodal system development, based on present ISO 20' and 40' standards. They **have other priorities** than investing in modifying their new equipment or their new infrastructure.

2. The **level of palletization** in these countries is very low. They do not consider the change of container standards as concerning them.

Quadrant III. Low degree of intermodal traffic development and **positive impact** of larger containers. In this area we may include Korea, Egypt and Eastern Europe. The **motivation** of these countries is **more strategic** than technical:

1. The strategic situation of the country. Countries such as Egypt can easily become **distribution center** for one area. In this case, the adoption of new standards can be considered as a competitive advantage.

2. **Low cost of adaptation.** In some countries of Eastern Europe the intermodal system has to be rebuilt. The cost of the new construction is similar for any kind of standards.

3. **Sectorial benefits** for strategic industries. The change of standards implies an increase in the demand for new containers producing a positive impact on the container industry. 50% of it is placed in Korea.

Quadrant IV. High degree of intermodal traffic development and **positive impact** of larger containers. The United States, Canada, Mexico, Europe and Singapore are included in this area.

1. The most representative countries in this area are the USA and Canada. The **infrastructure modifications** necessary to adapt larger containers are **minimum**. The **palletization level is high**. The **workforce is expensive**. **Railway** and road transport **compete** in similar conditions. With all these conditions larger containers represent a real factor of competitiveness and a way of increasing intermodal transport productivity. Mexico can also be included in this

group.

2. We have also placed **Europe** inside this "positive" area. The **same reasons** explained for the USA and Canada can be applied here. But, there are also many reasons against larger container standardization; some reasons are "The benefit of larger container size will not cover the cost of equipment modification", or "the positive effect on productivity will not cover the negative effect on productivity", or "It will benefit countries with a high amount of intermodal traffic generation against others with passing-through traffic." We have considered that, **generally**, increasing the size of containers has **positive consequences** for Europe. But there is **one necessary condition not satisfied: roads and railways compete in similar conditions**. This is why we have placed Europe in the lower part of the positive area.

After describing the position of the different countries in this matrix, we have extracted some general conclusions from the analysis:

A) Larger containers are **always convenient**. Since they take advantage of the economies of scale in transport. It was clearly understood in all countries investigated that the containers proposed would fit with intermodal transport requirements better than 20' and 40' ISO standards.

B) To make use of this advantage in the most effective way a **good performance** of the intermodal system is **necessary**. Otherwise the advantage is wasted. In this sense, the competitiveness of the railway system is critical.

C) Among the intermodal systems studied we have found **two trends**:

- **Extensive System** represented by the USA or Europe.
- **Space saving system**. Represented by Japan and Pacific countries.

Presently the extensive system is used in international traffic, and is a matter of disturb for the space saving system users (In fact, the 40' is not very much used there). And the 50% of the containerized cargoes are moved by countries using the space saving system.

D) **Future**. In all these nations there is a trend of all nations moving towards **quadrant four** of the matrix:

- The developing countries are improving their intermodal systems.
- A trend towards the extensive system can be observed in countries like Japan, at least as a way to improve railway share in container traffic.

Therefore, the conclusions are focused on the idea suggested by many countries that is **not yet the best moment** to establish new standards. Only once the necessary conditions mentioned are fulfilled will it be time to establish new standards.

For the time being there are still **four critical points** in most countries:

- a) Larger containers are supposed to benefit railway transport most as it is a factor of competitiveness. Nevertheless, apart from the USA there were **no railways in favour** of larger containers, mostly because they already have financial difficulties and cannot afford investments. The other sort of reasons point out that their policy is not aggressive competitiveness.

- b) The **developing countries will not be able to afford the new investment required** for some five to ten years. This means that the investment in changing to such larger containers will be financed by a private means. As railways and, of course, roads are public in developing countries, larger

(Continued on Page 19)

International Maritime Information

WORLD PORT NEWS

Ports Canada to Hold 7th Business Conference

Ports Canada, in conjunction with the Canadian Chapter of the International Cargo Handling Coordination Association (ICHCA-Canada), will be holding its 7th International Business Conference and Exhibition at the Sheraton Hotel in Halifax, Nova Scotia, June 16-18, 1992. The theme of the two-day conference will be "Transportation in an Era of International Competitiveness."

The conference will address international transportation issues in the context of a rapidly changing competitive environment. Major factors under consideration include: increased trade and investment opportunities, the globalization of industries, technological evolution, the progress of new economic partnerships, dramatic developments in Europe, and the enormous growth being experienced in the Far East. Attention will focus on how industry will benefit from these developments through appropriate policies, strategies and new approaches.

Registration for the conference is \$395. Hotel reservations at special rates may be made directly with the Sheraton Halifax Hotel at (902) 421-1700. To register for the conference, or for additional information, please contact Mr. Bernard Bisson at Tel. (613) 975-6788, Fax (613) 995-3501.

Asia 2010: New Insights Into Region's Economies

Hosted by Australian Chamber of Manufactures and AUSTRADE, Sunday 19th to Tuesday 21st July, 1992

Hyatt on Collins
Melbourne, Australia

Asia 2010 Objectives

"Asia 2010 — Critical Forces Shaping the Asia/Pacific Marketplace" will bring together experts from both Australia and overseas to focus on opportunities in the rapidly expanding Asia/Pacific economies.

"Asia 2010" will identify the major challenges for business and organisations of this dynamic growth and will provide new insights into the Region's development.

"Asia 2010" will also provide participants with opportunities to develop individual business relationships within Australia and the Asia/Pacific Region with prospective partners and other contacts that will assist participants' business development in the region.

The Region

Asia/Pacific trade flows are growing faster than any other comparable world region. By the end of this century trade in the Region will grow from 23 percent of world trade to over 30 percent.

Growth rates in the Region will be the highest in the world over the next three decades, surpassing both North America and the European Community.

Australia's position is unique in the Asia/Pacific Region. Australia is geographically close to the Region and its economic, business and political ties make an ideal location for managing regional operations from an Australian base.

Over 70 percent of Australia's existing trade flows are with countries which border the Pacific Ocean.

For further information, please contact:

Conference Australia
GPO Box 1469N Melbourne Victoria
3001 Australia
Telephone: (03) 698 4210
Facsimile: (03) 699 4863

10th Int'l Harbour Congress at Antwerp

Organized by Royal Flemish Society of Engineers, Technological Institute — Section on Harbour Techniques Antwerp, 15 — 19 June 1992

Session 1: Environmental aspects in port planning and construction.

Session 2: Port in developing countries.

Session 3: Renovation.

Session 4A + 4B: Innovative and

unconventional techniques in port structures.

Session 5: Maintenance of port structures — planning and organization.

Workshop: Mathematical & Physical Models for the Design of Harbour Constructions.

Registration

The registration fees are as follows:

	before	after
	1.5.92	1.5.92
participants/authors	35000 BEF	40000 BEF
accompanying persons	15000 BEF	18000 BEF
post congress tour	15000 BEF	15000 BEF
not included: V.A.T. 19%		

The registration fee includes a copy of the proceedings, refreshments during the breaks, lunch on Tuesday 16.6., lunch during the technical visits and participation in all social activities including the banquet.

For further information, please contact:

Congress Office:
Ingenieurshuis
10th International Harbour Congress
Desguinlei 214 B - 2018 Antwerpen
(Belgium)
Tel. + 32/3/216 09 96
Fax. + 32/3/216 06 89

Conference on Safety In the Port Environment

*Emergency Response to Chemical Accidents in Port Areas
Bremen/Germany, 5 to 8 October 1992*

As the Bremen Senator of Ports, Shipping and Transport, I should like to recall that, at the closing of the First International Conference on Safety in the Port Environment in September 1990, all participants expressed the wish that a further conference be held within the next two years. They felt that the First Conference had done no more than touch upon many of the subjects and that the problems deserved much deeper investigation, treatment and discussion.

It therefore gives me great pleasure to announce that the Second Interna-

tional Conference on Safety in the Port Environment will be held in Bremen in October 1992 in close co-operation with, and supported by, the German Federal Ministry of Transport and the International Maritime Organization (IMO).

The Second Conference has been devoted to the present state of the art of Emergency Response to Chemical Accidents in Port Areas and will cover, in particular:

- Accident experience with dangerous chemicals;
- International conventions and activities;
- Recommendations on the safe transport, handling and storage of dangerous substances in port areas;
- Implementation of preventive measures;
- Equipment for emergency response;
- Contingency planning and training;
- Accident mitigation and combating, including financial and economic costs;
- Liability and compensation.

These topics have been selected because IMO has already initiated work to develop an appropriate instrument to expand the scope of the International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC Convention) to apply, in whole or in part, to pollution incidents by hazardous substances other than oil.

During the last day of the Conference, a technical visit will be organised.

Further information on the Conference will be mailed to you as it becomes available.

Port and Transport Consulting Bremen GmbH (PTC)

P.O. Box 107965
D 2800 Bremen 1
Attn: Mrs. Brigitte Mühlbrandt
Phone: 421/398805
Fax: 421/398902
Telex: 24484027 BL D

Conference on Maritime Liability in the '90s

Puerto de Santa Maria (Cadiz) and Sevilla — EXPO '92
14-20 June, 1992

Organized by: The Spanish — Portuguese — American Institute of Maritime Law.

In celebration of: The fifth centennial of the discovery of the Americas.

Official Agency:

Ultramar Congress

C/Goya, 54 — 28001 Madrid

Telephone: (1) 435 72 70

Telefax: (1) 431 61 75

Official Carrier:

Iberia, Lineas Aéreas de España

Place of Conference and Accommodations:

Hotel Monasterio de San Miguel
Puerto de Santa Maria

IMO: FAL Amendments Enter Into Force:

A number of amendments to the Convention on Facilitation of International Maritime Traffic (FAL), 1965, entered into force on 1 September, 1991.

The amendments were adopted in May 1990 by IMO's Facilitation Committee. The Facilitation Convention helps to simplify formalities and other procedures involved in maritime trade, by reducing the "red tape" that

often causes unnecessary delays.

It contains standards and recommended practices which are intended to harmonize procedures around the world. The amendments add new recommended practices to this list dealing with improving security and narcotics control through the use of automatic data processing, and policies to adopt when dealing with stowaways. Some existing recommended practices have also been amended. They deal with the improvement of traffic flow arrangements in ports; the improvement of baggage retrieval facilities; the needs of elderly and infirm passengers; and the requirements of passengers with impaired hearing or vision.

A new section is added to the Convention dealing with the establishment of national facilitation committee. Governments are encouraged to do this so that there is a national body to coordinate measures between Government departments, agencies and others responsible for facilitation work.

The Facilitation Convention has been ratified by 63 countries.

INTERTANKO on Financial Evidence Rules

The U.S. House of Representatives Merchant Marine and Fisheries subcommittee on Coast Guard and Navigation will conduct oversight hearings in Washington on 6th November to discuss the Notice of Proposed Rule-making on Certificates of Financial Responsibility recently published by the U.S. Coast Guard.

INTERTANKO's vice-chairman, Andreas K.L. Ugland, will testify at the hearings on behalf of INTERTANKO.

An EC-funded study—

(Continued from Page 17)

containers will not be able to come into a door to door traffic within these countries for a long time.

c) Some organizations within countries suggested 50' instead of 49'. As this fits better with present ISO length standards, 20' and 40'. Psychologically the acceptance of 50' and 25' is better than 49' and 24.5' and the pallet cargo capacity is identical for both sizes. **The 50' container appears as a limit in length.**

d) **Width is the major problem in all segments studied.** Problems caused by length affect safety. Most can be solved by additional safety measures which are not costly. The half

foot increase in width causes enormous modification requirements in vessels, terminals and railways.

On Customs/Trade Cooperation—

(Continued from Page 15)

proaches under the aegis of local MOU's. Others, for example, as in Canada and Singapore are working directly with their enforcement agencies to good effect.

Port efforts are effective when properly channelled. It is therefore IAPH's intention to absorb and react positively to the conclusions of this seminar. By so doing, we will hope to achieve greater success in what we are quite certain is a battle to be won through our joint efforts.

