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IAPH ANNOUNCEMENTS AND NEWS

IAPH observes 38th anniversary Working together for the benefit of the world's ports!

November 7, 1993 marks the 38th anniversary of the foundation of IAPH. Thirty-eight years have passed since our Association came into being at the inaugural conference at the Hollywood-Roosevelt Hotel in Los Angeles, California in November 1955.

Since then, eighteen conferences have been held, the most recent one being in Sydney, Australia, in April this year. The next conference is scheduled for June 10-16, 1995 with the ports of Seattle and Tacoma acting as co-hosts.

Thirty-eight years after its inception, IAPH has almost 350 members (238 Regular and 111 Associate), without counting those who are currently with us in their capacities as Honorary, Lifetime or Temporary members.

The Association's Board of Directors, which started with 14 members in 1955, currently numbers 91.

While IAPH has been continuing with its unceasing efforts to meet the demands of its challenging agenda, the Association has inevitably had to accept various changes in its membership and committees as well as changes in the economic or social situations which surround our members. Naturally, the activists of the 60s, 70s and 80s are different from today's leaders of our Association. However, a growing number of enthusiastic members is maintaining consisting efforts to build on the achievements of our predecessors, and the scope of the Association's activities has increased year after year.

It seems an opportune moment for us to size up our own organization to see where we are now and which direction we ought to be moving in. In doing so, we are pleased to introduce the address which was delivered by our First Vice President Mr. Robert Cooper recently in Kobe, Japan, where Mr. Cooper was a keynote speaker at the Asia-Pacific Ports Symposium. (By Kimiko Takeda)

IAPH Fostering Cooperation Through Many Activities



By Robert Cooper First Vice-President of IAPH Chief Executive Ports of Auckland Ltd.

A keynote speech delivered at the Asia-Pacific Ports Symposium held in Kobe on September 6, 1993

Introduction

It is my privilege to address you today in my role as First Vice-President of the International Association of Ports and Harbors on behalf of the hundreds of my colleagues in ports around the world.

In bringing you their greetings, please allow me, first, to congratulate the organisers, supporters and sponsors of this important symposium, and also congratulate you, the delegates, for giving time from your busy schedules to contribute to such a well-focused agenda.

Today, I want to introduce the International Association

of Ports and Harbors perspective on port co-operation, to outline how the Association is structured and organized, and to illustrate some of the interesting and worthwhile activities it undertakes in the spirit of international co-operation.

Like most professions, port management often speaks in a shorthand or jargon which provides an easy excuse for those not involved in the business to set it aside as being beyond our understanding.

Please allow me to distil the essence of the port business. Ports are transfer stations for goods and passengers in transit between sea transport and road and rail transport and, on occasions, air transport.

Although there is a huge range of disparate activities associated with this simple concept, it is a truism that the crux of good port management is in ensuring the efficient



movement of ships, goods and people through the port stage of the surface transport chain.

Given the huge of domestic and international sea trade through the world's ports, and the economic benefits which flow from these activities, it is an awesome responsibility of efficient management; and little wonder that Governments around the world give it so much attention.

There are many varieties of port governance. They range from central Government control of all activities to the other extreme of being totally privatised and responsive only to the market place. Not surprisingly, there are many variations in between, including the financial extremes of Government injecting money into the port system whenever it needs more, while others concentrate on taking it out when they need it! It is not beyond imagination that there are indeed examples where Governments do both at the same time.

Despite these many differences, there are even more commonalities, and this is where the spirit of co-operation at both national and international levels can be used as a base for development. In reality, those charged with the responsibility of running ports face much the same problems as their colleagues around the world, even though they may differ from time to time in scale, focus or priority.

Perhaps it is this commonality of purpose and a common burden of responsibilities which have helped forge such a tremendous international bond between ports. It is a bond which crosses all boundaries of nationalism, culture, creeds and politics, and I believe the founders of the International Association of Ports and Harbors recognised this potential.

International Association of Ports & Harbors

IAPH was founded in 1955, and one of its leading architects, Mr. Gaku Matsumoto, correctly noted that the efficiency of shipping transport and the functions of ports were interactionary. No matter how greatly improved was the efficiency of one part of the transport chain, it could be severely limited by the inefficiency of another. The efficiency of ships could be negated by the inefficiency of ports.

It was quickly recognized there was no point in trying to "reinvent the wheel" in dealing with port efficiency, and thus the successes, failures and experiences of ports around the world should be examined with a view to emulating the best and avoiding the worst.

Given that sea trade, with all its commercial benefits, links two or more ports, it is not surprising that port managers are willing to share their experiences, both good and bad, for the common benefit of their colleague counterparts.

Thus, the principal aim of International Association of Ports & Harbors was to increase the efficiency of ports and harbors through the development and dissemination of useful information. In this it encourages members to

PORTS AND HARBORS November, 1993

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exchange views, experience and knowledge in all aspects of port operation, management and development.

The founders had great vision.

They chose as their slogan

WORLD PEACE THROUGH WORLD TRADE WORLD TRADE THROUGH WORLD PORTS

They recognized the enormity of that challenge, and knew well that the best way to success would lie in furthering a spirit of co-operation.

Their success is evident for all to see.

Some 38 years on, IAPH is thriving. It is a non-Governmental organisation with its Secretariat based in Tokyo. Its membership exceeds 300 comprises representatives of almost every major port in the world, spread through 82 countries in every continent.

The affairs of the Association are governed by a Board of Directors spearheaded by a President and three Vice-Presidents. The membership of the Board is designed to ensure a spread of representation throughout the world.

In turn, the President and the Board of Directors are assisted by the Executive - again reflecting that multi-national mix - and our ever responsive permanent Secretariat led by our esteemed Secretary General in Tokyo.

That is the formal structure.

Let me now describe to you the way in which co-operation between members is developed so that they can contribute to and be well informed about a whole range of port issues.

We have a Technical Committee structure which is grouped under the three broad headings of Ports Affairs, Trade Affairs and Human and External Affairs.

The Port Affairs group is further divided into Committees such as:

Port Planning and Construction Committee Dredging Task Force Port Safety & Environment Committee Marine Operations & Safety Committee Cargo Operations Committee

The Trade Affairs group comprises:

Sea Trade Committee Ship Trends Committee Combined Transport and Distribution Committee Trade Facilitation Committee

The Human and External Affairs group comprises:

IAPH Common Bond of Challenges/Problems

Port Communities Committee Legal Protection Committee Human Resources Committee Along with these Committees there are other standing Committee such as Finance, Membership, Constitution and By-Laws and Legal Counsel which ensure the Association functions in a businesslike manner.

With membership drawn from a wide range of ports, these Committees provide a forum for investigation, consideration and deliberation on almost every port aspect faced around the world today.

Not surprisingly, the spotlight has shifted from one area to another since the Association was founded. In the past we have seen huge changes in cargo handling technology, and benefited from one another's experience in this field. Now, the technological needs have eased and the focus has shifted to, for example, environmental issues. Here again, it is the sharing of experience and knowledge that has enabled some ports to respond speedily and effectively to newly identified problems.

Over the years, these Committees have produced a number of important port documents establishing guidelines for port managers.

To list a few:

- Guidelines on Port Safety and Environmental Protection, Committee on Port and Ship Safety, Environment and Construction (COPSSEC) (2nd printing of the 1985 original edition, 382 p.)
- Guidelines for Environmental Planning and Management in Ports and Coastal Area Developments, Port Planning Sub-Committee, COPSSEC (1989, 93p.)
- Practical Guidelines for Ports on Environmental issues
 Water Pollution A concern for port authorities, Sub-Committee on Port Safety & Environment, COPSSEC (1991, 23p.)
- Practical Guidelines for ports and environmental issues
 Dangerous Goods and the Port Environment, Sub-Committee on Port Safety & Environment, COPSSEC (1991, 25p.)
- IAPH Guidelines for Port Planning and Design (Port Planning Sub-Committee, COPSSEC (1993, 84p.)
- IAPH Guidelines on Soil Pollution in Ports, Port Safety Environment Sub-Committee, COPSSEC (1993, 33p.)
- International Safety Guide for Oil Tankers & Terminals (1988) (ISBN 0 948691 62 X) (Jointly produced by International Chamber of Shipping, Oil Companies International Marine Forum and IAPH).
- CCC/IAPH Guidelines on Co-operation Between Customs Administrations and Port Aimed at the Prevention of Drug Smuggling (1989, 24p.)

In addition, IAPH, in association with UNCTAD, has published a number of monographs covering a wide range of specific port management matters:



Responsibility for Efficient Management

- Changing from daywork plus overtime to two-shift working
- Planning land use in port areas: getting the most out of port infrastructure
- Steps to effective equipment maintenance
- Operations planning in ports
- Container Terminal Pavement Management
- Measuring and evaluating port performance and productivity
- Steps to effective shed management
- Economic Approach to Equipment Selection & Replacement
- Multi-Purpose Terminals Recommendations for Planning and Management
- Computerised Container Terminal Management
- Electronic Data Interchanges Concerning Ports

International Association of Ports & Harbors is far from insular, and has extended its co-operation to a number of international organisations.

For instance, it liaises with:

- * ECOSOC (United Nations Economic and Social Council)
- * IMO (International Maritime Organization)
- * UNCTAD (United Nations Conference on Trade and Development)
- * UNEP (United Nations Environment Programme)
- * CCC (Customs Co-operation Council)
- * PIANC (Permanent International Association of Navigation Congresses)
- * AACI (Airport Association Council International)
- * WTA (World Teleport Association)
- * WTCA (World Trade Centers Association)

In short, International Association of Ports & Harbors is committed to making a viable input to the work of many other organisations on a wide variety of issues involving ports and seaborne trade and their associated issues/problems. However, even there the story does not end.

Within its own international family the Association has formed a Committee on International Port Development (currently known as Human Resources Committee). Here, the members demonstrate their willingness to bridge the gap between developed and developing ports in a positive and practical way. The Association has established a fund supported by members' voluntary contributions which is used to assist young people employed in developing ports to further their studies internationally.

Over the years the various bursary and award schemes have assisted almost 100 young people to gain opportunities to further their management education and experience to the benefit of their parent port. Bridges Gap Between Developed and Developing Ports

Of course, there are difficulties in running an Association with a membership distributed around the world from places as far apart as Iceland and New Zealand, Kobe and Abidjan. It requires the unstinting efforts of our President and the Secretary General and his staff to ensure the communications and co-operation continue uninterrupted by the barriers of distance and language.

The wider port family meets every second year at its biennial Conference to formally conduct the business of the Association, to confer on a range of economic, technical and environmental issues and, of course, to further cement the bonds of friendship and co-operation. In the alternate years the President meets with his Vice-Presidents, the Executive Committee and the Secretariat to ensure the smooth running of the Association's affairs, and to chart the Association's course for the years ahead in preparation for the next biennial meeting of the Board of Directors.

Throughout these two-year intervals the work of the Association's Committees continues on without pause. Port people throughout the world give generously of their knowledge, their time and their energy to ensure that every issue likely to affect ports is given dispassionate, professional consideration with a view to making recommendations on how each issue, both present and foreseen, should be best addressed.

Let me conclude by saying that I take great pride from my involvement with this truly international Association. I think it is unlikely that its spirit of co-operation is matched in any other international organisation, and perhaps that is because of the ready recognition that we all benefit from world trade, and that we as representatives of the ports have opportunity to play such an important part in facilitating that trade.

If we, as representatives of Asia-Pacific ports, can build up further co-operation from this sound international base, then we will fulfil our responsibility.

Dwayne Lee to Represent IAPH at 16th LDC Meeting

Mr. Dwayne G. Lee, Deputy Executive Director — Port Development, Port of Los Angeles and Chairman of the IAPH Dredging Task Force has recently sent an IAPH position paper for submission to the 16th Consultative Meeting of Contracting Parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and



Other Matter in London which is scheduled for 8-12 November 1993. In his letter addressed to Dr. Manfred K. Nauke, Head, Marine Science Section, IMO's Marine Environment Division, Mr. Lee confims that he is attending the meeting as head of the IAPH delegation which includes Mr. Joseph E. LeBland, Jr., an attorney from New Orleans who has served as legal counsel for IAPH at Consultative Meetings of the LDC. The paper submitted by Mr. Lee is reproduced in this issue.

Sea Trade Committee More about its terms of reference

Following the submission of the terms of reference for the 12 technical committees to the Board for its approval in September 1993, the Sea Trade Committee chaired by Ms. Lillian Liburdi (the Port Authority of New York and New Jersey) has recently sent the Secretary General a report on further details of her Committee's terms of reference as follows.

The Sea Trade Committee was first convened at the mid-term meeting in Charleston in May 1992. Since that time, the Committee has formed three task groups to achieve its objective of enhancing IAPH's collective understanding of cargo movements and their impact on ports. The three groups have been directed to investigate the possibility of consistent statistical definitions of cargo, explore the possibility of a standardized forecast of world cargo movements, and develop a worldwide database of marine terminal capacity.

The First Task Group, led by Mr. Frazer McKenzie of the Port of Tauranga, New Zealand, has been working on the problem of establishing consistent cargo definitions for port data collection. An overriding concern has been that the definitions should coincide with the cargo categories being forecasted, that they should be broadly applicable to ports worldwide, and that the data be readily available. Comments exchanged by fax among task group members resulted in proposed cargo definitions have been presented to the Sea Trade Committee for review at the meeting in Sydney. The task group will incorporate comments and forward them for eventual adoption by IAPH. It also plans to work with other international bodies to incorporate these definitions in statistical compilation and analysis.