In its statement, INTERTANKO brings a direct and simple message: The continued safe and efficient flow of crude oil and petroleum products to the United States is very much at risk in the near term. The cause of this risk is the severe strain placed on existing marine insurance facilities and INTERTANKO members by the liability and financial responsibility provisions of the Oil Pollution Act. Traditional sources of marine insurance coverage are simply inadequate to meet the requirements of federal and state law. Unless the various sectors of the international maritime community, the Congress, and the Coast Guard can find effective solutions to this impending crisis, we seem likely to witness a marked decline in the quality and volume of tanker service to the United States. Such a decline will have supply and monetary effects that every American will feel at the gas pump and in his utility bills.

Tanker owners are not able to fulfil the new requirements for providing evidence of financial responsibility. Insurers will not subject themselves to unlimited liability, direct action and waiver of policy defences. No independent tanker owner can meet the self-insurance requirements.

INTERTANKO makes the point in the submission that its major concerns cannot be resolved without active involvement by the U.S. Congress, and suggests that a mandatory insurance system for ships of all types, with high liability limits and with the involvement of cargo owners and the U.S. government could be a solution. Cargo owners have for many good reasons traditionally participated in sharing the costs of clean up after tanker accidents, not least as it is the cargo which after all is the polluting agent and as the shared responsibility works as an incentive for cargo owners to secure quality transportation.

INTERTANKO applauds in its submission the efforts undertaken by the Union of Greek Shipowners and the Norwegian Shipowners' Association for their efforts to secure workable governmental and cargo participation in solving the insurance capacity problem. It also refers to the method found in the Alaskan oil trade as another possible option.

New Publications

Massive Growth Forecast For Container Trades

A major new study* from Ocean shipping Consultants forecasts further massive increases in European container trade volumes in the 1990s. Recent years have seen container port volumes in the front rank European port ranges expand at unprecedented levels. The pace of these developments in coming years will be directly related to developments at the macro-economic level and in turn will directly influence required port/terminal and container shipping demand.

The importance of macro-economic conditions on the future of box trade has been repeatedly illustrated since the 1970s and the study explores and identifies likely demand levels under two main scenarios. At the centre of the developments is the degree to which economic advantages flow from the unification of the EC countries and recent agreement with EFTA nations. Of equal importance to demand development will be the pace of reform in eastern Europe. Developments are identified on a regional and national basis to present estimates of European container flows.

Case 1 works through the effects of a more limited improvement in the EC economies together with continuing uncertainty in the east of the region. Under these conditions the scope for rapid development is more limited.

Case 2 assumes rapid integration of the EC economies after 1992 together with further reform in the east. In the latter markets, although further restructuring is inescapable the upside for later trade growth is very strong.

Container Port Volumes to 2000

Under Case 1 conditions it is forecast that total European container port volumes will increase by around 31 percent over 1990 levels to reach a total of some 29.8m TEU. Continued very strong growth is indicated under these conditions with a total estimated volume of around 37.6m TEU by 2000.

The more rapid economic integration and eastern growth levels summarised in Case 2 indicates a sharper develop-

ment in total box volumes, with a growth of around 36 percent estimated to 1995. Beyond that date further rapid growth will be recorded with demand approximating 41m TEU by the end of the study period.

Whilst both cases (which constitute the effective limits of possible development) generate significant increases, the structure of growth differs quite sharply. Table 1 presents these forecasts analysed in terms of the type of traffic. Both feeder and deepsea traffic are by definition related to European trade with other regions. In both cases strong demand growth is forecast, although market share will decline sharply under Case 2 conditions. Inter-European traffic is seen to be the most dependent upon differing development. Obviously, greatest demand growth is forecast under the rapid integration case, with a growth in demand estimated at some 41 percent to 1995, with an even more impressive growth level of 66 percent estimated for the 1995/2000 period. Even under more limited conditions a strong level of demand growth is anticipated for European trade.

The study includes a detailed evaluation of the historic and forecast structure of trade on a sub-regional basis and the overall development of demand by European zone is summarised in Table 2. As is to be expected each regional market is set to record great improvement. Within this total the greatest proportional increases are anticipated for the Mediterranean regions, where underlying GDP development is set to be more rapid and greater scope is noted for increased containerisation.

Considerable opportunities are identified and even in the more peripheral EC regions, such as the Atlantic port zone, further steady expansion is forecast. As is also to be expected the North Continent zone — which includes all major box terminals in the Le Havre-Hamburg range — will remain the dominant zone, with total demand increasing by around 70 percent to reach a total of around 16.7m TEU in 2000.

European Container Shipping Demand

By focusing on European trade (inter-Europe and feeder shipments) the study presents an analysis of the de-

Table 1
Forecast European Container Port Throughputs by
Type to 2000
('000 TEUs)

	1988	1989	1990	1995-I	1995-II	2000-I	2000-II
Inter-Europe	5,538.5	5,889.6	6,180.7	8,283.1	9,129.8	11,055.0	13,746.2
Feeder	2,792.9	2,962.4	3,041.0	4,160.5	4,141.0	4,920.0	4,908.0
Deepsea	11,999.5	12,826.7	13,500.4	17,338.4	17,689.2	21,660.0	22,200.8
Total	20,330.9	21,678.7	22,722.1	29,782.0	30,960.0	37,635.0	40,855.0

Source: Ocean Shipping consultants

Table 2
Forecast European Container Port Throughputs by
Region to 2000
('000 TEUs)

	1988	1989	1990	1995-I	1995-II	2000-I	2000-II
UK/Ireland	3,915.7	4,204.3	4,408.5	5,525.0	5,995.0	7,115.0	7,890.0
Scandinavia/Baltic	1,940.3	1,990.6	2,002.0	2,703.0	2,850.0	3,405.0	3,805.0
North Continent	8,776.6	9,444.6	9,879.3	12,625.0	12,870.0	15,765.0	16,715.0
Atlantic	1,043.3	1,055.0	1,110.0	1,554.0	1,645.0	2,085.0	2,275.0
West Mediterranean	3,430.5	3,583.9	3,877.3	5,350.0	5,450.0	6,590.0	7,250.0
E Med./Black Sea	1,224.5	1,400.3	1,445.0	2,025.0	2,150.0	2,675.0	2,920.0
Total	20,330.9	21,678.7	22,722.1	29,782.0	30,960.0	37,635.0	40,855.0

Source: Ocean Shipping Consultants

Table 3
Forecast Container Shipping Demand, Trade and Shipping
Distance to 2000

	Shipping Demand		Trade		ASD	
	mTEU/miles	index	'000TEUs	index	n miles	index
1990	2,044.39	100	4,611.4	100	443.0	100
1995 — Case I	2,867.75	140	6,211.8	135	462.0	104
1995 — Case II	3,041.23	149	6,635.4	144	458.0	103
2000 — Case I	3,676.31	180	7,987.2	173	460.0	104
2000 — Case II	4,311.16	211	9,327.1	202	462.0	104

— Average Shipping Distance

Source: Ocean Shipping consultants

velopment of shipping demand since 1980 and forecasts this demand out to 2000. For the historic period demand has recorded an increase of some 180 percent to reach a level of some 2bn TEU/miles in 1990. By far the greater part of this increase is the result of greater trade volumes but an increase in average shipping distance of some 22 percent has also exaggerated this trend.

This rapid increase in demand is forecast to continue, with a growth of between 40/49 percent anticipated to 1995 and an increase of between 80/110 percent anticipated for the entire forecast period.

The study goes on to consider the

indicated level of further shipping capacity that will be required to handle this demand. In addition to presenting forecast shipping capacity needs the study analyses the likely market share of fully-cellular, semi-container and ro-ro vessels in the forecast market. With the emphasis seen to be firmly in favour of fully-cellular and ro-ro tonnage at the expense of older semi-container vessels.

By analysing current productivity levels and current fleet capacity an indication of total shipping investment needs is derived. For Case 1 it is estimated that required shipping investment to handle perceived increases in European traffic is in the order of

\$6.27bn, whilst under more rapid demand growth conditions the corresponding investment requirement is placed at some \$7.38bn.

In general terms anticipated demand will have far-reaching effect on both the shipping and port sectors. Massive investment must be channelled to meet this demand if total trade volumes are not to be constrained by lack of infrastructure capacity.

The study — which runs to over 140pp — presents detailed analyses of demand development and analyses the effect of these trends on port and shipping investment needs.

* *European Containerisation to 2000* — an analysis of seaborne trade, port and shipping demand

available from;

Study Sales Department

Ocean Shipping Consultants Ltd.

Ocean House, 60 Guildford Street, Chertsey, Surrey KT16 BE, England

Tel: 0932 560332 (international + 932 560332)

Fax: 0932 567084 (international + 932 567084)

Telex: 94070113 OSCL G

Price £435-00 (UK) or \$780-00 (all overseas sales).

Strategy and Profitability in Global Container Shipping

The relative profitability of the world's main container trades is poised to shift radically in the next five years, as the beneficial effects of capacity regulation across the conference/independent divide become apparent. Carriers on the transpacific route, the world's largest container market, are set to reverse the downward drift in eastbound rates and recoup some of the multi-million dollar losses which had been accumulated in the late 1980s. For this they will have to thank the pioneering Transpacific Stabilisation Agreement (TSA) which, despite manifest imperfections, is nevertheless the only mechanism that the industry has yet developed to reproduce the authority and discipline formerly provided by conferences.

After a largely ineffectual initial phase, the capacity restraint introduced by the TSA is set to lead a recovery in freight rates which, allied to a period of modest growth in cargo volumes,

should make the transpacific trade the most profitable of the axial east-west routes in the next few years with annual service results registering a \$40 million improvement by 1995 compared to their unsatisfactory 1991 level. For operators in the presently booming Europe-Far East trade and in the contrastingly depressed transatlantic market, though, prospects for the first half of the 1990s are distinctly less favourable.

This is just one of the conclusions arrived at in a new Drewry Report — "STRATEGY AND PROFITABILITY IN GLOBAL CONTAINER SHIPPING" — which analyses the operations, performance and prospects in the world container market. The current westbound cargo bonanza from the Far East to Europe has led to a major upturn in profitability, but has coincided with a radical restructuring of the major consortia on the trade which, logically, will make it very difficult to reproduce any TSA-style agreement while carriers are establishing a new pecking order and fighting for market share. As a consequence the infusion of new slot capacity and continuing weakness in European export volumes (plus the probable entry to the trade of Hyundai) are likely to hit vessel utilisation and profitability, which could show an adverse swing of up to \$70 million per annum for each nine-ship service from a 1991 high point to the nadir in 1995.

In the transatlantic market, already demoralised carriers are faced with the seemingly inevitable arrival of Hanjin (despite repeated denials) within the next two years, which will almost certainly lead to even worse trading conditions in the short term. The scale of losses experienced by carriers in this market for most of the last decade seems destined to be repeated in the first half of the 1990s, and will inevitably produce a number of casualties. At the moment many operators are probably hanging on (as they have been for several years) in the hope that the competition will disappear first, but the period to 1995 promises such financial haemorrhaging that only those with very deep pockets, very cheap ships, or very supportive shareholders/governments will be able to stay in the game. Though there is light at the end of the tunnel, operators on the North Atlantic should not rely on its being anything other than a very long tunnel indeed.

Forecast Vessel Utilisation on East-West Trade Routes (%)

	Transatlantic		Transpacific		Europe-Far East	
	E/B	W/B	E/B	W/B	E/B	W/B
1990	58.7	60.5	72.8	57.4	53.9	82.1
1991	62.2	54.4	71.7	60.7	53.1	85.7
1992	62.8	56.4	76.1	63.8	51.3	84.2
1993	62.6	56.3	77.9	64.9	50.2	82.1
1994	62.7	56.4	78.5	65.1	50.0	81.4
1995	64.7	58.5	79.1	65.5	49.0	77.6
1996	66.8	60.8	79.3	65.5	51.1	78.7

Excluding military and relay cargoes
Sources: Drewry Shipping Consultants Ltd.

The Failure of Global Market Strategies

The Report traces the development of the ambitious corporate strategies of the 1980s which have produced an industry that is second to none in its quality of service and technical accomplishments, but which has acquired a reputation for ill-considered economics in the process. Over-investment in assets has produced a growing surplus of container space that has been exacerbated by advances in US intermodalism that have markedly shortened average voyage distances on the key transpacific route. In turn this has promoted an under-pricing of services that has led, despite inexorable traffic growth, to a prolonged downturn in industry profitability as the struggle for market share has taken precedence over the bottom-line.