The Second Task Group, led by Mr. Jean Pierre Hucher of the Port of Le Havre, has developed a survey of IAPH members' cargo forecasting activities. The Committee will use the information collected from the survey to help it determine if a global forecast is desirable, and how best to compile it.

Mr. Wade Battles of the Port of Miami is leading the Third Task Group, which is developing a worldwide database of marine terminal capabilities and capacity. The group is collecting data from numerous sources which will be compiled by geographic port ranges. A computer-generated matrix will compare total marine terminal capacity for a port range with trade volumes on that range.

Note: The Committee which started as a sub-committee of COPSSEC in May 1992, has now become a full committee since the Sydney Conference in April 1993.

Technical Committee Members Announced

Following the announcement of the terms of reference for the 12 technical committees which was made through the previous issue of this journal, we list the committee members who have recently been appointed by President Lunetta based on the lists as confirmed by the respective chairpersons by the end of July.

For most committees, changes in membership can take place at any time and it is necessary for the Head Office Secretariat to keep in close contact with the Committee chairpersons so as to enable the Secretary General to process the proposed appointment without delay. For this purpose, the Head Office would appreciate receiving copies of communications exchanged between the chairperson and committee member or applicant as to the changes in membership status.

If any IAPH members wish to serve on a particular committee, they are encouraged to write to the chairperson concerned. Upon considering the matter the chairperson will then be in a position to have President Lunetta make the official appointment.

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P. Palu, Chairman, Baltic Ports Organization, Denmark R.H. Parry, Deputy Secretary, Port Development Board, Hong Kong

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Members: to be known

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P. Lelarge, Development Manager, Port Autonome du Havre, France

E. Lui, Deputy Director (Information Systems), Port of Singapore Authority

L. Sposi, Manager – ACES, Marketing Division, Port Department, The Port Authority of NY & NJ, U.S.A.

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G. De Monie, Programme Coordinator, IPER, France M. Eguchi, Director General, Port and Harbor Bureau, City of Kobe, Japan

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

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

J.M. Pisani, Director, Office of Port & Intermodal Development, Maritime Administration, U.S. Dep. of Transportation, U.S.A.

H. Ramnarain, Chairman, Mauritius Marine Authority, Mauritius

F.J. Smith, Oregon State University, Dep. of Agricultural & Resource Economics, U.S.A.

Special Advisors:

D.L. Turner, Chief, Transport & Communications Division, ESCAP, Thailand

J. Cambon, Chief, Ports Section, UNCTAD, Switzerland

Legal Protection

Chairman:

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Vice-Chairman:

P. Keenan, Chief Executive, Cork Harbour. Commissioners, Ireland

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E. Gitau, Company Secretary & Head of Legal Services, Kenya Ports Authority

T. Hirota, President, The Overseas Coastal Area Development Institute of Japan

M. Hosseini, Deputy Managing Director for Operation, Ports and Shipping Organization, Ministry of Roads & Transportation, Iran

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

P. Mallon, Through Transport Mutual Services, U.K. J.M. Moulod, General Manager, Port Autonome d'Abidjan, Cote d'Ivoire

A. Pagès, Honorary Member of IAPH, France

A.J. Smith, IAPH European Representative, U.K.

J.F. Stewart, Honorary Member of IAPH, New Zealand C. Veng, Deputy Managing Director, Port of Copenhagen, Denmark

H.H. Welsh, Assistant General Counsel, Port Authority

of NY & NJ, U.S.A.

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H. Onishi, Senior Adviser, Port and Harbor Bureau, City of Osaka, Japan

N. Shanley, Chief Executive, Dublin Port and Docks Board, Ireland

Color pictures of Your ports for The IAPH journal

Since 1987, "Ports and Harbors" has carried color pictures of our member ports on its front cover page. It is the ardent hope of all the editorial staff at the Head Office to continue decorating the journal's front cover page with color pictures of various ports. Please send recent color pictures of your port to the IAPH Head Office in Tokyo, preferably with a brief explanation of the photographs concerned so as to enable us to prepare them for future issues of the journal in the most appropriate way. Members are encouraged to send several color pictures — for instance, one showing an overall view of the port and others focussing on particular facilities. Selection of the pictures to be used will be entirely at the discretion of the editorial staff.

All pictures and materials to be provided for the above purpose should be either in the form of film or color prints, and the costs incurred for mailing and delivery should be borne by the sender.

We urge all members' cooperation in supplying news, pictures and articles illustrating the latest situations concerning their ports, which we will introduce in appropriate issues of the journal.

Besides the provision of color pictures, we would equally

value members' continued cooperation in sending us articles and pictures for insertion in the "World Port News" column. Moreover, members are invited to run their advertisements in the journal at reasonable rates: ¥100,000 for a full-page (B&W) and ¥60,000 (B&W) for a half-page per insertion, to which a 10% members' discount will be applied.



The IPD Fund: Contribution Report

Contributions to the Special Fund For the Term of 1992 to 1994 (As of Oct. 12, 1993)

Contributors	Amount
Paid:	(US\$)
ABP (Associated British Ports), U.K.	3,000
Akatsuka, Dr. Yuzo, Univ. of Saitma, Japan	230
Akiyama, Mr. Toru, IAPH Secretary	
General Emeritus, Japan	1,000
Barcelona, Puerto Autonomo de, Spain	1,000
Cameroon National Ports Authority,	
Cameroon	480
Cayman Islands, Port Authority of,	350
the Cayman Islands	250
Clydeport Ltd., U.K.	1,000
Constanta Port Administration, Romania	250
Copenhagen Authority, Port of, Denmark	1,000
Cotonou, Port Autonome de, Benin	100
Cyprus Ports Authority, Cyprus	1,000
Delfzijl/eemshaven, Port Authority of,	
the Netherlands	350
de Vos, Dr. Fred, IAPH Life Supporting	1.00
Member, Canada	150
Dubai Ports Authority, U.A.E.	500
Dundee Port Authority, U.K.	250
Fiji, Ports Authority of, Fiji	100
Fraser River Harbour Commission, Canada	250
Gambia Ports Authority, the Gambia	250
Ghana Ports and Harbors Authority, Ghana	250
Halifax, Port of, Canada	250
Hiroshima Prefecture, Japan	523
Japan Academic Society for Port Affairs,	
the, Japan	267
Japan Cargo Handling Mechanization	250
Association, Japan	259
Japan Fort and Harbor Association,	407
the, Japan	493
Japanese Snipowners' Association,	E1 (
ule, Japan Klang Dort Authority, Malaysia	200
Klang Port Authority, Walaysia Konee Container Terminel Authority, Koree	200
Korea Container Terminal Authority, Korea	1 000
ASC (Kuwait On Company), Kuwait Marina Department, Hong Kong	1,000
Maritime Services Board of New South Wal	500
Austrolio	267
Australia Mouritius Marino Authority Mouritius	200
Montreal Port of Conada	200 500
Nagova Container Barth Co. Itd. Japan	518
Nagova Container Derth Co., Ltu., Japan Nagova Port Authority Japan	3 564
Nagoya Fort Authority, Japan New Vork & New Jorsey Port Authority	3,304
of USA	1 000
Nijgata Port of (Nijgata Prefecture)	1,000
Japan	860
Okubo Mr Kiichi Janan	274
Pacific Consultants International Japan	2/4
Penta Ocean Construction Co., Ltd., Janan	500
Point Lisas Industrial Port Development	200
Co. Ltd Trinidad	100
*Primer Concurso Internacional de Memoria	15
Portuarias: Carlos Armero Sisto. Anuario	
de Puertos: Buenos Aires. Argentina	300
	200

Public Port Corporation I, Indonesia	180
Qubec, Port of, Canada	250
Shipping Guides Limited, U.K.	500
South Carolina State Ports Authority,	
U.S.A.	1,000
Tauranga, Port of, New Zealand	500
Toyama Prefecture, Japan	254
UPACCIM (French Ports Association),
France	1,905
Vancouver, Port of, Canada	500
Total:	US\$29,033

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

Obituaries

Dr. Alessandro di Cio, President of Venice Port Authority

On September 11, IAPH Head Office learned from Mr. A.J. Smith, our European Representative in London, of the death of Dr. Alessandro di Cio in an accident in his office in Venice.

Ing. Shaul Raziel, Director-General, Israel Ports and Railways Authority

On September 24, IAPH Head Office learned from Mr. E. Hadar, Honorary Secretary, Israel Ports & Railways Authority, that Ing. Shaul Raziel, the Authority's Director-General, has passed away recently.

The Secretary General of IAPH has sent a letter of condolence to the bereaved families and the authorities concerned in Venice and Tel-Aviv respectively. In his letters Mr. Kusaka expressed the deep appreciation of IAPH members for the contributions the two deceased had made towards the work of IAPH.

Visitors to Head Office

On 31 August, **Mr. Egbert Prins**, ex-Secretary General, International Association of Hydraulic Research (IAHR, Delft), visited the Head Office and met Mr. R. Kondoh for an exchange of views on items of mutual concern. Mr. Prins was attending the IAHR Conference held in Tokyo.

On 2 September, Mr. Robert Cooper, 1st Vice President of IAPH, together with Mr. David Catty, Marketing Manager, Ports of Auckland Limited, visited the Head Office, where they were received by Mr. Hiroshi Kusaka, Secretary General, and his staff. Mr. Cooper was visiting Tokyo on a business mission. He then proceeded to Kobe where he attended a symposium on Asia Pacific Ports, where he delivered a keynote speech on IAPH and its activities entitled "IAPH: Fostering International Cooperation Through Its Many Activities".

On 3 September, Mr. John Hayes, General Manager, Port Coordination and Planning, Maritime Services Board of NSW, visited the Head Office and was received by Mr. Hiroshi Kusaka, Secretary General, and his staff. He was visiting Japan to attend the above symposium where he delivered a keynote speech on the subject of "Relocation, Renewal and Rehabilitation of Port Facilities - Experiences in the Sydney Ports".

On 2 September, Mr. R. Kondoh was guiding a group



Mr. Struijs (second from left) with the H.O. Members

of seven experts of mixed expertises of civil engineering, railways and banking of Taiwan, China to visit the Kawasaki site of Trans-Tokyo Bay Highway Corporation (TTB). The group, headed by **Mr. Chow, Chan-Yuen,** Chairman of Transportation Committee, Taiwan Provincial Assembly, was visiting Kawasaki to study about the on-going construction project of bridge & tunnel system connecting Kawasaki and Kisarazu over a distance of 15 km traversing the Bay of Tokyo. At the TTB Marine Road Plaza, a domonstration hall for the 1.4 trillion yen project, comprising a 10 km long undersea tunnel and a 5 km long bridge over the water, the study group was received by Eng. Tadasu Okuide, Chief, Safety Management Office of TTB.

On 10 September, Mr. Young-Tae Chang, and Mr. Sung-Gui Kim, Senior Researchers of Korea Ocean Research & Development Institute, visited the Head Office to meet with Mr. R. Kodoh for an exchange of views on the current situation of maritime shipping and port developments in the region. The visitors had attended the Symposium on Asia-Pacific Ports held in Kobe in the earlier part of the week. In Tokyo, they also visited the Japan Maritime Research Institute to meet with Mr. Hideo Yamada, Director & Senior Researcher.

On 20 September, **Mr. Pieter Struijs**, Executive Director, Shipping, Rotterdam Municipal Port Management, visited the Head Office to meet with Mr. Hiroshi Kusaka and his staffers for an exchange of views on items of mutual concern and interest. He was visiting Japan to attend a tripartite Port Seminar of the Ports of Rotterdam, Seattle and Kobe which have been affiliated by a sister ports for more than two decades.

On 22 Septemer, **Mr. Jose Luis de Luis**, Chief, Fishery Port Division, and **Mr. Joaquin Colunga Perez**, Chief of the Business Department, Port of Vigo, Spain, visited the Head Office, where they were received by Mr. R. Kondoh, to learn about the current situation concerning fishery ports in Japan.



Officials of the Port of Vigo at the Head Office

The two gentlemen were visiting Japan on a trade development mission from the Chamber of Commerce and Industry of Corna, Spain. The Trade Mission visited the Ports of Tokyo and Yokohama with the particular aim of investigating the handling of marine products and related facilities such as cold storage. The mission also visited the ports of Shimizu and Yaizu in Shizuoka Prefecture. The Port of Shimizu is known not only for its functions related to container services but also for the landing of tuna. The Port of Yaizu is one of the biggest fishery ports in Japan.

On 23 September, Mr. R. Kondoh, at a Tokyo hotel, met with **Ing. Carlos Mier y Teran O.**, Coordinator General of Ports, Ministry of Communications and Transport, Mexico to exchange views on items of mutual interest, including membership participation by Mexican ports. Also present at the meeting was **Mr. Julio Rodolfo Moctezuma**, President, Preinvestment and Development, who had been presiding over Pemex after leaving the ministerial post at the Finance Ministry of Mexico.

On 27 September, Mr. R. Kondoh was invited to an evening reception hosted by the Rotterdam Port & Distribution Delegation led by **Hon. R.M. Smith**, Vice Mayor of Rotterdam. At the event, Mr. Kodoh met with **Mr. W.K. Scholten**, President, Rotterdam Municipal Port Management, and Vice Chairman of the Rotterdam Port Promotion Council. The mision members also took part in the tripartite port seminar of the Ports of Rotterdam, Seattle and Kobe held in Kobe, Japan.