However, the solo strategies which characterised the 1980s have recently undergone a major re-evaluation as shareholder impatience with never-ending deficits has finally reached breaking point and forced many "lone wolves" such as Maersk, Sea-Land and APL into a new (albeit limited) phase of co-operation and vessel sharing. The wave of agreements that hit the transpacific trade in 1990/91, has so far largely passed by the new breed of Asian giants — Evergreen, Hanjin, Yang Ming, Hyundai and now Cosco — who seem almost impervious to the financial difficulties afflicting the higher cost, Western ship owning nations.

Revenues and Costs — Never the Twain Shall Meet

One of the major causes of unprof-

itability in container shipping has been the separation of revenues and costs. The growth of intermodalism in North America, and the consequent development of through rates, has meant that carriers have lost much of their ability to recoup additional service costs through rate adjustments and surcharges. The revenues of container shipping have simply ceased to reflect its costs, while the mounting burden of fixed service costs has encouraged the adoption of marginal pricing with calamitous results for freight rates. Carriers have virtually given away the financial benefits of new, larger vessels; of faster port working; and of double-stack intermodal technology in lower prices, and now threaten to do the same in the value added logistic market. Without a rate discipline which prices services more accurately, the promised land of profitability will continue to prove elusive. The continued regulatory pressures on conferences and stabilisation agreements (now at their most intensive level ever in the USA, Europe and the Far East) are certainly not helping carriers to organise themselves effectively to achieve this pricing discipline.

Empty Containers — the Achilles Heel of Container Shipping

Modern container shipping services are provided at very high levels of efficiency and very low unit costs. The profitability squeeze of the 1980s has, belatedly, produced a much leaner industry which exudes operational and organisational competence, but one major problem area for the industry is the cost of empty container movements. Too many boxes are deployed in world container trades, and too many empty container moves are incurred. On a global basis, an estimated 13.5

million teu of empty container handling operations were performed at ports during 1989, costing carriers something in the order of \$1.5 billion in terminal costs alone. The single major commodity carried in containers is fresh air — good news for terminals, lessors, hauliers and ports, but potentially ruinous for carriers. Equipment management will be one of the major operational issues in the 1990s as carriers pay more attention to the whole range of indirect costs — costs which are indirect in name but have a direct effect on bottom-line profitability.

"Strategy and Profitability in Global Container Shipping" is published by Drewry Shipping Consultants Ltd, as part of a series of occasional detailed market surveys. Individual copies of the Report are priced at £295.

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The London Dumping Convention: The First Decade and Beyond

Sales number: IMO-532E. Price: £28.00 (add £8.00 for airmail).

This publication presents a consolidated text of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (London Dumping Convention), and its annexes; a comprehensive overview of the origin, scope, provisions and implementation of the Convention; interpretations of the most important features of the Convention; 33 annexes containing a wide range of background material; and a brief overview of the decisions taken at the Thirteenth Consultative Meeting of Contracting Parties to the Convention (October/November 1990). Illustrated (in colour). (IMO News)

- mailbox service — the electronic storing and forwarding of documents;
- protocol conversion, which allows organizations using different protocols to communicate with one another;
- message translation, in which electronic messages will be translated into a format which can be read and used by the computers of different participants of the system;
- multiple levels of security;
- billing and control, and;
- ongoing, 24-hours-a-day support.

In its initial stages EDI will cover more than 58 percent of containerized cargo moving through the Port of Halifax. Twelve firms and organizations — five container shipping lines, the Halifax Port Corporation, both Ceres and Halterm marine container terminals, Canadian National Railways, one customs broker, Canada Customs and Agriculture Canada — will participate.

A second phase of the project — to define the EDI target environment — will develop a longer-term vision for the new system at the port. This initiative will help EDI-PORT Atlantic ensure that future EDI development is undertaken in an efficient, coordinated manner, optimizing the benefits of new technology while maintaining compatibility with developments in the international maritime community.

The Port of Halifax EDI project is one of several important initiatives aimed at reducing costs and improving service to container shipping lines and other users and stakeholders of the port.

(Port of Halifax)

Committed to Integrity Of North Fraser

The real proof of the NFHC's commitment to the environmental values and integrity of the North Fraser rests with the North Fraser Harbour Environmental Management Plan.

"It's a four-part plan we developed jointly with the federal Department of Fisheries and Oceans (DFO) and put it into effect in 1988," said Mr. George Colquhoun, NFHC's Port Manager. "It was the culmination of nearly three years of work preparing the plan."

According to Mr. Colquhoun, there are four main components to the plan.

"The shoreline habitat classification

The Americas

Sophisticated EDI System at Halifax

A comprehensive electronic data interchange (EDI) project has been launched at the Port of Halifax under the direction of EDI-PORT Atlantic Inc. EDI, the computer-to-computer exchange of business information and documents, will result in lower costs, greater efficiency and better service for all participants of the transport chain. EDI-PORT Atlantic, an organization of port users and suppliers of services, is committed to developing and promoting EDI in Halifax. Among EDI's demonstrated benefits and advantages are:

- significantly reduced administrative costs through the elimination of paper documentation;
- reduced errors and duplicated work;
- more accurate and efficient means to book, track, pay for and clear cargo;
- easier, instantaneous access to more accurate cargo information; and
- fewer delays and increased speed in the movement of cargo through the port.

The Port of Halifax EDI project will further strengthen the Port's competitive position in handling container traffic. The system, which is expected to be fully operational by spring, 1992, will be the most advanced of its kind in Canada and one of the most comprehensive in North America.

The Halifax EDI was designed with active input from users of the port. It will encompass the following import and export transactions:

- Reservation booking
- Confirmation of booking
- Shipping information advice
- Canadian Customs information
- U.S. Customs advice
- Customs release
- Status details reply
- Equipment interchange release
- Terminal operations activity gate arrival (Ocean)
- Arrival notice
- Railway manifest

The project makes use of a value added network (VAN) to facilitate the exchange of messages. GE Information Systems (GEIS), a division of General Electric, has been chosen as the VAN for the project. GEIS, recognized as the world leader in EDI, already supports the daily needs of more than 10,000 companies around the world. Among the VAN services to be provided by GEIS are:

program is a critical part of the plan," said Mr. Colquhoun. "It was originally developed by the DFO, after a joint shoreline habitat survey conducted in the summer of 1986. The program rates the environmental value of the North Fraser foreshore and categorizes the foreshore on a sensitivity rating."

"Another part of the plan is the fish habitat compensation bank — a first in Canada," said Mr. Colquhoun. "Under this program, habitat created by the NFHC will be made available to developers meeting certain conditions. This will help ensure that future development will not result in any further loss of habitat, and in fact, may lead to a net gain in the base habitat in our harbour," he said.

Mr. Colquhoun said that under the plan, specific site assessment procedures for developers in the North Fraser Harbour will be developed to improve project planning and design to reflect the foreshore habitat needs.

"The fourth part of the plan involves an overall cooperative management program with harbour stakeholders involved with the North Fraser to meet the common goals of habitat and water quality improvement," he said.

"It's an ambitious plan," said Mr. Colquhoun, "and we are honoured to be a part of it along with the Department of Fisheries and Oceans and other federal and provincial government agencies. It's really a first for Canada and is being used as model for the Fraser River Harbour Commission now also. Both DFO and the NFHC have received international recognition for the kind of environmental sensitivity this plan exhibits."

Gold-Headed Cane to Captain Vadim Belyshev

The President and Chief Executive Officer of the Port of Montreal, Mr. Dominic J. Taddeo, presented the famous Gold-Headed Cane to Captain Vadim Belyshev, master of the M/V *Khudozhnik Saryan*, the first ocean-going vessel of the year to reach port without a stopover.

The Port of Montreal has been open for business 12 months a year since January 4, 1964, when the Danish vessel *Helga Dan* inaugurated year-round navigation in Montreal.

The first arrival of 1992, the M/V



Mr. Dominic J. Taddeo (right), President and Chief Executive Officer of the Port of Montreal, congratulates the winner of the Gold-Headed Cane, Captain Vadim Belyshev, Master of the Khudozhnik Saryan.



The M/V Khudozhnik Saryan, first ocean-going vessel to arrive in the Port of Montreal in 1992.

Khudozhnik Saryan, is a Russian Federation carrier. Owned and operated by Balt Canada Line, it is represented in Montreal by Morflot Freightliners Ltd., steamship agents.

The ship came from the port of Bremerhaven in Germany and opened the navigation year in Montreal by crossing the Port's limits at Sorel at 12:49 a.m. on January 1, 1992. It then proceeded to tie up at Maisonneuve Terminal, Berth 66, where its cargo of 510 containers was handled by Termont Terminal Inc., terminal operators and stevedores.

The M/V *Khudozhnik Saryan* is scheduled to leave January 7 for Liverpool (England), Rotterdam (Netherlands) and Bremerhaven before returning to Montreal.

The happy recipient of the Gold-Headed Cane, Captain Belyshev, was born in Ivanovo, Moscow, in 1944. He went to sea for the first time at age

23 and attained the rank of captain in 1978. He has been with Balt Canada Line since 1985.

Captain Belyshev won the Gold-Headed Cane for the first time, but it is the 11th time that the master of a Russian vessel has captured the award since the beginning of year-round navigation in 1964.

The Port of Montreal also paid tribute to the pilots of Saint-Laurent Central Inc. who brought the M/V *Khudozhnik Saryan* safely into port. Pilots Pierre Bellisle and Yves Desrochers were each presented with wine goblets.

Before an audience of dignitaries, among them the Consul General of the Russian Federation in Montreal, Mr. Evgueni Kotchekov, Mr. Taddeo spoke of the reasons that still motivate the port to perpetuate the tradition of the Gold-Headed Cane.

Mr. Taddeo stated: "Now, in addi-

tion to honouring the master of the first ocean-going vessel of the year, the Gold-Headed Cane also reinforces the importance of year-round navigation to Montreal.

"The Gold-Headed Cane not only acknowledges the experience, training and sound judgment of the officers and crew who bring the first ocean-going vessel safely into port each year, but it also pays tribute to the imagination, ingenuity and determination of those Canadians who have made winter navigation a reality.

"For many, it still comes as a surprise to learn that we do not close for the winter. The fact that the Port of Montreal is a vibrant, bustling hub of domestic and world trade year-round is one we cannot stress enough."

In fact, winter navigation is extremely important to the Port of Montreal, which handles approximately one-quarter of its annual volume of general cargo in the winter months. Without the container traffic loaded and unloaded at its docks in January, February and March, the Port of Montreal would not have been able to attain its current status as Canada's number one container port and a leader on the North Atlantic.

The Port of Montreal generates an economic impact of approximately \$1.2 billion per year for the Greater Montreal region and Quebec and creates some 14,000 direct and induced jobs.

Vancouver to Expand Container Terminal

The Vancouver Port Corporation (VPC) announced the awarding of a contract to improve and expand its Centerm container terminal.

The \$5.8 million contract was awarded to Dilcon Constructors Ltd. of North Vancouver to build a 235-foot (72-metre) westward extension of the Centerm dock. The extension project precedes the installation of an additional container crane — the fourth for Centerm — scheduled to be operational in early spring 1993.

The terminal upgrade programme will enable Centerm to service two post-panamax sized vessels simultaneously. The expansion project will also create an additional two acres (.8 hectares) of storage space for containers at Centerm. The total programme, in-

cluding crane purchase and dock extension, carries a contract value in excess of \$12 million.

In announcing the terminal expansion contract, the Port Manager and C.E.O. confirmed VPC's determination to compete in the West Coast container business. Captain Norman Stark said the Centerm upgrade "...will send another signal to our customers across the continent and around the world that we are committed to ongoing improvements to capacity and container handling efficiency in the Port of Vancouver."

Work on the dock extension project began November 25, and includes dredging, filling, dock construction and paving. Completion is targeted for July 1992.

To date, the port's container tonnages are running 21 percent ahead of last year's totals.

Mr. Milroy Elected North Fraser Chairman

Mr. John Milroy, a Senior Business Consultant, has been elected to the Chair of the North Fraser Harbour Commission.

Mr. Milroy replaces Mrs. Irene Frith who had been Chairman since 1986. In stepping down, Mrs. Frith stated she had enjoyed her stay but felt it was time for a change. Much had been accomplished, a new strategic plan put in place, and Mrs. Frith looks forward to assisting in the initiation of the future direction of the Commission.

The North Fraser Harbour Commission's mission is to provide innovative and responsible leadership in the administration of the North Arm's river highway and to ensure that all development enhances the economic opportunity, recreational potential and environmental integrity of the area.

Dredging Underway At North Carolina Ports

Annual maintenance dredging is underway to ensure that authorized project depth is available for cargo vessel navigation at both North Carolina State Ports Authority deepwater ports of Wilmington and Morehead City.

Dredging of portions of the 40-foot project at Wilmington Harbor began

in December, and work on portions of the 38-foot project is scheduled to begin in January. This dredging, contracted by the U.S. Army Corps of Engineers, is scheduled for completion by the end of March.

A separate project to dredge the ocean bar of Wilmington Harbor begins in January with completion also scheduled by the end of March.

The North Carolina State Ports Authority has determined the need to deepen both the 40-foot and 38-foot projects at Wilmington Harbor. To that end, the U.S. Army Corps of Engineers has completed the reconnaissance study which indicates a federal interest in the project and a favorable benefits-cost ratio. The terms, conditions and cost of the feasibility study phase for this project are being negotiated by the U.S. Army Corps of Engineers and the non-federal sponsor, the State of North Carolina, under the auspices of the Division of Water Resources, NC Department of Environment, Health and Natural Resources.

At Morehead City, annual maintenance dredging began last month to achieve authorized project depth of 40 feet MLW. Completion within 90 days is expected.

Awaiting U.S. congressional authorization and funding is a new project at Morehead City to deepen the federal channel from 40 to 45 feet MLW. The estimated project cost of \$12 million would be shared by the State of N.C. with the non-federal share estimated to be \$4.2 million.

Port Economic Impact Studies in AAPA Library

In preparing a resource base to support its Public Awareness Campaign, AAPA is seeking to bolster its library holdings of port economic impact studies. These holdings are listed below.

Port/Ports	Year Published
Alabama State Docks	1988
Albany	1980
Baltimore	1987
Brunswick (GA)	1989
Canaveral Port Authority	1989
Cleveland	1979
Duluth/Superior	1986
Georgia Ports	1987
Greater Baton Rouge	1991
Houston	1982/1987

Indiana Ports	1986/1990
Lake Charles	1990
Louisiana Ports	1985
Massachusetts Port Authority	1989
Milwaukee	1980
Narragansett Bay Ports	n/d
New York/New Jersey	1985/1990
North Carolina Ports	1983
Oakland	1982
Pascagoula	1984
Philadelphia	Undated
Ports Canada	1988/1989/1991
Richmond (VA)	1982/1991
Seattle	1982/1989
Tampa	1988/1989
Toledo	1989
Virginia Ports	1980/1989

(AAPA Advisory)

Wilmington Approved For Fruit Fumigation

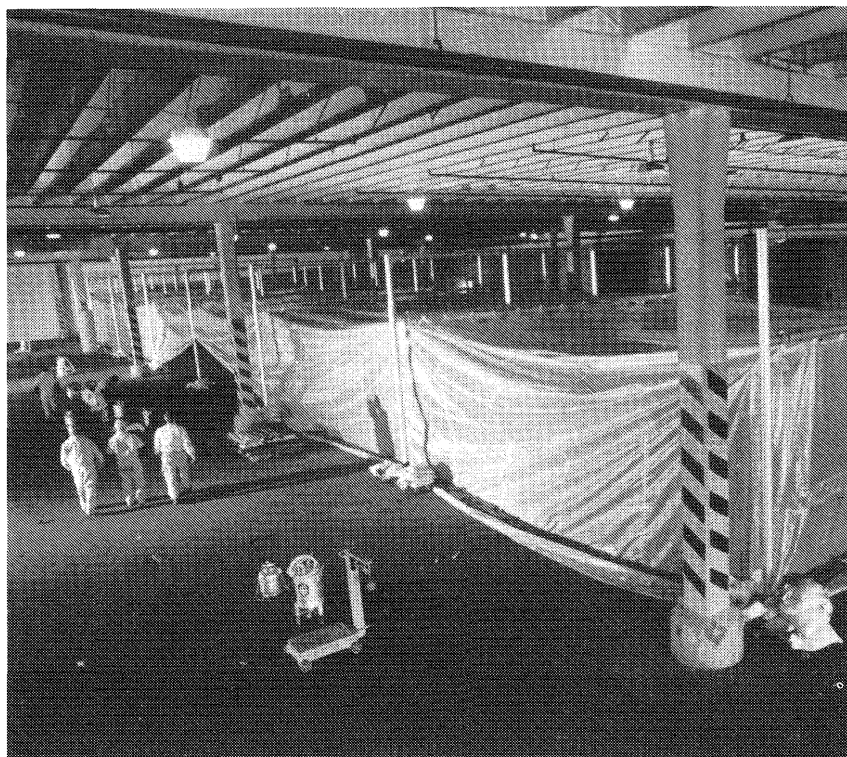
The U.S. Department of Agriculture (USDA) has authorized the Port of Wilmington, North Carolina to perform large capacity breakbulk fruit fumigation. Mr. Robert Berninger, Director of the USDA's Hoboken (New Jersey) Methods Development Center approved a new 376-pallet capacity fumigation tent during a USDA supervised test at the Port of Wilmington

on January 8, 1992.

With the USDA approval, the Port of Wilmington now may install additional fumigation tents, and is prepared to handle the fumigation of imported Chilean fruit in accordance with USDA regulations. Fumigation at the Port of Wilmington will be handled by Degesch America, Inc., a German-based firm with operations in the USA, Chile, South Africa and other countries.

"This is a good time for Chilean fruit shippers to consider shipping palletized grapes and other winter fruit to the Port of Wilmington, North Carolina," said North Carolina State Ports Authority Chilean Fruit Project Manager Walter Colton. "With the strong growth in fresh fruit exports from the Southern Hemisphere to the United States, the North Carolina State Ports Authority is preparing a specialized terminal to receive fruit."

As a key part of this project, design work on a 30,000 square foot chiller facility at Wilmington is being finalized by Bonar Engineering of Jacksonville, Florida. A contractor should be selected in March to construct the chiller facility in order to be ready to accept fruit in November, the beginning of the Chilean fruit season.



U.S.D.A.-approved fumigation tent at the Port of Wilmington, North Carolina is ready to handle imported Chilean fruit.

CIT Joins Container Automation System

The North Carolina State Ports Authority's Charlotte Intermodal Terminal (CIT) is on line with the automated container gate operation in use at the Wilmington Terminal.

This means that participating steamship lines and agents have immediate access to gate activity and yard inventory, as well as historical data at both North Carolina port facilities, according to Director of Management Information Systems, Mr. Cris Mowrey.

"We certainly see a lot more efficiency and we can update our in-house system immediately," said Mr. Mike Lanier, general manager for Carolina Shipping Company in Wilmington and Charlotte. Carolina Shipping represents Yang Ming Line and uses both Wilmington and the CIT.

The new system was designed and developed by the N.C. State Ports Authority Container Terminal and the Management Information Systems Department.

According to Container Terminal Manager Fred Getsinger, the automated system now provides the CIT with accurate yard inventory, computer generated interchanges and a faster work flow.

"The system allows different reporting formats too," Mr. Getsinger said. "The CIT can request equipment reports based on ownership, size, type, status and condition."

"A lot of reports we had to do by hand we can now do on the computer," added Mr. Elwood Thomas, Manager, Intermodal Terminals. "What used to take two hours now takes two minutes," he said.

Customers realize several benefits from having the CIT as simply another gate on the system, according to Mr. Mowrey.

"They don't have to have different systems, or different ways of doing things, to get information from the different yards," Mr. Mowrey said.

"The customer also enjoys increased accuracy, speed and readability of interchanges," added Mr. Getsinger.

"Carolina Shipping is helped by increased efficiency at both ends. We like being able to respond immediately, instead of the next day, if there is problem," said Mr. Lanier. "We would

like to see the same thing happen at the Greensboro Intermodal Terminal," he said.

Seattle Sees 5th Straight One-Million-TEU Year

Despite a national recession and the loss of a major customer, Port of Seattle officials announced that the Port will handle over one million TEUs (20-foot equivalent units) in 1991 for the 5th consecutive year. The port maintains its position as the top port in the Pacific Northwest and as one of the leading container ports in the nation.

"The Port continues to be a regional leader in international marketing — the end result of which is new economic development to Puget Sound," said Mr. Frank Clark, managing director, Marine Division. "All but one of the major steamship lines that service the Puget Sound region have been landed here by the Port of Seattle."

The Port has enjoyed steady container increases by steamship lines Hyundai, Mitsui-OSK, K-Line, APL, and NYK. In fact, cargo increases and the need or expanded terminal space were the driving forces behind the recent relocation of Hyundai from Terminal 42 to Terminal 18.

"The need to implement our expansion plans become more important as our present customers continue to bring more cargo across our docks," said Mr. Clark. The Port's Container Terminal Development Plan, which was introduced earlier this year, could increase container capacity by 235 acres, and create up to 4,200 port-dependent jobs by the year 2000.

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.

POS Waterborne Goods Over \$27 Billion Mark

The Port of Seattle remained the 4th largest U.S. Port as measured by import/export dollar value of international waterborne goods, by handling an all-time best of \$27.8 billion through

its docks in 1990, according to U.S. Census Bureau statistics. The previous best was \$26.7 billion in 1989.

The figure puts Seattle behind only the Ports of Los Angeles, New York, and Long Beach, and establishes the Port as the leader in the Pacific Northwest surpassing the Port of Tacoma by over \$2 billion.

The top export commodities by dollar value in 1990 included: hides, aluminum, cotton, paper, industrial equipment, and frozen fish. The top imports were: wearing apparel, office machines, electronic equipment, motor vehicle parts, video games, and Christmas decorations.

"We pride ourselves on the contribution we make to keep this region economically strong, especially in recessionary times," said Mr. Frank Clark, managing director, Marine Division. "Not only did we set a new container record and increase our market share of Pacific Asia trade last year, but this latest accomplishment shows the value and diversity of the goods that pass through our docks," he said.

Seattle Commission Agrees to Partnership

The port of Seattle Commission voted to join in the Port of Seattle Partnership. The Partnership is a formal effort by the Port of Everett, Bellingham and Seattle to jointly do facilities planning, target marketing, sharing information, and determine pricing levels for the benefit of the region. The Ports of Tacoma, Port Angeles and Olympia have also been invited to participate.

"By pooling our resources we utilize the strength of each Port, deriving much greater benefit for our region and our residents. The Partnership is about cooperation in the fierce arena of international trade. It is time to set aside our provincial differences and improve all of our positions," said Seattle Port Commissioner Paul Schell who has spearheaded this proposal.

Also in attendance was the Executive Director, Mr. Donald C. Fleming of the Port of Bellingham. In his testimony he stated, "We strongly believe in this cooperative effort. It is important for our region to maintain a competitive edge. Bellingham will be an active participant in this partnership — both

learning from you as well as sharing with you our different perspectives and visions for economic well being in Puget Sound."

The Port of Seattle Commission authorized the Chief Executive Officer to negotiate a formal interlocal agreement among the Ports of Everett, Seattle and Bellingham to develop work programs in the following areas:

- A Partnership ten-year capital plan.
- A Partnership marketing plan, including a graphics package.
- A Partnership communications or public relations plan, including a government relations plan.
- A Partnership recommendation on how to address the region's future aviation capacity needs, including a response to the recommendations of the Puget Sound Air Transportation Committee.
- A Partnership Intermodal Transportation Strategy, including ground transportation links between and among partner port facilities and other transportation facilities.
- A Partnership strategy for developing cruise ship activity in the region.
- A Strategy for utilization of under-utilized facilities, including log facilities.

The commissions of the Port of Everett and Bellingham are expected to approve the agreement within the next several weeks.