Membership Notes:

New Members

Regular Member

Port Works Division,	Civil Engineering Office, Civil
Engineering Departme	ent, Hong Kong (Hong Kong)
Address:	5F., Civil Engineering Bldg.
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Temporary Member

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Address:	3-1-1, Ohte-machi, Oita City		
	Oita Pref. 870		
Mailing Addressee:	Mr. Morihiko Hiramatsu		
	Governor		
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Associate Member

Tokyo Boeki Ltd. [Cla	Tokyo Boeki Ltd. [Class A-2-1] (Japan)			
Address:	2-13-8, Hatchobori, Chuo-ku			
	Tokyo 104			
Mailing Addressee:	Mr. Yasuhiko Yamamoto			
	Director			
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Fax:	03-3555-7369			
Director:	Mr. Yasuhiko Yamamoto			
Sales Representative:	Mr. Akira Imoto			

International Maritime Organization

Sixteenth Consultative Meeting of Contracting Parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 8-12 November 1993 Agenda item 4 LDC 16/4 16 September 1993

Amendments to the Convention and its Annexes

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

1. Introduction

- 1.1 The fifteenth Consultative Meeting identified 13 "core issues" as subjects to be considered by Contracting Parties for amendments to the London Convention 1972. The Scientific Group was asked to provide comments upon these issues at its sixteenth meeting in May 1933, and an amendment conference was scheduled to address these core issues with a view to making recommendations to the Sixteenth Consultative Meeting.
- 1.2 Contracting Parties adopted a Procedure for the Priority Consideration of Amendments to the Convention (LC15/16, Annex 3). Because of the limited time available for finalizing amendments under this procedure, the 1st Meeting of the Amendment Group (19-23 July 1993) proposed the consideration of certain issues on a "fast-track" basis to allow adoption of formal amendments to the annexes at the Sixteenth Consultative Meeting. These issues included proposals to incorporate into the Convention or its annexes the following resolutions adopted by Contracting Parties at past consultative meetings:
 - (a) Resolution LDC.21 (9), prohibiting disposal at sea of radioactive waste pending consideration of the final report of the Inter-Governmental Panel of Experts on Radioactive Waste Disposal at Sea (IGPRAD 6/5);
 - (b) Resolution LDC.43 (13), prohibiting disposal at sea of industrial waste by the end of 1995; and
 - (c) Resolutions LDC.35 (11) and LC.47 (15), prohibiting incineration of noxious liquid wastes at sea.

Texts for the proposed amendments are set out in the report of the Amendment Group (LC/AM 1/9). A draft resolution for adoption of the proposed amendments will be issued as a meeting document to the Sixteenth Consultative Meeting.

1.3 The Secretariat has requested the submission of comments upon these and other proposed amendments, as well as upon the reverse listing approach considered under core issue 11, by 17 September 1993. This document is submitted to express the views of

IAPH upon these issues.

2. "Fast-Track" Issues

2.1 Issue 4: Prohibition of Disposal of Radioactive Waste At Sea

- 2.1.1 The Amendment Group considered the final IGPRAD report concerning the prohibition of radioactive waste at sea and narrowed the seven options identified in the report to three options which it felt could have the most chance of successful adoption at the Sixteenth Consultative Meeting:
 - (a) Option 4 the moratorium on dumping at sea of low-level radioactive waste would be prolonged for an indefinite period or for a period to be determined;
 - (b) Option 6 the dumping at sea of radioactive waste would be prohibited by amending the Convention and/or its annexes, subject to the right of named Contracting Parties to opt out and provided that these Contracting Parties to opt out and provided that these Contracting Parties would not resume dumping for an agreed time; and
 - (c) Option 7 the Convention and/or its annexes would be amended to include the prohibition of dumping at sea of radioactive waste.
- 2.1.2 With regard to Option 4, the current moratorium on dumping of radioactive waste at sea was adopted within the framework of Annexes 1 and 2, which contain appropriate reference to the International Atomic Energy Agency (IAEA) as the competent international body to define wastes considered to be "radioactive" for purposes of regulatory control. The IAEA definition (IAEA Safety Standards, Safety Series No. 78 (1986)) contains an exclusion for naturally occurring radioactivity in dredged material. The IAEA is also currently working upon a deminimus definition of "radioactivity". Extension of the current moratorium would include these determinations by the IAEA.
- 2.1.2 Options 6 and 7 would amend the Convention and/or its annexes to prohibit the sea disposal of radioactive waste. If this approach is taken, in IAPH's view it

is necessary to include appropriate reference to the IAEA as the appropriate body to define what wastes and substances are to be considered "radioactive" for purposes of the prohibition, as is done under the current annexes.

2.2 Issue 5: Prohibition of Disposal of Industrial Waste at Sea

- 2.2.1 The Amendment Group identified four options to incorporate into the Convention or its annexes the prohibition against the sea disposal of industrial waste under Resolution LDC.43 (13). The principal differences relate to how "industrial waste" is defined for purposes of the prohibition. Option 1 defined for purposes of the prohibition. Option 1 proposes to incorporate the language of the existing resolution. Options 2 and 3 are based upon a new definition of "industrial Waste" proposed by the United States which would include a listing of materials excluded from the definition, such as dredged material.
- 2.2.2 IAPH supports the United States's proposal. In IAPH's view, it is important to identify those wastes and substances which will not be subject to the sweeping prohibition against the disposal at sea of industrial waste.
- 2.2.3 If the definition of industrial waste in the existing resolution is retained, IAPH would request that language be included in the report of the Sixteenth Consultative Meeting to reflect that dredged material is not intended to be covered by the prohibition. Dredged material has always been the subject of separate regulation.

3. Other Proposed Amendments

3.1 Issue 11: Incorporation of the WAF into the Convention

- 3.1.1 In the debate upon core issue 11, a number of delegations have proposed the adoption of a "reverse listing" approach under which all substances would be prohibited from disposal at sea unless listed as acceptable for sea disposal. This approach has been taken under recent regional conventions, which have listed dredged material as acceptable for disposal at sea. IAPH could support a reverse listing approach that listed dredged material as acceptable for sea disposal.
- 3.1.2 IAPH would also support incorporation of the WAF into the Convention or its annexes. Use of appropriate part of the WAF with the Dredged Material Guidelines is a technically sound and effective means of assessing the impacts from sea disposal.

3.2 Issue 8: The Precautionary Approach

- 3.2.1 The Fourteenth Consultative Meeting reached consensus upon a statement of the precautionary approach in the adoption of Resolution LDC.44 (14). In IAPH's view, since agreement has already been reached on this issue, adherence to the language of the resolution would provide the most expeditious way to incorporate this concept into the Convention of its annexes.
- 3.2.2 A proposal has been made (LC/AM 1/9/3.12.3) to change Resolution LDC.44 (14) from requiring action whenever effects in the marine environment "are likely to be caused" to requiring action whenever effects "may be caused" by human activities. IAPH is opposed to such an expansion of the precautionary approach. There is no absolute certainly in assessing the effects of sea disposal or any other disposal option. The mere possibility that harm "may" occur cannot be used as the basis for prohibiting a disposal oper-

ation. This would create an impossible standard. Dredging projects essential to the continued operation of many ports could be halted if they could not proceed whenever there was any possibility of harm, however remote.

- 3.2.3 The "likely to" language found in Resolution LDC.44 (14) is also consistent with Article 1 of the Convention, which obligates Contracting Parties to take all practicable steps to prevent the pollution of the sea by the dumping of waste or other matter "that is liable" to create hazards, harm or damage. The Law of the Sea Treaty (LOS) similarly defines "Pollution" as the introduction of waste or other matter into the sea "which results or is likely to result" in hazards, harm or damage. These support retaining the language of the resolution.
- 3.2.4 A proposal has also been made (LA/AM 1/9/3.12.4, Option 2, p. 17) to require the application of "best available techniques" and "best environmental practices" as part of the precautionary approach. These terms are not defined under the Convention and would create ambiguity as to what is required and under what circumstances. This could affect activities such as dredging operations in unknown ways. IAPH opposes the imposition of such undetermined requirements, particularly any that would mandate the use of particular dredging technology or equipment or which would require changes in dredging operations or techniques when all other criteria under the Convention are satisfied.

4. Conclusion

IAPH invites Contracting Parties to take into account the views expressed above in the consideration of proposed amendments to the Convention and its annexes on these issues. IAPH also wishes to express its appreciation at the opportunity to participate in the amendment process and to reaffirm its willingness to assist Contracting Parties in the consideration of issue affecting the disposal of dredged material at sea.

> DWAYNE G. LEE Chairman, IAPH Dredging Task Force

Port-related Interests at **Recent IMO Parleys**

Report by Alex J SmithIAPH Liaison Officer with IMO



1 General Remarks

IMO's Council and each of the Standing IMO Committees have met since March 1993 in preparation for the meeting of the Assembly, IMO's governing body, which will be held in London from 25 October - 5 November 1993.

In shaping priorities, IMO has necessarily had to take account of events which were both expected and unexpected as, for example, in the sequence of highly publicised marine accidents which have occurred during 1993, and which have once more focussed public concern on ship safety and pollution prevention and response arrangements.

Another factor is the consequence for IMO of the Rio Summit of the world's political leaders on environment and development in June 1992 which, inter alia, set the maritime agenda for the twenty-first century. The Summit's Agenda 21 Declaration has placed a major lead responsibility on IMO for action in the maritime sectors.

The main thrust of IMO action continues to be directed at the safety of shipping and safeguarding the marine environment. Increasingly, however, IMO is being identified with, and becoming more involved in issues which relate to operations in those activity areas which service shipping. The Port Transport Sector is one — in IMO eyes at important one — of those areas.

IMO's Council, and Committees, have-fine tuned a host of draft Resolutions on maritime safety and pollution prevention for consideration by the Assembly in October 1993. The majority of these relate to the technicalities of ship design, construction and onboard management and are only of marginal interest to the world's ports. There is little doubt however, that the Assembly will be invited to approve some Resolutions which will have an impact on port operational activities.

Past reports on IMO activities, culminating in the report to the 18th IAPH Conference in Sydney, last April, have drawn attention to this development and focussed attention on a range of port-related issues which feature within the IMO overview process. This report will, if anything, underline these and hopefully bring them into sharper focus.

2 Meetings

2.1 Council

IMO's Council met from 14-18 June 1993.

A significant portion of the Council agenda deals with reports of its Committees. The work of these Committees will be addressed below in the order in which they have met since March 1993. Additionally, however and importantly, Council has approved the holding of a joint MSC/MEPC meeting on 2 November 1993 to consider current safety and pollution prevention issues of a general nature which might give rise to:

> a general review of maritime safety and marine environment protection, including matters of policy and a strategy to accomplish new goals, if a change in the current policy of safety and pollution prevention is deemed necessary;

> the need to establish priorities in order to enable them to respond to urgent and important needs in an efficient manner bearing in mind the resources of IMO;

> whether the present structure of sub-committees and the traditional allocation of meeting weeks to the Committees and their subsidiary bodies evolved over the years, responds successfully to the needs for enhanced maritime safety and marine environment protection, or whether a more rational structure would provide a more efficient mechanism towards achieving the desired goal;

> (the allocation of meeting weeks to the committees and their subsidiary committees during the 1994-1995 biennium is as follows:

MSC - 22 MEPC - 5 Legal - 4 Facilitation - 1

Council itself will hold 4 meetings within which meetings of the Technical Co-operation Committee are also planned.)

In reviewing IMO's relations with non-governmental organisations (NGOs), IAPH's continuance in consultative status was endorsed. More generally, and mainly because of both the demands of IMO's technical operations programme and budgetary constraints, Council members have called into question the contributions made by NGOs to IMO activities. It will not be too long before NGOs will be called upon to demonstrate in practical terms, a real interest in and commitment to IMO's activities as a pre-requisite to the granting of consultative status.

2.2 Legal Committee (15-19 March 1993)

Previous reports during the past IAPH biennium have made members familiar with the detail of the Legal Committee's current work programme.

IAPH policies have been formulated on the issues in question and steps have been taken to ensure that these are taken account of in discussions and, it is to be hoped, built into the conclusions reached.

The present position is that top priority is given to the completion of work on the development of a draft Convention on the Transport of Hazardous and Noxious Substances by Sea (HNS Convention). Council has asked the Legal Committee to set a clear target for the completion of HNS Convention work.

It is likely that some attention will be given to aspects of a possible revision of the Limitation of Liability of Maritime Claims Convention, 1976 (LLMC76) which is included in the agenda for the next meeting. It is also possible that the Committee's request for more specific information on legal issues regarding ship reporting systems and vessel traffic services will be positively addressed by the appropriate IMO Committees.

2.3 Facilitation Committee (26-30 April 1993)

The intent of the 1965 Convention on Facilitation of International Maritime Traffic (1965 FAL) continues to be the reduction, simplification and standardisation of the documentation required, and the formalities and procedures connected with the arrival and departure of ships engaged in international trade, their passengers, crews, cargoes and stores.

Discussions have continued on proposals for amendments of 1965 FAL Convention to take account of developing techniques and technologies, and the ever-growing need for greater security at ports including drug interdiction activities, the problem of stowaways and illegal immigration.