Port of Charleston: ORION Still Star of EDI

(Reproduced from "PORT NEWS Port of Charleston")

Now, Charleston has reached a new level of automation with its computer-based ORION manifest filing network with full electronic data interchange (EDI) connections.

In January 1991, the Port began transmitting standard transaction sets to Lykes Lines in New Orleans. More than just an electronic mailbox, the Ports Authority translates cargo and manifest information into EDI format and transmits it to the customer through the IBM Information Network (IIN). The high level of sophistication of the IIN allows information to be sent to a customer even though he may be

linked to a different system.

Eventually, any ORION user will have the option of full EDI set ups for clearing and tracking cargo. Neptune Orient Line, for example, is establishing full EDI links utilizing a variety of transaction sets with the Port of Charleston for its Asia-East Coast Express. Other major lines are also exploring ORION's EDI advantages.

"This marks a significant step for the ORION system," said Mr. John Christensen, manager of Information Services at the Port of Charleston. "A term such as EDI can be subject to interpretation regarding the actual level of sophistication and application. The ORION link with Lykes Lines in New Orleans is a true EDI setup which simplifies and expedites access to information for the carrier."

What is a true EDI setup? "Any partner can communicate with us, using any major Value Added Network," Mr. Christensen said. Various EDI systems are being promoted throughout the U.S. The port has adapted ORION to do EDI because "ORION EDI allows us to be a partner with steamship lines, brokers and forwarders in their business. We are a true partner in the completion of their duties," Mr. Christensen said. "We go beyond providing the mailboxes. We actually handle data."

"Technically, the implementation of EDI with ORION has been very smooth," said Ms. Virginia Alster, manager of systems and programming. "It's an opportunity for us to work with our trading partners, understanding how they run their business, giving us some ideas for future ORION developments."

ORION is the premier cargo tracking system in the U.S. and the information services staff is always looking for new applications for the system. Upgrading ORION to be compatible nationally and internationally in EDI transaction was a natural step.

"All ORION users will ultimately be able to do EDI. This is important because information on ORION can be sent out without programming changes," Mr. Christensen said.

ORION has been expanded slowly and steadily since making its 1982 debut. The basic ORION System is an on-line, realtime, fully interactive automated network for filing manifests and tracking cargo, and is interfaced

with U.S. Customs' Automated Manifest System.

AMS is the national Customs automation effort which allows for electronic filing of manifests and the clearance of cargo on those manifests. Subscription to ORION among water transportation companies in Charleston is 100 percent.

"It is through this total participation that we are able to utilize an ORION advisory committee containing representatives from each major function within the port community.

"The ORION advisory committee provides us with guidance concerning the needs of the community and the direction that ORION needs to take to fulfill those needs," said Mr. Christensen.

"The committee has proven to be of tremendous assistance in our being able to ensure that the ORION system continues to meet the changing needs of our port community," he concluded.

Charleston is perhaps the most automated port in the world, with all 27 Charleston brokers participating in ABI (Automated Broker Interface) and some 95 percent of all steamship lines in Charleston are on AMS (Automated Manifest System). No other port can boast such a high level of participation and automation.

However, the high level of automation is of no value unless it enhances the quality of service the port offers. In Charleston, increased automation means unprecedented Customs clearing of cargo (up to five days in advance of arrival), direct access to Customs' computers (something small and medium-sized lines are unable to afford), and up-to-the-minute tracking of cargo throughout the port system.

"ORION was developed and its programs written in-house by the Information Services staff," said Mr. Christensen. "By year's end, the Port will implement a system for tracing individual cargo items. The enhancement will allow tracking of cargo at the bill-of-lading level. This level of tracking is important especially for containers carrying several individual shipments. These programs are being written in-house, as well."

The success of ORION is a tribute to all of the people who have designed and continually expanded the system. In the last nine years, it has not only maintained its position as the premier

cargo clearance system, but has expanded to meet the needs of those who use it. In this state-of-the-art automation, Charleston is re-affirming its commitment to service in order to meet the challenges ahead.

Mr. Shera Named Pres. Of Tacoma Commission

Tacoma Port commissioners today (January 16, 1992) named Mr. Ned Shera to a one-year term as president of the Port of Tacoma Commission. Mr. Shera succeeds Commissioner John McCarthy in the leadership position.

Mr. Shera, who served in 1991 as vice president of the five-member commission, was first elected to the Port Commission in 1988. Mr. Shera recently retired as president of his own Tacoma-based insurance brokerage firm, Ned Shera Company, Inc. He also served four years as a state legislator in the House of Representatives.

Mr. Shera has served as chairman of the board of the Association of Washington Business and chairman of the board for St. Joseph's Hospital in Tacoma.

He has been active in business issues affecting the Port. "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."

In other commission posts, Mr. Jack Fabulich will serve as vice president, Mr. Robert Earley will serve as secretary and Mr. Pat O'Malley and Mr. John McCarthy will hold positions as assistant secretaries.

Port of Tacoma Reaches Container Milestone

The Port of Tacoma, which during the past decade has ranked as the nation's fastest growing container port, has reached another milestone.

Port Commission President John McCarthy announced that Tacoma had handled cargo containers totaling more than 1 million in 1991.

A single TEU is equivalent to one 20-foot container, although steamship lines in Tacoma use containers measuring anywhere from 20 to 45 feet. Containers are used to ship a variety of goods, including TVs and VCRs,

clothing, toys, frozen meats and wood products. For example, one 40-foot container (2 TEUs) could hold about 2,400 packaged cassette players.

Tacoma is the sixth U.S. container port to reach the million-TEU mark.

"Our growth has been steady and strong over the last 10 years, and hitting the one-million mark is another symbol of our success," Mr. McCarthy said. "We also have positioned ourselves for continuing expansion during the 1990s and beyond."

The Port's passage through the million-TEU threshold was observed at the Sea-Land Terminal on Sitcum Waterway, where a ceremonial 40-foot container was lifted onto the "Sea-Land Express," bound for Asia. The container was filled with wood products sold by Weyerhaeuser.

Port officials then hosted representatives of Tacoma's various steamship lines and other Port customers.

"The growth we have seen is a tribute to all our customers and carriers, large and small," said Mr. McCarthy. "Every container counts, and we could not have reached this one-million mark without winning their business with a teamwork approach."

The Port's most dramatic increase in container volume occurred in 1985 when the arrival of both Sea-Land and Maersk service propelled the Port into the major leagues of container shipping. Since then, several other major carriers have become tenants, making Tacoma one of the world's premier container ports.

In the early 1980s, Tacoma was handling about 135,000 TEUs annually. In 1985, Tacoma's container traffic increased to 505,000 TEUs and has continued a steady upward climb since that time. Some 14 shipping lines currently call Tacoma with container service.

Mr. John Terpstra, executive director of the Port of Tacoma, said exceeding 1 million TEUs helps send a message in the shipping industry.

"It's one of those magical thresholds like the four-minute mile, and it's a signal to the world that the Port is really entering the big leagues," he said.

Tacoma's container traffic grew in 1991 in spite of a sluggish world economy. In addition, the entire Puget Sound area has seen consistent increases in container shipping. Container volumes have more than doubled since the

early 1980s, and Puget Sound ports now command about 28 percent of the West Coast container shipping market.

Container shipping also has provided growth and stability to the area's job market. For every 1,000 TEUs of container shipping, 3.8 direct port industry jobs are provided in Washington state, according to an economic impact study done by the Port.

The Port's 1991 container count also has been helped by a 5 percent increase in the Port's Alaska business. A joint service agreement between Maersk Line and Sea-Land also has been positive, as has a new Hawaii service started by Sea-Land.

Africa/Europe

New Container Service To and From Far East

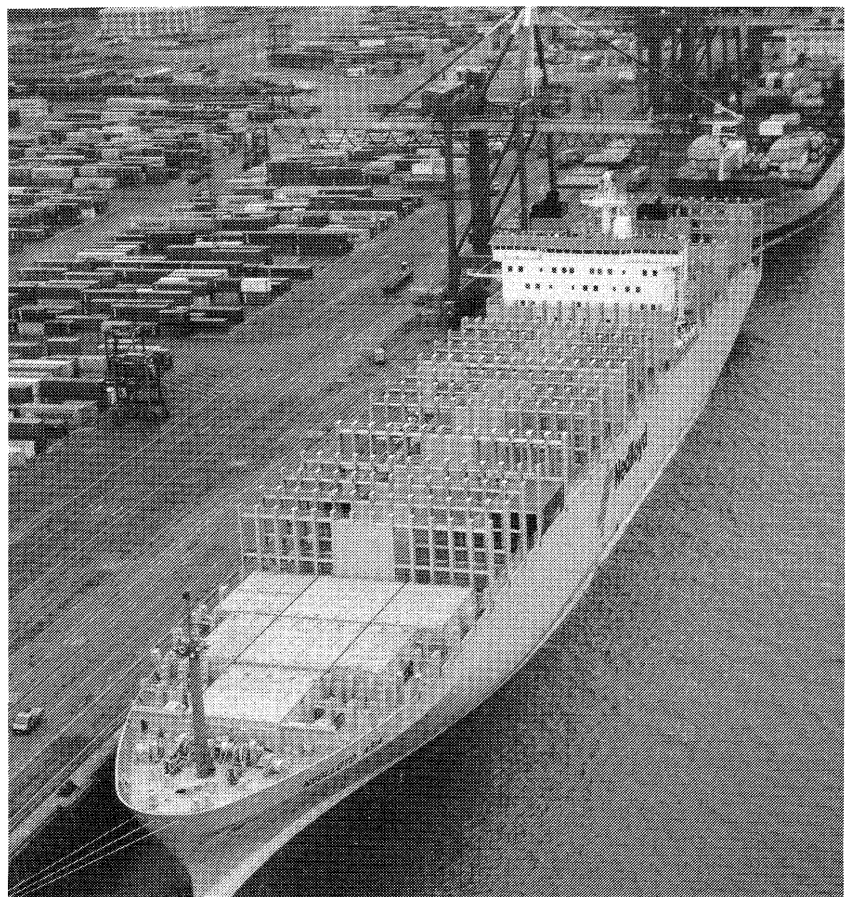
The first vessel of a new container service to and from the Far East, the *Nedlloyd Asia*, moored at the BLG Container Terminal Bremerhaven on

schedule on January 15, 1992, Wednesday being its fixed berthing date for Bremerhaven. Nedlloyd's "new time saver," the Ultimate Container Carrier without any hatch covers, shall contribute to a quicker port dispatch. The Container Terminal Bremerhaven will contribute as well by being the first European terminal using the EDIFACT format for data interchange with the shipping line and the vessels in this service.

In addition to Bremerhaven, Hamburg, Felixstowe, Rotterdam, and Le Havre are also served by this conference service, which employs nine vessels with a carrying capacity from 3,750 TEUs to 4,470 TEUs. By the end of 1992, all new vessels of the French Line CGM, the Malaysian MISC, and the Dutch Nedlloyd Lines will be in service.

Within the new service, Bremerhaven is the last German port of call which also handles Scandinavian export containers.

Ports of call in Asia are Port Kelang, Singapore, Hong Kong, Busan, Kobe, Nagoya, Shimizu, and Yokohama. All of them are reached in shorter transit times.



Ports of Bremen Achieve Breakthru in FE Traffic

The Bremen-based port operating company BLG Bremer Lagerhaus-Gesellschaft reports an increase of 35% in container traffic in the Europe-Far East trade in 1991 compared to 1990. In particular the number of containers shipped westbound into Bremerhaven increased tremendously.

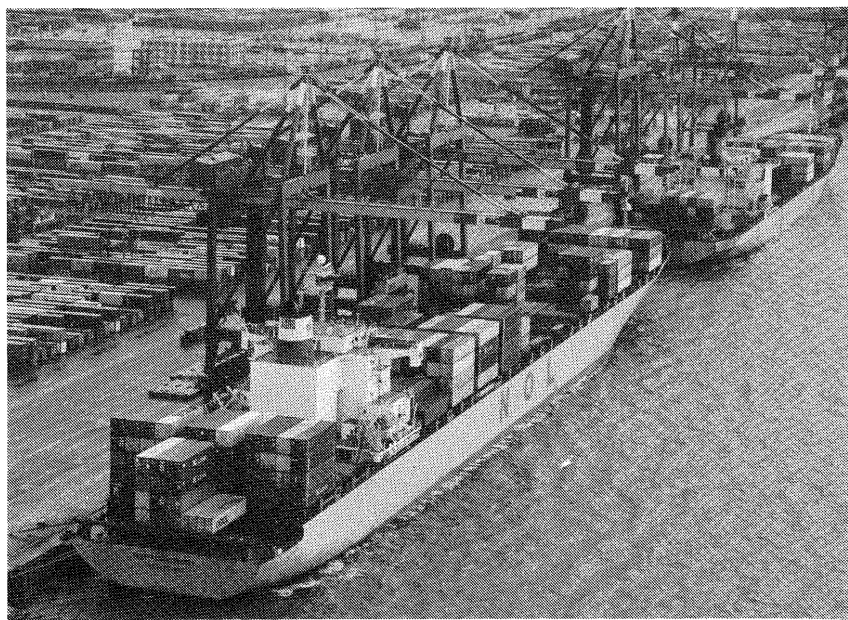
Due to traditionally established trading links, the position of the Ports of Bremen/Bremerhaven in the Europe-Far East trade was not as strong as that of its competitors. "But those old trading links are losing their importance for the whole transport chain", says Mr. Manfred Kuhr, Managing Director of BLG's Eastern Hemisphere Sales Department. In fact, in container transport the shipping lines with their logistic strategies dominate more and more the routing of transport. As container vessels become larger, they look for a container terminal with easy and quick access, as well as with ideal intermodal facilities to serve shippers and consignees in the hinterland. Bremerhaven is among Europe's ideal intermodal meeting points for ships and cargoes in that respect.

"The high growth rate in the Far East-Europe trade is a result of different factors", Mr. Kuhr explains in detail. "First of all, more lines call at the Container Terminal Bremerhaven in the Far East-Europe trade. In 1992

further new lines will serve Bremerhaven. The present callers are going to increase their capacity. Secondly, the share of so called local cargoes, i.e. cargoes which are manufactured, traded, or physically distributed in Bremen/Bremerhaven, increased due to further investment in distribution centres and not least due to the new Asia Pacific Trade Centre, hosting now more than 70 companies from Asia with European Sales Offices. Thirdly, the developing markets of East Germany and East Europe have caused a strong stream of imports via the German ports, in which Bremen/Bremerhaven strongly participates."

"All these facts give us confidence to continue investing in our container facilities. In particular, as more shipping lines plan to call at the Container Terminal Bremerhaven to save costs and time," Mr. Kuhr explains the forthcoming extension of the Container Terminal Bremerhaven as well as the deepening the estuary of the River Weser.

Strong marketing efforts in 1992 in co-operation with well established marketing offices in Germany, Austria and East Europe as well as the Far East Offices in Japan, Korea, Taiwan, Singapore, Jakarta and Kuala Lumpur lead to a forecast of a 25% increase in the Far East-Europe trade in 1992. This figure is in line with the established carriers' plans to increase capacities and with those which are upon to call at Bremerhaven newly.



Dr. Ludwig Chairman Of Hamburg Board

At a recent meeting of the Port of Hamburg Marketing and Public Relations Supervisory Board, Dr. Hans Ludwig Beth was unanimously appointed chairman of the organization as the successor to Mr. Helmut F. H. Hansen when he retires on March 31, 1991.

Port of Amsterdam Continues Growth

Over the last nine months the Port of Amsterdam's transshipment volumes grew by 5.9% to 24.6 mln tons. According to Amsterdam Port Management figures, half of this transshipment (12.4 mln tons) consisted of dry bulk (+24.6%) and almost 9.9 mln tons of liquid bulk (-12.7%).

Figures were good in the mixed cargo sector as well. Especially for Ro-Ro traffic, which was up by 32.2% to 764,000 tons, and with unit cargo, which increased by 33.1% to 416,000 tons. Conventional mixed cargo continued its steady volume growth, rising 10.7% to over 542,000 tons. Container transport stabilised around 619,000 tons (0.9%).

The number of sea vessels mooring in Amsterdam harbour over the past nine months was significantly higher than for the same period last year—3,858 against 3,475 in 1990. Total gross volume rose from 25.2 mln tons in 1990 to 27.1 mln tons.

In view of the positive results booked after nine months, the Port of Amsterdam expects to close the year with a slight increase in transshipments.

Port of Hamburg: Boom Continues Through 1991

1991 was an extraordinarily good year for the Port of Hamburg and optimism abounds as Hamburg looks towards the turn of the century.

Between January and October the total volume of cargo handled by the Port of Hamburg rose by 10.2 percent, bulk cargo by 13.2 percent and containerized cargo, in terms of TEUs, by 11.8 percent. Thus, the eight-year upswing has continued in 1991.

By 1995 the Port of Hamburg expects the total volume of cargo handled to

have grown by 43 percent with bulk cargo up 46 percent, general cargo up 40 percent and containers up 53 percent on the 1990 figures. By the year 2000 Hamburg may well be handling twice as much cargo as this year — a development which would push Hamburg into the elite group of the world's super-ports.

Hamburg enjoys an extremely strong position in the particularly rapidly growing trading routes of the Far East and Scandinavia. Thanks to the revolutionary changes in Central and Eastern Europe and the treaty of association signed between the EFTA member states and the EC, Hamburg has gained new significance as the major hub of a market whose total population has doubled to 150 million. For the post-1995 period an extra 20 million tons of cargo a year are expected to arrive in Hamburg as a result of a shift away from the Baltic ports of eastern Germany (e.g. Rostock), growth in imports to and exports from the five new states of the Federal Republic and the potential growth of transit traffic to and from Czechoslovakia, Poland, Hungary, Rumania, Bulgaria and the Baltic states. The expected shift in cargo flows from the Baltic ports of eastern Germany (mainly Rostock) to Hamburg has already taken place. With a cargo mix composed of local goods, German exports and imports and transit traffic, Hamburg is an extremely attractive port for international shipping, especially in view of the trend towards reducing the number of ports of call.

In order to maintain the Port's international competitiveness in future, the City of Hamburg and its port op-



erators will be investing DM 2.5 billion in modernization measures in the next few years. They include the development of new sites for cargo-handling and service centres, the expansion and modernization of existing quay facilities, the modernization of the Port's radar system and the modernization and extension of the Port railway. Plans are also being made for improved links to Hamburg's hinterland, especially the East, and deepening the channel of the Elbe to take post-panamax ships.

Rotterdam Requires Massive Govt. Support

If the Port of Rotterdam wishes to retain its position as the major gateway to Europe, massive (financial) assistance from the Government will be essential in the coming years. The growth of 1.6% achieved in the past year in transshipment is in itself no guarantee of success in the battle for quality and competition with other European ports.

The Mayor of Rotterdam, Mr. Bram Peper, believes that a well-run port — as in Rotterdam — is no excuse for a friendly but detached Government attitude. Although he detects a positive disposition on the part of the Government, he is of the opinion that in the short term decisions need to be taken regarding the infrastructure which safeguards the position of the Port of Rotterdam.

THE STATISTICS: According to provisional statistics, the Port of Rotterdam transshipped 292.5 million tons of cargo in 1991. This represents an increase of 4.6 million tons (1.6%) in comparison with last year figures. The biggest growth sector is crude oil: imports rose by 9.3% to 91.6 million tons. The Mayor announced the figures at the traditional New Year's Eve gathering of the Rotterdam Port Association at Rotterdam Town Hall in his speech on "The quality and future of the Port of Rotterdam."

INTERNATIONAL TRADE: In his speech, the Mayor also referred to international negotiations and agreements. He stressed, for instance, the importance of the negotiations being carried conducted by GATT. The Mayor believes that if no agreement is reached during the world trade consultations, the participating countries may fall back into protectionist-

oriented economic blocks. This would have negative consequences where Rotterdam is concerned. Mr. Peper also cited the European Economic Area (EEA). The EEA is an agreement between the Economic Community States and the European Free Trade Association (Switzerland, Austria, Liechtenstein, Norway, Sweden, Iceland). According to the Mayor, this agreement is a beneficial development for the Port of Rotterdam. The agreement increases the economic area of these countries. The EEA consists of a prosperous market of 375 million people.

ENVIRONMENT POLICY: The Mayor of Rotterdam called for clear, strict environment standards and for a European environment policy. He believes that specifications should be laid down at a European level with regard to means of transport and also with respect to environment-legislation and its implementation in the field of industry.

COOPERATION: Mr. Peper once again put forward the possibility of cooperation between the social partners and (local) government in considering the future of the port. In his opinion, the combined interests of employers, employees and government should receive far more attention than has hitherto been the case.

THE STATE: The Mayor warned that the (financial) distance between Rotterdam and neighbouring European ports risked becoming too great if all higher government subsidies are not abolished throughout Europe. He does not, however, anticipate any harmonization of competition conditions in the coming years and therefore appealed for a joint effort by national and local government so as to safeguard the position of Rotterdam. "Otherwise," said Dr. Peper, "the state will impoverish itself by being too thrifty."

SIGENA System Installed in Lisbon

SIGENA — the integrated system for the management of vessels is being installed in the port of Lisbon. This scheme, which will shortly be displayed to the economic agents, will ensure the management of goods, port installations, equipment, labour and, eventually, the improvement of all the port systems.

The first computerized application

of the SIGENA system will cover the control of vessels entering and leaving the port of Lisbon. To this end, the APL has already installed a TARGON 35/M50 with 64 terminals, using a communications subsystem comprised of MODEMS and PATH's using private X25 technology, to serve as the basis for the development and implementation of SIGENA.

Two software subsystems have already come on line:

- **ENTRY AND DEPARTURE OF VESSELS:** This will handle the entry and departure, berthing and leaving of merchantmen. The data concerns the arrival of the vessel (as indicated in the data base of Lloyds Register of Shipping) the notice of arrival and departure and the licence to anchor or berth, which is the basic document for permission to call at the port.

- **CARGO SUBSYSTEM:** This controls the reception of the manifest and the arrival of the cargo together with the corresponding bills of lading, in relation to the service of port dues and the berth allocated to the vessel.

This subsystem will be interlinked to the STADA Customs Clearance system which is already being set up.

The whole SIGENA scheme is based on the relationships between a large number of users, with whom the APL is in touch, and protocols covering the electronic exchange of data (EDI) so that the system will be at the disposal of the whole of the port community.

Apart from SIGENA, the APL is also represented in other schemes for the electronic interchange of data, the most important being ARCANTEL, which will link the ports of the "Atlantic Arch" and MIDITEL for the Mediterranean ports.

(Port of Lisbon News)

UK Ports Chalk Up Record Year, Says BPF

Freight traffic through the ports of the United Kingdom in 1990 was a record 494 million tonnes, 13 million more than in 1989, according to *Port Statistics 1990*, published by the British Ports Federation and the Department of Transport.

The 3% increase in traffic was the net result of a rise in foreign traffic of 19 million tonnes and a fall in domestic traffic of 6 million tonnes.

Foreign traffic has been the growth area in the port industry, and 1990 saw an increase in both imports and exports of 10 million tonnes and 9 million tonnes respectively.

Domestic traffic, which includes coastal traffic and one-port traffic, fell in 1990 by 6 million tonnes. Much of this decrease is accounted for by a 5% drop in coastal traffic to 122 million tonnes, which was mainly due to falling domestic coal movements.

The main features of *Port Statistics 1990* are:

- Total trade increased 3% to 494 m
- Foreign trade increased 6% to 322 mt
- Domestic trade decreased 3% to 172 mt
- Bulk cargo increased 2% to 374 mt
- Unitised traffic increased 2% to 87 mt
- Conventional cargo increased 77%

MARSEILLES-FOS

The Magnificent Seven

A unique package of advantages for shipment between Europe and the East!

1 Port capacity

Marseilles-Fos, the leading port in France and the Mediterranean, combines space, resources and flexibility.

2 Transshipment power

Marseilles-Fos, the Intermodal Superport, offers the most effective links with the rest of Europe - by rail, motorway and river.

3 Know-how and technology

Marseilles-Fos expertise makes it one of the world's most advanced ports.