The perceived need to widen acceptance and usage of ADP/EDI for facilitation purposes featured prominently in discussions. In that regard, it was reported that trials of the EDIMAR system of standard EDI messages have been successfully concluded.

Joint promotional activities have also taken place most notably in holding seminars such as the twelve approved for the period 1993-1996 to be organised jointly by IMO and ESCAP.

Attention was also drawn to the development within

the UN system of a Code for Ports and Other Locations (LOCODE); and the use of the IMO Dangerous Goods declaration as the basis for a multi-modal Dangerous Goods declaration.

2.4 Maritime Safety Committee (MSC) (24-28 May 1993)

It must be stressed yet again that whilst the greater part of MSC activities is very much ship-related, and highly technical in that regard, various matters are dealt with at each meeting which are of more than passing interest to ports. On this occasion, with representatives from 64 Member States present, such matters included:

Containers and Cargoes

Provisions have been made for enhancing the safety of bulk carriers with particular reference to the requirements for a loading/unloading manual which will be of particular interest to those IAPH members which include cargo handling within their port operations.

Flag State Compliance

The principle underlying this area of activity is the development and consistent application of IMO standards by all IMO Member States and other States minded to follow the IMO lead.

In an MSC context, attention is currently focussed on the spread of Regional arrangements for Port State Control (PSC) from Europe to Latin America and the Asia/Pacific region, and the desirability of establishing uniform criteria for PSC performance. Guidelines in this regard will shortly follow. IAPH Committees ought therefore to consider whether and in what manner consideration should be given within these Guidelines to the concept of shipping which may be considered as sub-standard to port requirements.

Security Issues

The prevalence of piracy and armed robbery against ships in the Malacca Strait area led to a Working Group study of that problem which was subsequently expanded to include the enhancement of safety of navigation and protection of the marine environment in that area.

It is evident that a successful outcome to the Working Group's endeavours will be very much dependent on close co-operation between the littoral States on the ameliorative measures which must be taken. The Committee has decided that guidance on these measures, which is under development, should equally apply to other areas which suffer similar problems.

Experience gained thus far in dealing with the kind of problems addressed by the Working Group suggests that it is particularly helpful to involve port marine operational personnel in the co-operative process.

Experiences of dealing with security requirements for ferries and at ports in respect of measures against

unlawful acts against passengers and crews onboard ships will be shared at a seminar to be held at IMO Headquarters in London on 16/17 November 1993.

Safety of Navigation

Recent maritime accidents have imparted urgency to the need to examine the case for mandatory routing and ship reporting systems, the underlying sense of which is generally accepted. The relevant sub-committee will therefore consider these issues and related matters, including requirements and provisions for ship reporting, ship identification in relation to Vessel Traffic Services including an examination of the need, benefits, implications and feasibity such requirements, and whether ship identifecaron and tracking is required beyond VTS coverage for certain classes of ships. The hope is that the work will be completed sufficiently to allow for proposed amendments to SOLAS Chapter V to be put directly to the next MSC meeting in May 1994 for adoption.

IAPH, with other NGOs, has been and should continue to be an active participant in VTS-related developments which take place under the aegis of IMO.

Strategy for Ship/Port Interface

MSC has endorsed the draft Strategy for Ship/Port Interface which was the product of a Working Group meeting on the subject held in December 1992. The work programme proposed by the Working Group at that time was also agreed. Details of the proposed strategy and work programme were widely circulated to the IAPH membership prior to the 18th IAPH Conference.

MSC approved the issue of a Circular to Member States, inter-governmental and non-governmental organisations asking

- that they provide a list of Conventions and Codes, including their dates, recommendations, guidelines, manuals and standards coming under their responsibility and covering the topics of the subject areas listed by the Working Group;
- ii) that they submit proposals on the topics which they consider need urgent examination, explaining the nature of the problems experienced.

Responses to the Circular will be considered at the next scheduled meeting of the Working Group to be held at IMO Headquarters, London from 6-10 December 1993.

The question of which IMO Standing Committee should shoulder direct responsibility for the Working Group's activities will be dealt with at the joint MSC/MEPC meeting on 2 November 1993.

IAPH will be expected to be a principal, if not the principal respondent to the Circular, and also an active participant in related developments, as it was during the events leading up to the first Working Group meeting and during the course of that meeting itself.

2.5 Marine Environment Protection Committee (MEPC) (5-9 July 1993)

Delegates from 53 Member States, Observers from 4 inter-governmental and 21 non-governmental organisations, including IAPH, were present at the meeting, the agenda of which provided ample evidence of the widespread interest in and commitment to marine environment protection issues.

Even more so that is the case with MSC (see 2.4 above), the successful implementation of an increasing number of MEPC initiatives is dependent on their being requisite facilities and infrastructure in place at the world's ports, operated by skilled and co-operative personnel.

Port-related matters dealt with by MEPC usually and almost invariably refer to aspects of the International Convention for the Prevention of Pollution from Ships 1973, and its 1978 Protocol (MARPOL 73/78). A spin-off to IMO of the Rio Summit (see 1 above), however, and implementation in due course of decisions taken within the marinerelated section of its Agenda 21 programme, will almost certainly impinge on port operations.

IAPH would be expected to make an effective contribution to these decision-taking processes. It is therefor incumbent on the IAPH Committees directly concerned to be fairly familiar with and authoritative in IAPH policy terms on the issues which are to be discussed either as an initiative from the IAPH membership or from other interested parties.

Port-related matters discussed by MEPC on this occasion included:

Follow-up action to UNCED

It has been agreed that MEPC would act as the focal point within IMO in the fulfilment of IMO's functions and responsibilities in the implementation of Agenda 21. With that in mind, all IMO's Committees and sub-committees will be required to review and strengthen their activities in line with Agenda 21 requirements. The active participation of NGOs in consultative status with IMO such as IAPH, is seen as a vital element in facilitating IMO's commitment in this regard.

Chapter 17 of Agenda 21, which deals with marine environment protection issues falls within IMO's remit. Reference is made within that Chapter to the need to have facilities in ports for the reception of wastes from ships. This is not the only reference with a special significance for ports, however. It is nonetheless the topic on which particular attention will be focussed at the next MEPC meeting in March 1994.

MEPC would expect that IAPH would be in a position to make a positive contribution to that meeting on realistically attainable policies as respects sustainable provision and financing of reception facilities at ports.

Details of a Correspondence Group on the follow-up to UNCED, set up by MEPC, have been sent to the appropriate IAPH technical committees for necessary action.

Implementation of IMO Resolution A722(17) on

SBT Spaces

The essential element of Resolution of A722(17) from a port standpoint is a request that ports should deduct segregated ballast tanks (SBT) spaces from their calculation of port charges as an expression of their support for the design and construction of SBT tankers. These tankers are generally regarded as being environmentally friendly. Ports, generally, have not responded positively to the request to any appreciable extent through MEPC was advised that negotiations to do so are proceeding in a number of countries.

The position paper submitted to MEPC by IAPH was included in the October 1993 issue of "Ports and Harbors" (page 5). In an intervention made by the IAPH representative in response to numerous contributions from national delegations, the point was made that notwithstanding the complex nature of the entirety of the port charging process, IAPH actively continued to encourage Member Ports to look for ways of providing incentives for the effective design, operation and management of environmentally friendly ships. The meeting's attention was drawn in that regard to the development of a Green Award system by the Port of Rotterdam.

MEPC concluded that another draft Resolution should be forwarded to the 18th IMO Assembly for adoption. In addition to referring again to port charges, it was agreed that the Resolution should also cover pilotage dues.

Port Reception Facilities for Generated Wastes

MEPC noted that an IMO/World Bank Workshop on the Wider Caribbean Initiative for Ship-generated Waste (WCISW) would be held in London from 11-13 October 1993. The Workshop is regarded as a precursor to the actual implementation of a 5.5 million US dollar GEF-funded World Bank project and is aimed at achieving the broadest possible ratification, implementation and enforcement of MARPOL 73/78 in the WCISW Area.

IAPH members in the Wider Caribbean Area would find it in their interests to be represented at the Workshop, as also would representatives from appropriate IAPH technical committees who might find the Workshop's findings a useful precedent for application elsewhere.

The lack of reception facilities at ports continues to be of concern to MEPC though the underlying causes of this situation are generally appreciated.

An MEPC Working Group has finalised development of a "Manual on Reception Facilities" and the German Government has undertaken to prepare a first draft of a Manual for Disposal of Ship Wastes. Both documents will be considered at the next MEPC meeting.

Harmful Marine Organisms in Ballast Water

IAPH, with other organisations, will be asked to help resolve the problem of dealing with harmful.

marine organisms is ballast water.

The potential damage to public health and property by unwanted marine organisms is not apparently as fully appreciated as MEPC would like. Greater emphasis will therefore be given to it at the forthcoming 18th Assembly. A Working Group will also be established at the next MEPC meeting to review and further develop existing IMO guidelines on the subject as the basis for a new annex to MARPOL 73/78.

Pollution Prevention, Preparedness and Response (PPPR)

The importance of having an effective PPPR has been highlighted during 1993 by a number of dramatic tanker accidents. Amongst other things, these have called into question the adequacy of ship reporting procedures and the availability of key centres with an adequate salvage capacity.

These and a range of related matters are under consideration by the Working Group of MEPC which should be strongly supported by IAPH. It should be noted in that regard that IAPH is already committed to developing Guidance on Port Emergency Planning as a contribution to the implementation of the OPRC Convention and OPPR Conference Resolutions.

Depending on the necessary funding being provided by donors, it is hoped that a three-day workshop will be convened immediately prior to the next meeting of MEPC (7 March 1994) to deal with aspects of the implementation of the OPRC Convention. In so far as senior decision-makers in developing countries are particularly targetted, it should be noted that a limited number of representatives from developing countries participating in the Regional Seas Programme of UNEP could be given sponsorship, including financial assistance, to attend the Workshop.

2.6 Technical Co-operation Committee (17 June 1993)

45 Member States, 1 Associate member, 3 representatives from UN Specialised Agencies, 3 from inter-governmental organisations and 3 NGOs including IAPH were present at the meeting.

There are acknowledged problems in achieving the desired goal of widespread, if not universal adoption and implementation of IMO's global rules and standards. These rules and standards derive from IMO instruments dealing with matters relating to maritime safety and the prevention and control of marine pollution.

To exemplify, during the last 34 years, IMO has adopted 35 Conventions and Protocols and a large number of Codes and Recommendations.

Evidently, the severity of the impact of creating and sustaining appropriate infrastructure and accepting related obligations in respect of these instruments is greatest on developing countries.

To assist in the effort which the parties must make, IMO has constructed an Integrated Technical Co-operation Programme within which IMO's substantive divisions have responsibility to complete their respective technical co-operation sub-programmes.

Port-related aspects of the sub-programmes should urgently be examined by IAPH so as to determine the support which can be provided by the world's ports by way of expertise and/or funding to meet the objectives of the programmes.

Port-related needs and priorities, as with those of other sectors, are ever changing. IAPH's technical committees, with perhaps co-ordinating help from the Committee on Human Resources, should be familiar with the current position and be prepared as necessary, to input them into the IMO process for necessary action.

In so far as a regional dimension has been given to IMO's Technical Co-operation programme, IAPH committees should, if possible, examine port-related needs and priorities on a regional basis taking account of inherent regional risks to safety of ships and marine pollution, and the availability of funds in the region for effective implementation of related projects within the programme.

The meeting was interested to note in a general context that there was a marked lack of proposals for specific projects from local levels.

The meeting noted sub-programmes dealing respectively with Maritime Safety, Protection of the Marine Environment, Facilitation of International Maritime Traffic, and Maritime Legislation. Within these subject areas are matters which do involve the world's ports directly. The more obvious of these are:

Maritime Safety

The provision of certain shore and port-related services (such as aids to navigation, VTS services, personnel training, and equipment design); the provision of hydrographic services and survey facilities;

the need to ensure the safe transport, handling, storage and stowage of cargoes, liquid and solid bulk cargoes, dangerous substances and environmentally harmful substances, and the handling, stacking and the safe transport of containers through implementation of relevant Codes and Recommendations and the 1972 International Convention for Safe Containers;

the need to establish necessary national or regional arrangements to deal with air pollutions from ships.

Marine Environment Protection

Prevent marine pollution from ships through the implementation of MARPOL 73/78 and, in particular, through the provision of port reception facilities and the enforcement of appropriate Port State control measures;

prepare for and respond to marine pollution emergencies through implementation of the OPRC 1990 Convention and, in particular, through the development of national and regional contingency plans and the provision of training and equipment for combat operations;

prevent marine pollution from dumping at sea through the implementation of the London Con-(Continued on Page 21-22)

OPEN FORUM

Port Capital Investment Decision-making:

A Process



By Thomas J. Dowd and Candace Jonson

Acknowledgement: We express our deep appreciation to Washington Sea Grant for the permission afforded IAPH to publish this article in this journal.- IAPH Head Office

It is virtually impossible for a viable public port authority to be totally proactive since there are too many major factors that affect its future that cannot be controlled or even anticipated by the port staff. Conversely, it is also virtually impossible for a viable public port authority to be totally reactive since the time window between decision and implementation often exceeds that of the window of opportunity.

For a public port authority to maintain long-term viability, it must be dynamic! Dynamic in the sense that it must constantly review the facilities it owns, the services it offers, and the source of the revenues it generates. This review will determine how well the port is adhering to its mission and accomplishing its goals and objectives as set out in the port's strategic plan.

Today, a major management challenge for any viable port is prioritizing goals and maintaining a policy that ensures clear focus on the highest priority goals. Prioritizing is crucial for long-term viability. Prioritizing of capital projects should be high on the list of any public port authority.

This paper provides an overview of the decision-making processes used by public port authorities in evaluating new capital projects and insight into processes for determining the desirability of expanding, contracting, or terminating present facilities/services.

The cooperation and support of the American Association of Port Authorities (AAPA), especially the AAPA Finance Committee, and a multitude of public port authorities in Canada and the United States in this Washington Sea Grant funded research project are gratefully acknowledged.

The Process

For a port the biggest capital investment nightmare is the rogue project. This is a project that was approved without sufficient review and has seemingly taken on a life of its own, a self-fulfilling prophecy that gobbles up resources at an alarming rate and, when finally completed, generates little or no appreciable net income. These rogue port projects can be avoided!

Often the *most important* Board/Commission decisions are involved with the authorization of capital projects. Authorization of a capital project poses a number of challenges for both the Board/Commission and the staff. The various "go/no go" project decisions should be addressed using a logical decision-making process. However, quite often because of a lack of appreciation for the decisionmaking process and the analytical tools available, or the presence of some significant noneconomic motivation for the project, this logical analysis does not occur.

There is a process for determining these "go/no go" capital project decisions. By following this process, a public port authority will improve its chances that only capital projects that enhance port viability will eventually be approved. Using this process will not guarantee 100 percent success, but it should differentiate the solid opportunities from the latent disasters.

The capital project decision-making process is made up of three phases: the acceptance phase, the capital budgeting phase, and the implementation phase.

Acceptance Phase

The initial step in the acceptance phase is to define the project itself and determine that it is consistent with the port's mission. It is entirely possible that the current mission statement may need to be changed to accommodate the new project. If this is necessary, such a change should be made by the Board/Commission only after significant reflection/ study.

A port's mission statement is a product of the strategic planning process. It identifies the underlying design, aim, or thrust of an organization. In effect, the mission statement identifies the core businesses that the port will undertake.

If a proposed project is not consistent with the mission statement, then it may be necessary to reevaluate the mission statement as well as the port's goals and objectives that determined the accomplishment of the mission statement.

The second, and related, step in this phase is risk evaluation and the determination of a target return on investment for the proposed project.

This is necessary since it is unrealistic to require the same rate of return on all projects.

Proposed projects should also be analyzed to determine and quantify the risks associated with them. This analysis requires that there be a clear understanding of the project, its functions, and the potential for its profitable operation. To accomplish this step, it is necessary to look at project feasibility.

If the proposed project expands an existing facility or service, there is a very limited risk undertaken since the port is already familiar with the facility function or service. If the project requires the port to take on a new facility or service associated with, or complementary to, an existing one (e.g., adding an intermodal transfer area to an existing container terminal or a computerized system to facilitate customs clearance and/or cargo tracking), there is an assumption of some additional risk, but the risk is well appreciated because the port has experience with the basic activity. However, when the proposed project requires the port to take on a new facility or service that is totally unrelated to any current port function, there is the potential for the port to undertake a significant assumption of risk, a level of risk that may well be so extensive that it could create a financial burden for the port - even a burden that might affect the financial stability of the port itself. Thus, in those situations in which a port departs from its current core businesses, it is absolutely necessary to quantify the risks that are being undertaken.

It is important to recognize that a very substantial risk may be undertaken by committing to projects that are on the periphery of current core businesses (e.g., container port building a grain terminal).

If the proposed project involves additional risk, the port must determine the level of risk and recognize that the return on investment or ROI must reflect the level of risk undertaken. Thus a project that is an expansion of a current facility or service would be acceptable if it produces the ROI set out in the Board/Commission financial policy for new projects. Conversely, a proposed project that is outside of the current core businesses of the port and is determined to carry a substantial risk must demand a higher ROI.

The target ROI as set by the Board/Commission must reflect the risk level of the project, or the port subsidizes the project and creates a potential financial time bomb. Public port authorities are economic engines for their regional economies, but ports that ignore risk in determining project ROI targets tend to destablize their regional economies rather than provide stability for them.

The acceptance phase of the capital project decision process is used to (1) define the proposed project, (2) determine that it is consistent with the port's mission and goals, (3) determine the level of risk associated with the project, and (4) set a target ROI for the project.

Capital Budgeting Phase

After successful completion of the acceptance phase of the capital project decision process, the proposed project now enters the capital budgeting phase of the process. The capital budget is a document that lists the capital projects that have been approved by the Board/Commission. Before any proposed project can be placed into the port's capital budget, the project must be subjected to a multitude of additional decision steps.

Overseeing the capital budgeting phase of the process is usually the responsibility of a high level management committee or the executive director. The activities within the process are supervised and coordinated by a single individual for each major project or for a package of related projects.

The function of this process activity supervisor is a key factor in ensuring that the proposed project is guided through the capital budgeting process. In effect, this supervisor is responsible for the review and analysis effort, including the coordination of staff and/or consultant studies relating to the proposed project. He/she acts as a catalyst ensuring that the necessary steps in the process are completed and as a conduit for all analysis/review findings and other information that concerns the proposed project.

It is important to recognize that without this process activity supervisor, there is no single individual who controls the proposed project's analysis or who has a broad knowledge of the entire project. In effect, the absence of the process activity supervisor significantly increases the potential for creation of a rogue port capital project.

Empirical evidence strongly suggests that the person who acts as the process supervisor/coordinator be a port staff member rather than a consultant.

The capital budgeting phase of the process has three steps. The first step is an in-depth analysis of the proposed project justification. The second step is the investment decision analysis, and the third step is the financing decision analysis.

This first or justification step includes at least a project feasibility study, environmental and community impact analyses, and engineering studies. A verification of all data on the proposed project that was used as a basis for decision in the acceptance phase should also be undertaken.

A key document in the justification phase is the feasibility study. This study looks at the profitability of the proposed project once it has been constructed. It provides an opportunity to look at various income and expense factors that affect the proposed project. Often capital investment decisions are based solely on the proposed project's construction cost without any concern for the operating profit or loss that will be generated once it is up and running. The feasibility study looks at the income and expenses (operation and maintenance expenses), debt service, etc., of the proposed project. In effect, the feasibility study provides vital information on how the proposed project might affect the port's financial well-being once it is constructed.

Concern for the feasibility of a proposed project's operation is especially necessary with projects that receive construction grants. Capital investment decisions are quite often influenced by the fact that a portion of the construction costs will be paid by a federal or state grant or by funds provided by private industry partners. It is imperative to remember that this is a construction grant and that once the project is constructed the port is fully responsible for its profit or loss.

This first step in the capital budgeting phase will provide a data base for use in the next two steps.

The second or investment decision step provides initial identification of capital requirements and sets out some initial procurement and development options. The results of the investment decision step indicate whether the project is a sound business decision, taking into account the future cash flows and risks as well as the initial capital investment required. This step requires a financial analysis of the proposed project. This step provides data for alternative option selection (size, scope, functions, etc.) as well as input into the third or financing decision step.

It is during this second or investment decision step that significant analysis of project ROI (return on investment), NPV (net present value) and IRR (internal rate of return) is made. Each of these analysis techniques provides information that can help select development alternatives. In this step a reevaluation of the risk level of the project and the project feasibility is made.

It is important that the activities in this investment decision step be vigorously controlled and continuously reviewed and challenged since these activities formulate the basis upon which the ultimate decision is made to include a project in the capital budget. Assuming the project has passed the investment decision step, the project is ready to be placed before the Board/Commission for formal approval and inclusion in the capital budget.

The third or financing decision step of the capital budgeting phase involves the preparation of the *Capital Project Evaluation Recap*, which will be presented to the Board/Commission prior to any formal action to commit resources to the proposed project. Formal Board/ Commission approval and inclusion of the project in the capital budget allow the port to proceed with detailed design, procurement/property acquisition, and construction.

Projects should be placed on the capital budget ONLY after undergoing a comprehensive process with executive staff and Board/Commission level consensus on project need, timing, and cost. Economic, market, engineering, environmental as well as financial information provide the basis for this ultimate decision.

Implementation Phase

The third or implementation phase may occur right after the proposed project gains a place in the port's capital budget, or months (even years) after that time. The implementation phase is the venue of the final go/no go decisions for the project.

As soon as a project is placed in the capital budget, it must essentially compete for its place or priority within the capital budget. From the moment a project is placed in the capital budget, it is given a priority among the other projects. A list of positive project attributes for use in project prioritization is found in the *Capital Budget Priority Criteria Checklist.* These priorities are constantly being adjusted to reflect the port's current needs. Eventually this project may be the number 1 priority project.

As the initial step of this phase, a review of the project's justification may be appropriate. The depth of such a review is normally determined by the length of time between its being placed in the capital budget and the time it reaches

CAPITAL PROJECT EVALUATION RECAP

PROJECT DESCRIPTION: Give a brief description of the proposed project in general terms. Summairize all phases of the project, including feasibility and environmental studies, design and engineering and construction, and the work done to date.

BUSINESS JUSTIFICATION: Describe the need that will be filled by doing the project. Discuss the reasons for undertaking the project, which might include increasing market share, maintaining a customer base, improving the port's competitive position, and enhancing the ability to handle future business activity, etc. For customer facility and business development projects, identify whether new demand is met or generated by the improvement, and whether the improvement is for a specific customer. If the project is tied to a lease, include lease information. In each case, demonstrate how the project supports business planning decisions and existing facilities planning strategies.

CONSISTENCY WITH MISSION AND GOALS: Identify the project's compatibility with the adopted port mission and goals statement.

NEED FOR PORT INVOLVEMENT: Explain the reason for the port to undertake the project. Specifically address whether the activity is outside the domain of, or is not being adequately provided by, other entities in the region including the private sector. Discuss whether these entities could undertake the project and advantages or disadvantages tages of their doing so. If relevant, identify the impact of the project on regional capacity.

ENVIRONMENTAL/COMMUNITY ISSUES: Discuss both the environmental effects of the project and the impacts of environmental work required to implement the project. In addition, address the community issues related to the project, including which local government entities or community groups have been involved and whether there were concerns expressed. If there were concerns, identify them and provide information as to whether they have been addressed.

ECONOMIC IMPACT: Identify jobs, employee earnings, business revenues and taxes associated with the capital improvement. Include temporary construction jobs as a separate category.

FINANCIAL ANALYSIS: This analysis should identify the scope of capital improvements associated with the project,

Capital Resource Requirements: Itemize all of the capital costs associated with the project, including: preliminary and final design; engineering services; other soft costs (environmental, legal, permits, etc.); construction; contingency; port staff time. The sum of the categories should represent the total project cost. Provide separately all capital costs already incurred on the project.

Operating Resource Requirements: Provide an itemization of all on-going port costs associated with the project (operations and maintenance, allocated overhead, depreciation, property taxes).

Financial Performance: Determine the net present value and internal rate of return. In addition to a summary of investment and returns, attach cash flows and list key assumptions. Market studies or business analyses that support key business assumptions should also be forwarded for review. Identify any risks that could potentially make cash flows vary significantly from those projected. For example, if there is a significant probability that costs may be higher or lower due to environmental clean-up cost changes or that revenues may be higher or lower due to changes in cargo or passenger volumes, these should be identified as "key variables." Using the recommended alternative as a base, provide sensitibity analysis on these key variables.

INMPLEMENTAION PLAN: Present a project schedule with milestones for completing major phases (i.e., design, contract bidding, construction, installation). Also, note port staff member responsible for project management.

OTHER ISSUES: Include other issues (labor issues, recommendations from other studies, etc.) that are relevant to decision-making.

RECOMMENDATION: Based upon the criteria contained in this recap, summarize the rationale for recommending this project and/or any alternative project(s).

number 1 priority status. This review is designed to uncover any major changes in the data that originally justified the project's being placed in the capital budget.

Following a positive review, the project is placed in the current year's budget and eventually put out for bids.

The second step in this phase is a final go/no go project decision and the acceptance of construction bids. With construction bids in hand, a final determination of project feasibility and financial/investment acceptability are made based on a construction cost as bid. If the results of this final determination are positive, the winning construction bid is then accepted.

The third step in the implementation phase is monitoring construction change orders and/or cost overruns to ensure that the project is constructed within the cost parameters established in the feasibility study. This step is essential because construction bid price is often just a part of the project's actual construction cost.

The fourth and final step in the implementation phase, the post-audit, occurs after the project is up and running for a period of time. This step analyzes the validity of the assumptions and findings of the study effort in the capital budgeting phase. It addresses such questions as: Was the projected project cash flow on target and if not why not? The results of this step will allow the port to sharpen its decision-making process for future projects.

Conclusions

There is no single go/no go project decision! The capital investment decision process has three phases and each phase has several steps. Failure to pass any analyses, review, or decision point along the way can mean rejection of the proposed project.

A key to authorizing projects that will enhance port viability is the willingness of the Board/Commission, executive director, and staff to follow faithfully the capital investment decision-making process.

In an ideal world, there is unlimited time available to gather data, conduct studies, and weigh options. However, in the "real world", there are time constraints that preclude the port from addressing adequately or in sufficient details each step in this process. Thus, it is important to recognize that if adequate time is not available, the reliability of the project decisions decreases and project risk increases.