4 Time and money savers

Marseilles-Fos saves four days compared with transit times from the Orient to Northern Europe. Added to ultra-fast and efficient Customs clearance. Marseilles-Fos cuts your costs.

5 Security and reliability

Marseilles-Fos is closely controlled by police and Customs throughout the complex.

6 Economic performance

Marseilles-Fos delivers comprehensive services at competitive prices... 24 hours a day, seven days a week.

7 Industrial muscle

Marseilles-Fos is Europe's second largest chemical centre and Fos is the world's largest maritime industrial area.



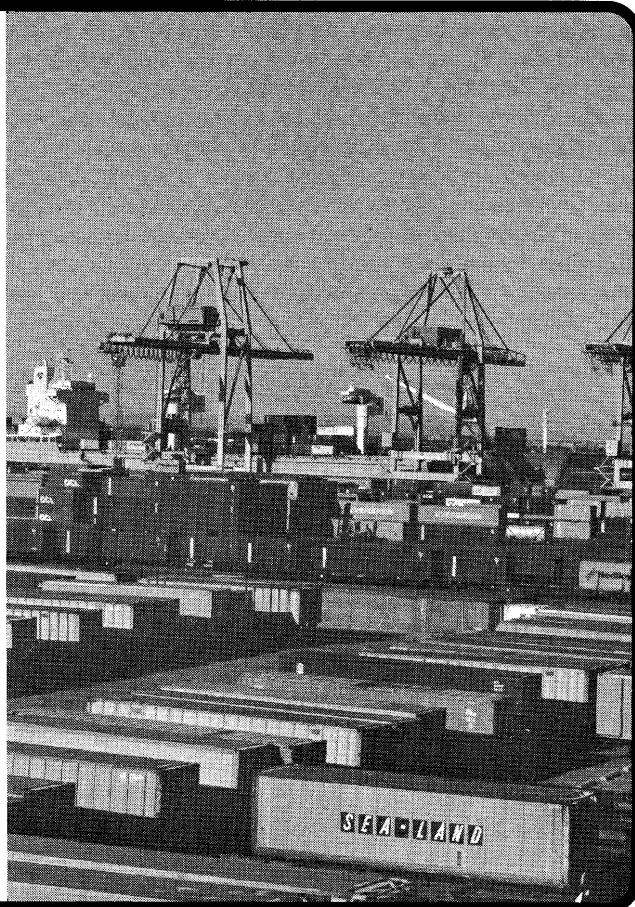
Port of Marseilles Authority

23, Place de la Joliette - BP1965
13226 Marseille Cedex 02
Telex 440 746 - Fax 91.39.45.00



91.39.40.00

Fos Container Terminal



Atelier Paul Bertrand

to 4 mt

League Table

London maintained its position at the top of the UK port league table, handling 58 million tonnes of cargo in 1990. In second place was Tees and Hartlepool with 40 million tonnes, followed by Grimsby and Immingham (39 million tonnes). Felixstowe handled the most unitised traffic — 1.2 million units carrying 16 million tonnes of goods — while Dover remained the leading ro/ro ferry port with 1 million freight units carrying 13 million tonnes of goods.

These statistics, together with a wide range of facts and figures about the UK ports industry, are published in 'Port Statistics 1990' which is available from BPF at £35.00 per copy.

(British Ports Federation: Review)

Scheme Abolition Brings 22% Fall in Workforce

The British Ports Federation's new survey of manpower in the ports industry shows a 22% reduction in the workforce at Britain's ports since the abolition of the National Dock Labour Scheme in 1989.

According to the survey, Report on Manpower in the UK Port Industry, there were 40,674 people employed in Britain's ports in March 1989, just before abolition of the Dock Labour Scheme. By April of 1991, this number had fallen to 31,667. Of these 52% are manual employees compared with 58% in 1989.

The report gives the first authoritative indication of how employment in the port industry has changed since the abolition of the Dock Labour Scheme in July 1989. In particular, the report shows:

- The largest group of employees at 2 April 1991 was dock workers and operational/cargo handlers. These accounted for 36.5% of port employees as compared to 42.4% in 1989.
- Overall, 1991 saw a decrease of 32.5% in the number of manual workers in the port industry and a decrease of 11.3% in the number of non-manual workers as compared to 1989.
- At 2 April 1991, 52.2% of the port industry were manual workers and 47.8% non-manual.

These proportions have changed since 1989 when the workforce was made up of 58.1% manual workers and 41.9% non-manual.

- Thames and Kent is the largest area of employment accounting for 18% of the industry's total workforce.
- The East coast accounts for 60% of all port employment.
- Nine port areas employed more than 1,000 workers at 2 April 1991. The top three port areas for employment are London, Felixstowe and Southampton.

"Report on Manpower in the UK Port Industry" is available from BPF at £25.00 per copy.

(British Ports Federation: Review)

Asia/Oceania

New Vision, Sensible Planning for Fremantle

Sensible planning and becoming commercially competitive are the keys to the successful future of the Fremantle Port Authority, according to Acting General Manager Kerry Sanderson.

Mrs. Sanderson said she believed Fremantle could become the most efficient port in Australia — particularly now with two terminal operators to cater for business in the Port.

Yet her first concern is to make sure the Port's finances are turned around and profits are seen as soon as possible.

"We have to be realistic, and not presume we are going to get increased trade," Mrs. Sanderson said.

"We must cut back to our core activities, and find out which businesses are viable.

"The Authority plans to establish commercially competitive business units which will be responsible for their own revenue and costs.

"These business units will have two years to establish themselves as viable.

"We are also downsizing by 36 percent and will restructure the Authority in the next 18 months. The unions have given us every co-operation in this process."

She said the Corporate Executive of the Fremantle Port Authority had been developing a Corporate Plan and vision to apply to the restructured Authority.

The group are currently considering a proposed organisation structure in relation to programs.

Corporate Executive will meet weekly to progress the development of a new structure, and liaise with employees on restructuring matters in the meantime. A mission statement will also be developed in the new year.

In addition to port development planning and corporate planning, Mrs. Sanderson believes customer liaison must be further developed.

Mr. Gilbert Appointed NSW Chief Executive

State Cabinet has approved the appointment of Mr. Wayne Gilbert as the Chief Executive of the Maritime Services Board of N.S.W.

Transport Minister Bruce Baird said Mr. Gilbert has extensive experience in all areas falling within the responsibility of the Maritime Services Board and a proven track record in management.

He has served as Managing Director of Oakbridge Limited, a coal producer and exporter and was the General Manager of the South East Queensland Electricity Board (Brisbane).

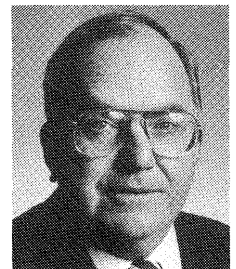
He replaces Mr. Max Moore-Wilton who was appointed to the Department of Transport as Director-General in July 1991.

Auckland Profit Down But Productivity Up

Ports of Auckland Ltd. has recorded a profit of \$11.19 million, before tax for the nine-month period to 30 June 1991, reflecting a period of low economic activity, reduced trade volumes and rationalisation of shipping services.

The company has changed its balance date at the request of its shareholders, and the report published by the company covers only a nine-month period.

The financial results showed an operating profit of \$17.08 million, which, on an annualised basis, was down 9 percent in comparison with the previous year. The net profit before tax but after re-organisation and redundancy costs



Mr. Gilbert

was \$11.19 million for the period.

The overall trade volume was 4.8 million tonnes, down some 355,000 tonnes compared with the same period last year, and container trade volumes were down by 12,000 TEUs in the same comparison.

The Chairman of Ports of Auckland Ltd., Mr. R.G. Alexander said that there were many positive features in the year, notably improved service, tighter controls and reduced costs at all levels.

"Productivity has continued to improve in all areas. For example, crane handling rates at Fergusson Container Terminal improved by 21.5 percent on the previous year, and individual ships rates of between 58-60 containers have been achieved.

"The elapsed time in port for container ships averaged 15.59 hours. Truck turnaround times continued to improve with some 85 percent being handled in less than 20 minutes," he said. "These are just some examples of world-class performances in our two ports."

Mr. Alexander predicted that the

coming year would show only modest growth, which was a real concern with the continuing over supply of port capacity.

"This oversupply is expected to worsen, which in the longer term can only be bad for New Zealand's trade as the port industry struggles to provide a satisfactory commercial return on activities associated with a comparatively static volume of trade."

(Ports of Auckland)

Security Arrangements At Ports of Auckland

Regular users of the port, visitors and Ports of Auckland Ltd. staff will notice some changes in the procedures for entry and exit to the wharves during the next few weeks.

Port of Auckland Ltd. staff at the gates will be supplemented by Owens Security Staff, as contractors to the port, from Friday, November 8, 1991, and new arrangements will be progressively introduced to improve access control.

Cargo deliveries and collections will

continue in the same manner as before, but the new arrangements will be applied strictly to **ALL VISITORS AND/OR CARS AND VANS** wishing to access the wharves.

The new arrangements will be as follows:

1. **ALL CARS/VANS** will be stopped at the gate by Ports of Auckland Ltd. Wharf Surveillance Officers, or Owens Services officers as contractors to Ports of Auckland.
2. The identity of the person wishing access will be sought, and some proof of identity or authorisation may be requested.
3. If access is to be granted, that person and vehicle will be logged as entering the wharf.
4. When he or she leaves the wharf, the car/van will again be required to **STOP** at the exit gate. The driver of the vehicle may be asked to open the boot of the car, and any bags which may be in the vehicle. The vehicle and person will be logged as leaving the wharf.
5. In the case of private visitors to ships, the staff at the gate will have



under full sail

To many, the sea can be a cruel and hostile environment. To the experienced navigator, however, adverse winds and currents are only an added challenge to the skill and judgement required in guiding the ship safely to port.

The skill and judgement of NIPPON STEEL ... the world's largest steel producer ... display the same sort of flexibility and sense of purpose as the company heads into today's winds of change. Get to know NIPPON STEEL better ... we are ready and able to serve you in many exciting new ways. NIPPON STEEL ... working today to create tomorrow's industrial products and values.

NIPPON STEEL
Creating New Values for Industry

instructions from the Ship's Master as to whether visitors to the ship are welcome. If visitors are welcome, the visitor will be held while the security officer telephones the ship for an escort to come to the gate to walk the visitor(s) to the ship. They will be logged on and off the wharf in the normal manner.

6. The security officers will also be able to arrange a vehicle escort for visitors with heavy bags or equipment for the ship.
7. Port user staff members are also required to wear high visibility jackets when on the wharves. When any vehicle is moving on the waterfront, the high visibility flashing light must be operating.

These procedures have been introduced to reduce the risks of unauthorised access or theft of goods from the waterfront, which is to the benefit of all port users and operators.

In addition to much tighter access control, Ports of Auckland Ltd. will be maintaining regular mobile patrols; introducing random checks on vehicles; and a number of other procedures and

systems to improve cargo security.

All staff will maintain high standards of courtesy and politeness at the gate, reflecting the company's "customer driven" philosophy. However, there may be situations when "unusual" access is required, and security officers will be able to exercise their discretion to apply commonsense solutions.

All port users must provide their representatives with authorisation or proof of identity to avoid confusion or delays in obtaining access. The same procedures will apply to everyone wishing to access the wharves, including Ports of Auckland Ltd. staff.

Ports of Auckland Ltd. is committed to a high level of 24 hour security. The new procedures which have been outlined in this note are a reflection of that commitment to our clients.

(Ports of Auckland)

Port of Napier Mission Statement

"To ensure that the necessary in-

frastructure is in place and that all essential facilities and services are provided at a cost effective rate."

OBJECTIVES

For its users, the Company intends to provide a safe, effective and efficient port operation at minimum cost.

For its shareholders, the Company intends to manage the financial assets and liabilities prudently and in a manner which will yield a satisfactory profit.

For its employees, the Company intends to promote a good working environment where positive contribution is encouraged and rewarded.

Results in Brief

	1991	1990	Change %
Cargo Imports (Tonnes)	540,000	605,000	-11
Cargo Exports (Tonnes)	1,469,000	1,200,000	22
Total Cargo (Tonnes)	2,009,000	1,825,000	10
Total Vessels (Arrivals)	386	319	21
Gross Revenue	17,466,000	16,233,000	8
Net Profit before Tax	5,261,000	5,136,000	2
Net Profit after Tax	3,507,000	3,379,000	4
Dividend	1,155,000	1,152,000	0
Shareholders Funds	26,427,000	24,113,000	10
Total Assets	33,289,000	31,929,000	4
Total Employees	116	121	-4

(Annual Report 1991, Port of Napier)

Top 10 News Items for Port of Nagoya 1991

1. Cargo and container totals come in at a record-breaking 137.5 and 17.2 million tons, respectively! (see the table below)
2. Fifty-two elegant passenger ships cruise in — another record!
3. Happy 40th birthday, Nagoya Port Authority!
4. Nagoya Port Aquarium Grand Opening set for October, 1992!

5. New weekly PSW and PNW sailings by Maersk and Sea-Land as of May!
6. Port Trade Mission makes sales pitch to Europe!
7. New Sailing Boat Training Center for young sailors opens in July!
8. Urban redevelopment: New Tsukiji Port Town under way!
9. Over 600,000 people flock to many different port events!
10. A Garden Pier Wharf is opened to the public for round-the-clock operations!

	Estimate for 1991		Actual 1990	Increase %	Remarks
Ship Arrivals	Number	48,700	50,395	+ 3.4	—
	Gross Tonnage	195,700,000	189,411,168	+ 3.3	Record high
Cargo Handling Volumes	Total	137,500,000	128,933,854	+ 6.6	Record high
	Foreign Trade	82,200,000	75,696,968	+ 8.6	Record high
	Domestic Trade	55,300,000	53,236,886	+ 3.9	Record high
— Foreign Trade Breakdown —					
Container Cargo Volume (F.T.)	17,200,000	15,436,864	+ 11.4	Record high	
No. for Containers (TEUs)	1,000,000	897,781	+ 11.4	Record high	

PSA Reefer Monitoring — High Stack, Hi-Tech

By Ng Chong Ching

Container Terminal Engineering Dept.

Port of Singapore Authority

Reefer throughput handled by the Port of Singapore Authority has grown tremendously in recent years; from 75,500 TEUs (Twenty-foot Equivalent Units) handled in 1986 to 180,700 TEUs in 1990, an increase of 140%.

To meet the increasing demand for reefer facilities, the Container Terminal Engineering Department (CTED) has embarked on a comprehensive development plan to enhance safety and increase productivity and efficiency in the Port.

Increased Capacity

Work started in 1980 to increase the reefer stacking capacity from 340 reefer points to 1,200 by 1993. With the completion of the new reefer yard in Sep 91 at the Tanjong Pagar Terminal, there are now 1,035 reefer points. Between 700 and 1,000 reefer containers

are stacked in the reefer yards at any one time.

S. Thangavelu, a technician who has been with the Port since 1972, said:

"Under the old method, reefer containers were stacked 2-high. We used ladders to reach the upper containers to record the temperatures. Torchlights were used during the night. But with the new purpose-built platforms and handheld computer terminals, my job has taken a new perspective."

The new reefer yards are equipped with well-lit purpose-built platforms to access reefer containers which are stacked up to 4-high. Technicians need not carry the cumbersome ladder and torchlight while working. The introduction of handheld computer terminals has enhanced the quality of the work and eliminated transcription errors.

"Temperature monitoring, plugging and unplugging and the repair of reefer containers can now be carried out more expeditiously and safely. There is also higher morale among the technicians because of the better work environment," added Thangavelu.

The purpose-built platforms allow optimal use of the yard space in the port. There is also time savings of 40% in monitoring reefer temperatures and some electricity savings as high block stacking shields more containers from

the direct heat of the sun.

Plans are also underway to stack reefer containers 4-high at Brani Terminal, which will commence operations in Jan 1992.

Singapore is one of the few ports in the world to have purpose-built platforms to enable high stacking and monitoring of reefer containers.

(PSA Port View)

Learning to Manage Container Operations

Course Emphasis On Effective Deployment And Requisition Of Resources

By Woo Fook Kheong
Singapore Port Institute

The two-week course on "Management of Container Operations" was well-attended. Six new PSA Traffic Officers and 19 participants from the United Arab Emirates, Bangladesh, Hong Kong, Indonesia and Malaysia participated in the course which provided comprehensive knowledge to plan, operate, control and manage container operations.

The emphasis this time was on the effective deployment and requisition of resources. Each unit covered a major aspect of container operations. These were:

- Layout and Facilities of Container

Terminals

- Measurement of Terminal Performance
- Ship Stowage Planning
- Ship Operation
- Quay Transfer Operation
- Yard Storage Operation
- Receipt/Delivery Operation
- Terminal Planning and Management
- Handling and Storage of Dangerous Goods Containers
- Port Tariff Structure

When asked on how she felt about the course, Miss Jean Chan, an Industrial Engineer from Hong Kong International Terminal, commented that the unit on measurement of terminal performance was most useful for her.

Both Mohamed Salleh and Sayed Jefferydean from Brunei Shell Petroleum shared the same view that the course provided them with a good knowledge on operations of oil terminals, particularly wharf operations and management.

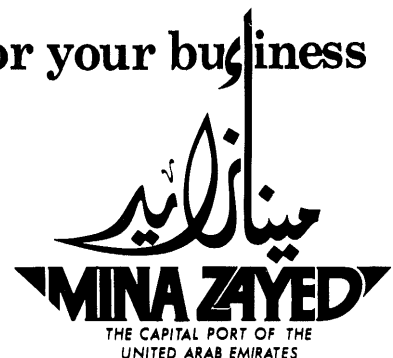
Mr. Omar Al Muhairi from Jebel Ali Free Zone Authority, United Arab Emirates was eager to apply his recently acquired knowledge to container operations in his home port.

More than 70 local and overseas participants have benefitted from the course this year. (PSA Port View)

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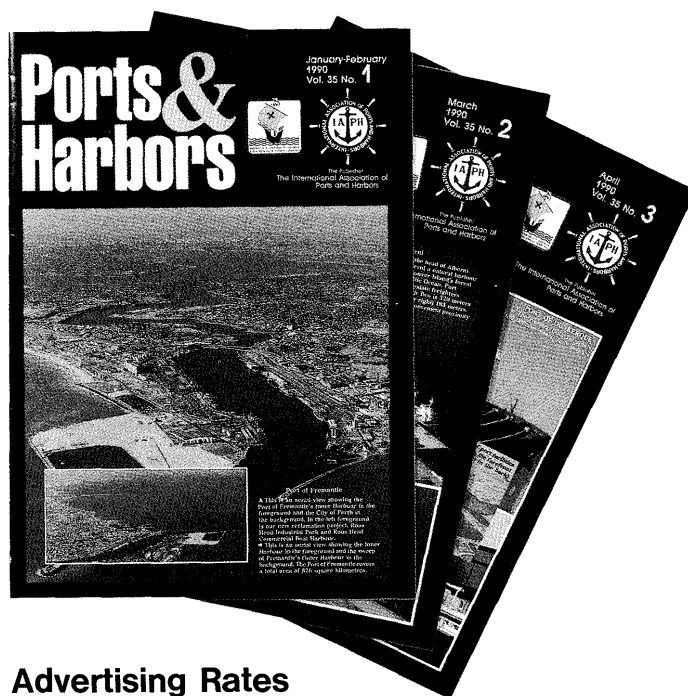


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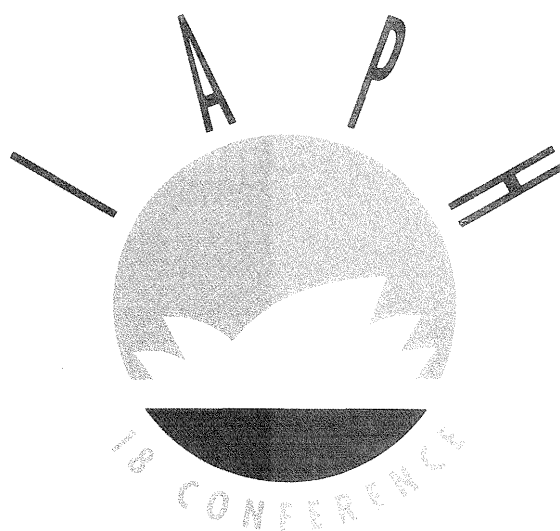
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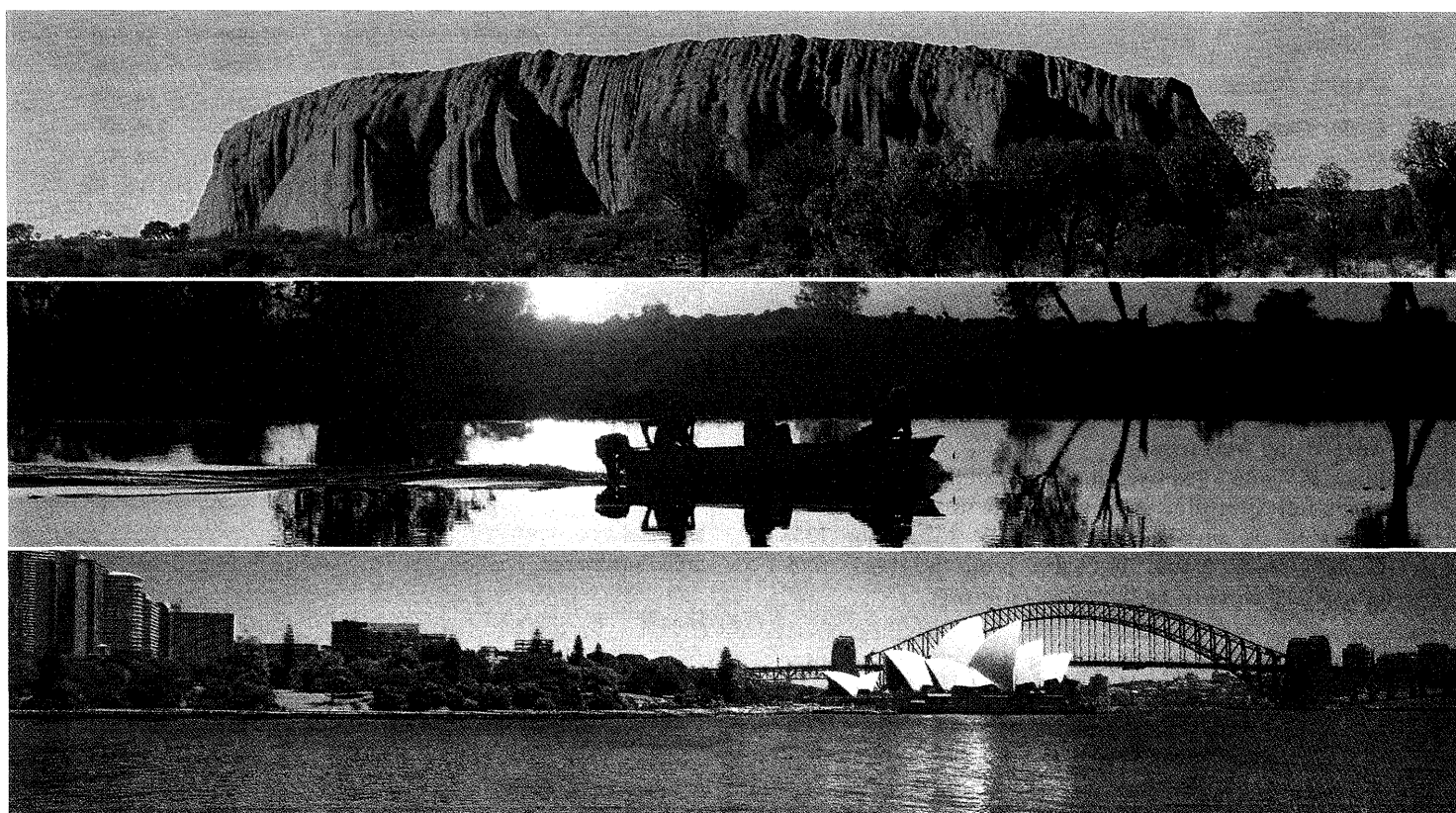
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