By following the process, a port should be able to differentiate between the solid opportunities and the latent disasters. Nothing can guarantee 100 percent success!

CAPITAL BUDGET PRIORITY CRITERIA CHECKLIST

Prioritization of projects in the capital budget is a complex process. This list of positive attributes will assist in prioritizing projects.

- Project would preserve an existing capital facility, avoiding greater expense in future years.
- Project would result in significant savings in operating costs.
- Project would result in the purchase of land for future projects at favorable prices.
- Project would generate sufficient revenue to be essentially self-supporting in its operations.
- Project would make an existing facility more efficient or increase its use with minimal or no operating cost

increase.

- Project would not duplicate other public and/or private services.
- Project would significantly reduce current and future operating and maintenance costs.
- Project would link other existing or planned improvements that will mutually benefit from the linkage and will improve port efficiency and ability to deliver service to customers.
- Project will make a significantly positive impact on the local economy and/or tax base.
- Project is required as a result of lease terms.
- Project results in enhanced productivity at same or lower operating costs.
- Project timing is critical; if the project is not acted upon at once, the opportunity will be irrevocably lost, or other major alternative actions would have to be initiated.
- Project is required to correct a building code violation and/or meet a federal or state standard.
- Project is required by an existing agreement with another agency.
- Project will correct a condition that currently results in a poor image for the port or an undesirable work environment for port employees or tenants.
- Project has a very high degree of citizen support.
- Project has few negative environmental impacts associated with its construction or subsequent use.
- Project is essential to provide for public or employee health or safety.
- Project is required to eliminate a hazard to personal health or safety.

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Port-related Interests-

(Continued from Page 17)

vention 1972 and, in particular, through the adoption of measures which promote the minimisation of waste disposal at sea through the application of non-waste technologies and the use of environmentally sound land-based alternatives.

Facilitation

Simplify, standardise and minimise the formalities, documentary requirements and procedures associated with the arrival, stay and departure of ships engaged on international voyages, through implementation of the FAL Convention, 1965;

promote the acceptance of IMO's FAL forms to

International Maritime Information **VYORID PORT NEVV5**

Singapore: Shiphandling Simulator for Training

To enhance Singapore's position as a maritime training centre, the Port of Singapore Authority (PSA) has purchased a \$10 million Full Mission Shiphandling Simulator. This provides state-of-the-art training for harbour pilots, ship masters/officers, tug masters and other marine personnel. It is also used for mega scale research and development studies on marine-related projects. The training courses offered by the Shiphandling Simulation Centre are backed by the vast resources of PSA with a training tradition of more than 3 decades. The Centre is conveniently located in the Singapore Port Institute, in the hub of the Maritime Business District.

The Shiphandling Simulation Centre is:

• An ideal venue for the training of personnel in the following maritime areas:

shiphandling and navigation crisis management/emergency procedures bridge team management planning and development of manoeuvring techniques aptitude examination for recruitment and upgrading of pilots and for pilotage exemption

• A sophisticated R&D Centre for: port and terminal development/expansion berths and waterways design

minimising navigational constraints

facilitate the clearance of ships, crews, passengers and cargoes;

introduce and develop electronic data processing (EDP) and interchange techniques based on Electronic Data Interchange Maritime (EDIMAR) standards to facilitate clearance of ships, crews, passengers and cargoes.

Maritime Legislation

Help to provide the means to strengthen the legal capacity and infrastructure of national maritime

and restrictions optimising tug utilisation risk analysis reconstructing and investigating marine related incidents

Features

As one of the most advanced Shiphandling Simulators in the world, it is designed to provide:

real-time computer-based simulation state-of-the-art simulation hardware and software three-bridge interactive exercises complex scenarios with tidal and

wind cycles

up to 20 traffic ships

authentic shipboard control equipment

true-to-life visual imagery such as day, night, dusk and limited visibility conditions

Highlights of simulation training

State-of-the-Art Technology Cost-Effective No Risks Focused Training Programme Time-Saving Effective Bridge Team Management Quantifiable Results

Training courses

The Full Mission Shiphandling Simulator is available to shipping and marine-related industries for the training of harbour pilots, shipmasters/officers, tugmastes and other marine personnel. The courses offered at the Shiphandling Simulation Centre include: Basic Shiphandling Advanced Shiphandling Pilotage Training Handling of VLCCs Shiphandling for Bunker Barge Masters

Customised training programmes can also be developed and provided on request to meet the specific needs of individual organisations.

Backed by the vast resources and experience of the PSA, the Centre also has the expertise to conduct sophisticated marine-related R&D studies.

Enquiries

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The 13th Conference of Lighthouse Authorities

FEBRUARY 19 - MARCH 1, 1994 HILTON HAWAIIAN VILLAGE HONOLULU, HAWAII

The XIIIth Conference of the International Association of Lighthouse Authorities (IALA) will be held from February 19 through March 1, 1994. The theme for the conference, *Moving into the 21st Century*, signifies the

authorities.

Other Activity Areas

Suppression of unlawful acts which threaten the safety of ships and the security of their passengers and crews, whether at sea or in port, similarly with regard to port;

illegal drugs interdiction, drug use and alcohol abuse; piracy.

program's focus on the technical aspects of navigational aids and issues concerning lighthouse authorities as we chart our course toward the future. IALA conferences bring together the world's experts in the field of aids to navigation, presenting a unique opportunity for formal and informal contact between users and suppliers of aids to navigation equipment and technologies. We are moving rapidly toward the 21st century, and the fast pace of technological change greatly affects the aids to navigation business.

Conference Location

Oahu, once "The Gathering Place" for Hawaii's island kings, will be our gathering place for The XIIIth Conference of the International Association of Lighthouse Authorities.

The conference will be held in Honolulu, capital city of the island state of Hawaii.

Conference Site

The Hilton Hawaiian Village in Honolulu, site of The XIIIth IALA Conference, is a premier resort and convention facility, designed and staffed especially for large conferences. The Village occupies 22 acres of oceanfront property on the world famous Waikiki Beach and includes four guest buildings towering from 15 to 35 floors high and offering a total of 2,500 rooms. Special features of the Hilton Hawaiian Village include three pools (the main "Super Pool" covers one acre of land!), 22 restaurants and lounges, and 100 specialty shops. The Hilton also offers the widest beach in Waikiki, where paddle boats, catamarans, wind surfers, and surf boards are available to rent.

Two separate conference centers are available at the Hilton. We will use the Mid-Pacific Conference Center for the general sessions, technical sessions, and conference registration. Offices for the IALA Secretariat, the U.S. Coast Guard, and TASCON (the conference management firm), and the photocopy and speaker preparation rooms will also be located in the Mid-Pacific Conference Center. The Tapa Conference Center will house the IALA Industrial Members' Exhibition.

Conference Format

To allow for maximum attendance and participation, all presentations will be given in general sessions. There will be no simultaneous sessions. The topics of the general sessions are:

- Organization and Management of an Aids to Navigation Service
- Visual Aids and Engineering
- Radio Aids to Navigation
- Reliability/Availability
- Traffic Management and Vessel Traffic Services
- Energy Sources

The program also includes:

- an overview session devoted to reviewing the activities of the IALA Committees over the past 4 years;
- a meeting of the IALA General Assembly; and
- a thought-provoking session entitled, "Impact of Developments on the Future Mix of Navigation Aids."

Seating for all sessions will be arranged in a "classroom" format, providing tables and chairs for attendees.

Languages

For the benefit of all attendees, simultaneous interpretation in English, French, and Spanish will be available during all general and technical sessions held in the Mid-Pacific Conference Center.

Conference Program Tentative Agenda (extracts)

Saturday, February 19 IALA Conference Committee

Sunday, February 20

IALA Council Meeting Opening Ceremony Overview of IALA Activities (1990-1994) Chairman: Mr. N.F. Matthews Welcome to Hawaii Reception

Monday, February 21

Session I: Organization and Management of an Aids to Navigation Service

Chairman: Commander S. Ording Vice Chairman: Mr. S. Dunning

Topics: Levels of Service, Management, Training; Maintenance/Contract; Maintenance – Privatization; Servicing Craft – Marine/Air

Tuesday, February 22

Session II: Visual Aids and Engineering

Chairman: Mr. J.M. Calbet Vice Chairman: Dr. H.R. Gerdes Topics: Fixed and Floating Aids: New Techniques/New Materials; Guidance for New Structures; Maintenance

of Existing Structures; Visual Signals General Assembly Industrial Exhibition Opening

Wednesday, February 23

Session II – Continued Session III: Radio Aids to Navigation

Chairman: Mr. F.E.J. Holden Vice Chairman: Dr. N. Ward Topics: Satellite Navigation for Maritime Use: Integrity Monitoring, Differential Services; Terrestrial System for the Future; Racons and Radar Enhancers

Thursday, February 24

Session III – Continued Session IV: Reliability/Availability Chairman: Mr. H.R. Cleveland

Vice Chairman: Mr. A. Wilkins

Topics: Achieving Availability Standards; Quality Assurance Practices; Automation/Remote Control and Electronic Monitoring; Management Information Systems to Assess Aid Availability

Friday, February 25

Session V: Traffic Management and Vessel Traffic Services

- Chairman: Mr. G. Kop Vice Chairman: Mr. N. Cutmore Topics: Aspects
- Establishing a Need for Traffic Management
- Risk Analysis Techniques
- Cost Benefit/Cost Effect Consideration
- Selection of Traffic Management Tools
 - **Vessel Traffic Services**
- Mandatory Participation
- Communications (procedures, format, language)
- Identification/Tracking
- Developments in Field of Data Collection and Data Exchange
- Relationships Between Services Offered and Requirements in the Fields of Training, Hardware, and Procedures

Secretary General's Farewell Reception

Saturday, February 26 Technical Tour/Picnic

Sunday, February 27 Free time

Monday, February 28

Session VI: Impact of Developments on the Future Mix of Navigational Aids

Chairman: Mr. N.F. Matthews Vice Chairman: Mr. T. Kruuse Session VII: Energy Sources Chairman: Mr. H.R. Cleveland Vice Chairman: Mr. A. Wilkins Topics: New Technologies; Problem

Solving and Improvements to Existing Techniques

Tuesday, March 1

General Assembly Council Meeting Conference Conclusions Closing Ceremony Final Banquet

Registration Assistance

If you wish to provide more information than you can fit on the registration form, or if you wish to ask for specific information not addressed in this booklet, please feel free to send us a letter with your registration form or to call us. Contact either Richard Heffernan (extension 249) or Peggy (extension 256) Sweitzer 1-301-907-3844 between the hours of 9:00 a.m. (0900 hours) and 5:00 p.m. (1700), Eastern Time. If you call during non-business hours, you will be greeted by a voice mail message. You may leave a message for Mr. Heffernan or Ms. Sweitzer by dialing the appropriate extension number after you listen to the voice mail greeting. You may also send a letter to our 24-hour fax number, 1-301-907-9655.



Lloyd's Maritime Atlas 17th Edition

Two hundred new ports and shipping places have been included in the 17th edition of *Lloyd's Maritime Atlas*, which has just been published by Lloyd's of London Press. The atlas now covers over 3,000 ports around the world. The new edition also charts the many changes to country names, borders and boundaries which have taken place over the past years, since publication of the last edition.

Lloyd's Maritime Atlas 17th edition is available price £40 from Lloyd's of London Press, Sheepen Place, Colchester, Essex C03 3LP, England. Tel: 0206 772113. Fax: 0206 772118.

World Cement Outlook for Trade & Shipping 1994-2005

A major new study* from Ocean Shipping Consultants forecasts extensive development in the international cement trade and shipping sectors in the period to 2005, with different rates of import/export growth set to fund considerable structural change in trading patterns.

The following is a summary of the main findings of the 212-page Report.

World Cement Trade

* The world trade aggregate is estimated at 70mt in 1992 — this marginally down on the previous two years, and representing 6% of world cement consumption.

* Of this 1992 total, seaborne trade equated 47.8mt – some 5% below the 1991 level and 10% below that of 1990. The seaborne aggregate increased from 15mta at the beginning of the 1970s to over 40mta by 1980 and to almost 54mt in 1984. Following this however, the trade volume declined to around 41mt in 1988, before growth to 45.8mt in 1989 and 53.0mt in 1990. Whilst several import markets continued to exhibit growth in 1991, several of the largest sources of import demand remained depressed, with aggregate trade volumes approximating 50.3mt. In 1992, continued decline in the US market, and a restructuring in S/E Asia saw the total fall back to below 48mt.

* Intra-regional movements are dominant, most specifically intra-Americas, intra-Europe, and intra-S/E Asia. Together, cement movements within these areas account for approximately two-thirds of all shipments in the world, this translating to approximately 32mt in 1992. The importance of these intra-area shipments is now far higher than in the early/mid-1980s, with significance levels of around 30% for such intra-area movements noted in 1984/1985.

* The main recent developments have been the continued decline of import volumes to the USA (4mt in 1992 against 5.8mt in 1991 and 10mt 1990), and the decline in volumes shipped to Asian markets (apart from Japan, South Korea, and Taiwan). Elsewhere, continued depressed construction activity volumes in the developed markets is reflected in marginally lower cement import volumes for many countries.

* On the export side, the recovery of Japanese shipment levels — from less than 6mt in 1990 to over 7.3mt in 1991 and 11.5mt in 1992 — is by far the most significant positive development noted.

* The average haul length approximated 2,770nm in 1992 — this some 29% shorter than the 1984 level. This explains the far greater decline noted for shipping employment than for trade in this period. The 1992 level is 1.5%below the level of the previous year, and with trade tonnages down by 5%, the shipping demand aggregate is therefore over 6% lower at 132.6bn TM (tonne-miles).

* The scale of shipping demand decline since the mid-1980s highlights the extent to which the markets which have replaced the Middle Eastern and N/W African markets, are now supplied by neighbouring countries. Even in the more recent case of the US market, the decline of import demand together with other factors such as higher shipping costs and limited export volume availability, have seen a subsequent reversal to short-haul movements almost exclusively serving this market.

Future Cement Consumption

* The overall outlook for world cement consumption is expansion of some 34% in the period to 2005, taking the total to 1560mta.

* The pace of this growth is set to slow after the mid/late-1990s — from around 3% p.a. to approximately 1.2%. To put this into context, average annual expansion approximated 3.7% for the second half of the 1980s, and approximately 1% since.

* There will be marked differences in the scale of expected forward demand growth for different areas. Whilst overall total world growth is set to approximate 33%, regional expansion varies from less than 8% for West Europe to 68% for C/S America. Above average expansion is also expected for the Middle East, the Former Soviet Union, East Europe, and to a lesser extent Africa. These are based on a combination of continued underlying economic and industrial growth and on the extent of recent cement depression amid massive economic and political restructuring.

Future Cement Trade

* For world seaborne cement trade, the outlook is for marginal growth over the near-term, with relative stability thereafter. In tonnage terms, after falling by 5.2mt (10%) since 1990 to 47.8mt in 1992, the world trade aggregate is forecast to increase to around 53.3mt in 1995. Mixed regional development thereafter will see a 2000 total some 1mt lower at 52.3mt, with an end-period level of 53.8mt. There will remain significant potential within the world cement market for marked short-term volatility from these trends.

* For the US market, after the large-scale consumption and import volume decline of recent years, the forward outlook for seaborne shipment levels is for some recovery over the near-term. The annual volumes likely to be witnessed, however, are set to be far lower than in past years, although the high potential for annual demand volatility amid a general background of relatively fragile recovery, may dictate considerable variation in annual levels. In tonnage terms, the seaborne import total is forecast to rise from the 4mt of 1992 to approximately 5mt for 1993, with further recovery to around 7.4mt in 1995. The annual total is forecast at 5.6mt for 2000 and 5.3mt for 2005.

* In West Europe, the expected import development is one of marginal expansion over the near-term, followed by steady slow decline. From the 1992 level of just under 9.9mt, the annual volume is expected to increase to over 10.5mt in 1993 and 12mt in 1995 as continued high levels are expected in several major import markets. For the latter 1990s and beyond, the profile of seaborne import development is one of decline, as the longer-term underlying trends already evidenced in the principal markets are re-established. In tonnage terms therefore, the aggregate is set to decline to just over 10mta by 2000 and to 8.6mta by 2005. * The recovery in cement consumption volumes following the end of the Gulf War is set to be the prime force behind a significant increase in seaborne imports in the Middle East over the near-term, with continued demand growth in Iran being the other significant factor. The resumption of construction work previously postponed is set to fund a market increase in import needs for Saudi Arabia, which has recently emerged as a major regional supplier. Reconstruction work in Kuwait is also set to account for a large volume of extra import demand. In the case of Iran, whilst large-scale capacity expansion is set to see the country emerging as a regional exporter within the study period, the strength of demand growth in the near-term is likely to outpace that of domestic production capacity, with associated short-term import needs.

* The seaborne import aggregate for the region is set to increase from the 2.6mt of 1992 to around 5.4mt in 1993, with the significance of the post-Gulf War boom and the Iranian demand/supply excess tending to decline over the mid-1990s. By 1995 therefore, the regional total is projected at 4.3mt, with longer-term forecasts of 5mta by 2000 and 7.5mta by 2005.

* In S/E Asia, the recent trend of declining import volumes in Japan is expected to continue throughout at least the majority of the forward period. This is linked to the outlook for cement consumption which is of overall decline. The recent decline in import volumes to South Korea has been due to large-scale increases in domestic capacity, rather than domestic demand decline, and this is set to be the main feature over the forward study period.

* For Taiwan, the prospects are somewhat different with further extensive demand growth and heightening problems over the supply of raw materials to feed the domestic cement industry. The outlook is for the continuance of import volumes, with potential for growth depending on the scale of new capacity development. In tonnage terms, the import total has developed from nothing to 2.5mt in 1992, and this is set to approximate 3mt in 1993, a level which is set to remain the annual average over the mid-1990s.

* For the S/E Asia region as a whole, the annual volume of seaborne imports is forecast to decline from the 19.8mt level of 1992 to 16.4mt in 1995, with a similar aggregate volume forecast for 2000, with some decline thereafter to a 2005 level of 15.7mt.

Future Cement Shipping Demand

* The outlook for cement shipping demand is generally more positive than for trade volumes, with the difference in development profiles increasing towards the end of the study period. Overall expansion for the period to 1995 is 11.4% for trade and 12.7% for vessel employment, with the corresponding figures for the whole forward period 12.5% and 17.6%.

* Significantly however, the forecast shipping demand levels are generally below the 1990 peak, with this only exceeded by 2005. In absolute terms, after falling from around 151bn TM (tonne-miles) in 1990 to 132.6bn TM in 1992, the aggregate is expected to rise to 149.5bn TM by 1995, before some marginal decline to 148.3bn TM by 2000, and growth recovery to 156bn TM in 2005.

Summary: projected Cement Trade & Shipping Demand to 2005

	Trade (m.t)	Shipping Demand (bn TM)	ASD (nm)	
Base Case				
1984	53.6	209.6	3,910	
1990	53.0	151.0	2,850	
1991	50.3	142.0	2,820	
1992	47.8	132.6	2,770	
1995	53.3	149.5	2,800	
2000	52.3	148.3	2,840	
2005	53.8	156.0	2,900	
INDEX				
1992	100	100	100	
2005	112	118	105	
2005 Low	88	91	103	
2005 High	149	160	107	

Source: Ocean Shipping Consultants Ltd.

The extensively detailed 212-page Report contains analysis of all aspects of the world cement trade and shipping sectors, and is essential reading for all parties with an interest in the cement industry.

* World Cement: Outlook for Trade & Shipping 1994-2005

Available immediately from: Study Sales Department Ocean Shipping Consultants Ltd

Ocean House 60 Guildford Street Chertsey Surrey KT16 9BE England Tel: (0)932 560332 Fax: (0)932 567084 Telex: 94070113 OSCL G

Price £475 or US\$850.

The Americas

Recession, Strike -**US Coal Exports Down**

Recession abroad and dwindling domestic output resulting from the ongoing United Mine Workers strike are taking their toll on U.S. coal exports. U.S. Census data reported by the National Coal Association for the first six months of 1993 show bituminous coal exports down 25.1 percent from a year ago to their lowest level since 1988.

Most of the loss is attributable to trade with Canada and Europe, down 39.3 percent and 33.2 percent, respectively, from last year. In the Canadian market, the prime casualty has been steam coal, falling 62.4 percent from a year ago, primarily due to sharp cutbacks by Ontario Hydro. Most heavily impacted in the European market were exports to Denmark, France, Italy, Spain, and the United Kingdom.

Exports to Brazil, another important U.S. coal buyer, were also down, by 10.9 percent. The Asian market, however, held up surprisingly well, down just 3.4 percent overall, with U.S. sales in volume terms up 17 percent for steam coal and off 12.4 percent for met coal.

Reported exports from major coastal ports show no improvement through August. The experts are saying things are unlikely to get better anytime soon. The UMW strike, which shows no immediate sign of resolution, has cut into domestic production, reducing supplies available for export, jacking up prices, and once again bringing into question the reliability of the United States as a coal supplier.

Ironically, the United States at the same time is importing record quantities of bituminous coal - almost 2.3 million tons through June; leading supplier are Canada, Colombia, Indonesia, and Venezuela. (AAPA Advisory)

> **U.S. Bituminous and Related Coal Trades** (Millions of Short Tons) January/June

	1993	1992	1991	1990
Exports				
Overseas(a)				
Metallurgical	23.86	28.67	30.06	30.09
Steam	11.19	17.03	15.80	14.09
Total	35.05	45.70	45.86	44.18
Exports to Can	ada			
Metallurgical	2.00	1.76	1.13	1.55
Steam	1.54	4.06	1.43	4.01
Total	3.54	5.83	2.56	5.56

Total Exports(b) Metallurgical 25.86 30.43 31.20 31.63 Steam 12.73 21.10 17.23 18.11 Total 38.59 51.52 48.43 49.74 Other Exports(c) Anthracite Coal .22 .20 .20 .34 Furnace Coke .28 .28 .31 .28 Lignite .27 .23 .21 .25

Imports Anthracite Coal 2.29 1.72 1.66 1.41 Furnace Coke .85 .94 .45 .32 Briquets .63 56 .48 48

(a) to countries other than Canada. (b) To all countries, including Canada. (c) To all countries. Source: National Coal Association

Leakage Testing Device At North Carolina Ports

The Container Terminal at the Port of Wilmington, North Carolina purchased and installed a water testing device several months ago. The device is intended to provide container users an alternate means of testing containers for leakage.

The water test begins when a container is driven over the start switch. The device then sprays water through hundreds of jets as the container passes through the stainless steel framework. During the process, the container is showered with over 150 gallons of water in approximately one and one half



New Container Service from Fraser Surrey Docks

The recent arrival of the Cielo Di Genova at Fraser Surrey Docks (FSD) heralded the start-up of the new Pac-Med Container Express service between Canada, Europe and South America. The Cielo brought in ceramic tiles, wine and foodstuffs and left with a cargo of specialty grains, lumber and frozen salmon.

On hand to celebrate the occasion were, left to right, Tim Richardson, Manager of Customer Service FSD, Mike Cornish, Director Marketing and Customer Service FSD, Al Grimson, President Anglo-Canadian Shipping, Dave Whitaker, Director of Operations FSD, Captain Antonio Ambrosino, Master of the Cielo, Captain Bill Burnett, Pacific Pilotage Authority Canada, Keith Grenal, Business Agent ILWU Local 502, Terry Johnston, President FSD, George Preston, Chairman, Fraser River Harbour Commission.

minutes.

After the spraying process is finished, the container doors are opened and the van is inspected for leakage. The water testing device is a quick, efficient and economical means to provide shippers with a proven water tight container.

The North Carolina State Ports Authority is the first port authority to make this service available to all tenants. At most other ports a few lines have opted to install devices for their own personal use, according to Fred Getsinger, Manager of the Container Terminal at Wilmington.

The Port of Wilmington's water testing device is being used by Mitsui Line to ensure that their Japanese Tobacco shipments are delivered without water damage.

(North Caroline Ports)

Lockheed Parts Imported Via Port of Savannah

The Georgia Ports Authority (GPA) has begun a key partnership with Lockheed Aeronautical Systems Company (LASC) as point of entry for major aircraft parts being shipped to Georgia for use on the new P-3 Orion assembly line.

The first two shipments of aircraft parts were unloaded from two Wilhelmsen Lines ships which called September 11 and 12 at the GPA's Garden City Terminal.

The larger shipment, a set of aircraft wings, was lifted by a GPA crane onto a CSX raiicar, then blocked and braced by Authority Crane for transit to Lockheed's assembly plant in Marietta, Ga. The crate containing smaller structures moved by Bo-Mark Trucking Company. Tower Group International and Schenkers International handled Customs clearance for the shipments, while SSA provided stevedoring services.

"This is a major milestone for our P-3 program, and the beginning of what we hope will be a long relationship with the Georgia Ports Authority," said LASC Vice President Bill Bernstein. "Moving our P-3 assembly operation from California to Marietta has gone very well, due in part to a great transportation network and facilities, such as the GPA's Garden City Terminal."

The wings were shipped from Korea

after assembly at Daewoo Heavy Industries in Chang Won, Republic of Korea, one of that country's largest companies. The other shipment contained the vertical and horizontal stabilizers for the first Marietta-built P-3. Those parts were produced by a division of British Aerospace in Prestwick, Scotland.

Both shipments arrived in Savannah aboard Wilhelmsen Roll-on/Roll-off (Ro/Ro) ships, the Toba which came from Korea and the Talabot from the U.K. Oslo-based Wilhelmsen Lines is the worlds largest Ro/Ro carrier.

First delivered to the U.S. Navy in 1962, the P-3 was quickly established as a mulit-mission aircraft, adept in anti-submarine warfare, surveillance, search and rescue and border patrol. Today, it is the choice of 14 nations for land-based maritime patrol.

The Orion assembly was moved to Georgia from California following the restructuring of the Aeronautical Systems Group of the Lockheed Corporation in 1990. All major aircraft production programs were consolidated to the more modern facilities in Marietta next to Dobbins Air Reserve Base north of Atlanta. The wings and other parts coming through the Port of Savannah are for the first Georgia-built P-3 Orion.

NCSPA: Bowater Joins GEIS EDI Network

The North Carolina State Ports Authority (NCSPA) is making strides in utilizing available computer technology to expedite receipt of handling orders.

By using the General Electric Information Systems (GEIS) EDI network, handling orders for shipment from BOWATER, Inc., can be printed directly in the NCSPA Forest Product Office. Rail shipment notices are sent by BOWATER through the GEIS EDI network. The NCSPA has a program which converts these documents into NCSPA handling orders. Current procedures allow handling orders to be available for printing by 8 a.m. -Monday through Friday. This encourages better productivity by providing shipment notices in the most timely and accurate manner.

EDI is the use of standardized documents which are transmitted among "trading partners". Various industries and transportation groups have their own unique set of EDI documents. BOWATER actually sends a "Rail 404" document which is a carrier shipment notification to the AT&T Easylink network, with the port authority's name and address, in care of the GE EDI*Express network. Then the ports authority checks its electronic mailbox twice daily. Any mail from BOWATER is converted into dock order format and is available to print in the forest products office.

According to Ted Low, Bowater, Inc., "The use of EDI enables Bowater to notify the NCSPA of shipments enroute to Wilmington several days before actual car arrival. This eliminates the expensive and time-consuming use of fax messages and provides an excellent planning tool to insure the Ports Authority is able to unload cars to meet very tight delivery schedules."

(North Caroline Ports)

Everybody Wins at Port Canaveral Recycling

For many years "spoils" have been regarded as a disposal problem. Spoils are dredged materials from a channel, inlet, port, harbor, or any man-made waterway. With growing environmental awareness, spoils are being recognized as a valuable resource when properly managed.

Pioneering efforts by the Port Canaveral commissioners and engineering staff have demonstrated the appropriate use of technology in the context of long-range environmentally conscious planning. What used to be a problem can be turned into an asset, benefiting nature, commerce, and recreation simultaneously.

Port Authority leads the way

The port authority and Army Corps of Engineers have been working together to integrate two basic tasks: keeping the port channels clear for navigation and renourishing area beaches. Commission Vice Chairman Malcolm McLouth and engineering director Joe Lapolla were featured presenters on a panel with the Army Corps of Engineers at a recent meeting of the International Association of Port Authorities in Atlanta. They were applauded for their presentation on multiple strategies for recycling dredged materials.

Port authority commissioners and engineers have taken pioneering initiatives in ecological planning and demonstrating the feasibility of important new methods and technologies in recycling the spoils from Port Canaveral.

Before environmental concern became a focus, it was general practice to dredge whatever sediment was "getting in the way" and dispose of it "out of the way". This solved the navigation problem, but caused a disposal problem.

Now, with the two basic tasks of dredging and beach renourishment integrated, the process can be streamlined and funds for dredging made available for the entire recycling process.

Sand recycling

The first step in recycling spoil is to look carefully at dredge material. This can be anything from rocks to fine silt. In Port Canaveral, it is generally sand and clay with some small rocks. Environmental engineering studies by the port authority indicated usable (beach quality) sand in a layer above the rocks and clay.

This led to the first breakthrough: beach quality sand was segregated from the less desirable sediments for use on area beaches. However, the process of dredging the sand, segregating it, loading it on dump trucks, and hauling it to its destination was time consuming and expensive.

Since it was already loaded onto a barge, why not haul the sand to a site near the beach and dump it where it would be washed ashore by the natural action of the waves? This was done, producing a "nearshore berm": (it looks like a big man-made sand bar). A recent survey by the port's coastal engineering consultant Olsen Associates, Inc., verified the pilot project worked as predicted. The sand from the nearshore berm is moving beachward at a significant rate.

An ounce of prevention

Several other innovative projects will soon be initiated. When it comes to dredging a waterway as large as the port channel, an ounce of prevention can be worth several tons of "cure". Why not find ways to keep the sand out of the passage in the first place? This should reduce the expense of dredging and the migration of sand from nearby beaches.

Several projects are nearing completion, while others are literally on the drawing board.

Using information from a recent marine survey of sediment flow and patterns of sand deposition within the port channel, both short and long range strategies have been generated for preventing sand from "leaking" into the port inlet. These include:

• Immediate "sand tightening" of the south jetty using a very large sand bag called a Longard Tube. This should slow the rate of sand leaking through the loosely built jetty into the channel.

• The rebuilding of both jetties to provide better barriers to the natural drift of sand (northward in the summer and southward in the winter). In the process, a recreational fishing pier is to be built along the south jetty.

• The continued recycling of beach quality sand from maintenance dredging — keeping sediment from blocking the channel — and the widening and deepening projects. Cutting the corner of the West Turning Basin will contribute its spoil to renourishment of area beaches.

Sand bypassing

Over the years, a number of solutions have been proposed to the problem of sand accreting up along beaches north of the inlet, inaccessible to the beach going public. The goal has been to get this sand from the North beaches along the Cape Canaveral military reserves to the beaches south of the port needing renourishment.

The original Corps of Engineers' plan called for a "sand pipeline" permanently installed under the channel and used to pump a sand and water mixture to the beaches south of Port Canaveral. There were several reservations about this plan. First, no one could figure out how to get the pipeline unclogged if it got too much sand in it for the pumps to move.

Thus, the plan was reevaluated and alternatives suggested over a period of many years. The term "sand bypassing" acquired an almost apocryphal tinge.

However, the Corps recently detailed a simpler method used in previous years on other similar projects. Instead of a permanent pipeline, this plan calls for the periodic use of regular hydraulic dredging methods.

The sand and water mixture will be pumped through a floating pipeline on a barge offshore. This temporary floating "pipeline" will be buried under the channel, then surface again to end near a southern beach needing renourishing. A nearshore berm will be constructed with the dredged sand from north of the inlet. This should have to be done once every five or six years.

Natural beauty, economic vigor

Instead of approaching inlet management piecemeal, the port commission is looking at the big picture. They're acquiring an international reputation in environmental and marine engineering circles for the success of their pioneering efforts. Their goal is simple: maintain navigable depth in the port to keep the economic wheels in motion while simultaneously maintaining the natural beauty of the environment for all to enjoy.

(Port Canaveral)

Port Canaveral Officials Receive Awards

Two Port Canaveral officials recently received awards from respective member organizations.

Malcolm "Mac" McLouth, vicechairman of the Canaveral Port Authority board of commissioners, was named Member of the Year by the Florida Shore and Beach Preservation Association (FSBPA). This award is presented annually to a member for outstanding service to the Association and to the cause of beach preservation in Florida.

McLouth was recognized for his initiatives leading to requesting the Corps of Engineers to do additional research on separating sand from dredge spoil material for use on beaches; requesting state senators to introduce legislation to use the Harbor Maintenance Fund for mitigation projects; convincing Brevard County to contract for a comprehensive beach study; and his involvement in Port Canaveral's action to conduct an inlet management study, construct a nearshore berm and install a geotube along the port's south jetty.

Stan Tait, president of the FSBPA commented: "Mac's outstanding leadership has resulted in the development of a comprehensive beach management plan for Brevard County and the establishment of a beach-friendly management model at Port Canaveral."

The FSBPA functions as a league of coastal cities and countries concerned about beach and coastal issues. McLouth will receive his award at the Association's annual Awards Banquet in September.

Also in line for an award is Max Willis, Director of Port Canaveral's Foreign Trade Zone #136. Willis will receive the 1992 Customs Independence Medal from the U.S. Customs Service.

This award is a special form of commendation established to acknowledge a select group of former Customs managers who have left the service, but are still remembered for their sustained career performance and accomplishments.

George Weise, Commissioner of Customs, commented: "This award is an important tradition in which we take time to recognize a few of the men and woman of Customs who have made significant contributions to our mission. I am very pleased that Max Willis has been selected to receive the Independence Medal."

Willis will be presented his award at the Customs Service Annual Management Review and Awards Ceremony in September.

Maintenance Dredging at Port of Redwood City

Maintenance dredging has been completed and construction of new docks should begin soon at the Port of Redwood City Marina.

The public boat launching ramp at the marina will remain open during construction of new docks for the 207 boats that call the marina home. The marina basin has been dredged to a depth of 10 feet at low tide.

Some 36 boats moored at C-Dock will return at the end of the September, with the balance of the project expected to be finished by January or February.

The project has entailed dredging 65,000 cubic yards of silted material from the marine basin, replacing all timber piles with concrete piles and replacing all of the floating docks except "C" Dock.

The total project cost is estimated at \$1.4 million, which will be partially funded by a loan of \$880,000 from the state of California Department of Boating and Waterways. The remaining project costs will be covered by the Port's capital fund.

The marina was constructed by dredging a basin adjacent to Redwood Creek in 1959. The Port has been responsible for the operation and maintenance of the marine since it was turned over to the Port by the City in 1978. This is the first maintenance dredging and major renovation of the marina docks since it was built. *(Currents)*

Port of Seattle Acquires Lot for Expansion

The Port of Seattle Commission approved an \$18.9 million property acquisition at a commission meeting. The purchase is essential to the Port's Southwest Harbor Project and the proposed expansion of Terminal 5 for American President Lines. Port staff and the property owner, Seattle Steel Incorporated (SSI), reached an agreement, avoiding formal action by the Commission to initiate condemnation proceedings.

Through the agreement the Port will acquire approximately 42.5 acres at 3010 Harbor Avenue S.W. on or before September 15, 1993. The agreement also compensates SSI \$925,000 for environmental data provided to the Port and \$372,000 for an easement into Salmon Bay Steel property. The purchase agreement proposed by staff will place \$5 million of the purchase price into escrow to be used by the Port for cleanup of dangerous waste on the site. Any unused funds following cleanup actions will be forwarded to the seller.

"This property is the cornerstone of our Southwest Harbor development and the proposed expansion of Terminal 5 for American President Lines," said Frank Clark, managing director of the Port's marine division. "We're pleased that we reached an agreement with the sellers that is mutually beneficial and we're excited to continue moving forward with the development project steps—ultimately it means a cleaner environment, more jobs, more business revenue and a bigger tax base to the people of this region."

In the proposed redevelopment, the SSI site will be incorporated into the SW Harbor Project/APL expansion area and used in five ways:

- Rail tracks within the terminal for a rail storage area.
- Rail tracks outside the terminal to serve existing industrial activity in West Seattle.
- Scrap metal storage/stating for Salmon Bay Steel (part of a land exchange proposed to SBS as part of needed property acquisition).
- Greenbelt buffer and bike path for the West Seattle community.
- Other industrial uses or future terminal expansion.

The Southwest Harbor Project/APL expansion is an example of industrial development and activity that leads to a cleaner environment. The SSI property is a major part of the environmental restoration to be undertaken by the Port as it redevelops nearly 100 acres of industrial land in West Seattle. The SSI property contains a former municipal landfill and has a history of use by Bethlehem Steel and SSI as a storage site for scrap and slag metal associated with steel mill activity.

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 more than 80,000 jobs in the region and handles greater than \$30 billion a year in two-way trade.

First Imports of Russian Motorcycles at Tacoma

The first commercial shipment of Russian-built motorcycles to be imported to the United States arrived at the Port of Tacoma in August.

Six of the Russian sidecar-equipped motorcycles arrived August 6 in a 20-foot container aboard the Far Eastern Shipping Company (FESCO) vessel M.V. Vasiliy Burkhanov.

The motorcycles are built by the Ural Moto Company in the remote Siberian town of Irbit, about 950 miles northeast of Moscow. The U.S.-bound motorcycles are transported from the factory in containers. They move by rail to Vladivostok and are shipped aboard



Importer Bob Genend sits astride the first Russian-built Ural motorcycle to clear U.S. Customs at the Port of Tacoma. His company, Ural America Inc., is the first in the U.S. The first shipment from the Siberian factory arrived in Tacoma in August. (Port of Tacoma photo/Chris Phillips)

FESCO to Tacoma.

A pair of entrepreneurs from Bellevue, Washington are importing the large, utilitarian motorcycles to the United States for distribution among established motorcycle dealerships.

Thomas Lynott and Bob Gerend, partners in the import company Ural America Inc., say the best response has come from Harley-Davidson dealerships. So far, the interest has been strongest in Washington, Florida, Texas and Ohio.

The import company has about 100 orders in hand and expects to have at least 200 orders by year's end. This fall the company plans to be importing about 48 motorcycles a month, and by next year that number should grow to 96 per month. The business will mean about 100 containers a year, all moving through the Port of Tacoma.

Marketing of the sidecar motorcycles in publications and at motorcycle shows will begin later this fall. Initially, they will sell for about \$6,000.

But these large, 1940s-style motorcycles already are generating interest among collectors, enthusiasts and anyone with a curiosity, said Lynott. The machines look like something off the set of a World War II movie. In fact, the motorcycle's design originated from the German-made BMW motorcycles that were used so effectively by the military during the 1940s. In Russia, the 50-year-old motorcycle manufacturer is now making about 132,000 motorcycles a year and exports about 4,000 units annually to 40 different countries. Since the 1950s Russian civilians have used the rugged Ural motorcycles as an economical means of transportation. Since many Russians cannot afford cars or trucks, they use the motorcycles to carry entire families or even loads of wood and agricultural supplies.

"They use these motorcycles the way we might use a pickup truck," said Lynott.

Until now, however, none of the Ural motorcycles has been U.S.-bound.

"We're excited about these motorcycle shipments because much of the U.S.-Russia trade has been westbound cargo destined for Russia," said Bob Guinan, president of FESCO Agencies North America. "Now we are starting to see some Russian exports coming to America.

"Our trade links to Russia are starting to pay off," said Jack Fabulich, president of the Port of Tacoma Commission. "It's great to see a small importing business like this benefiting from our ties to FESCO and our sister port in Vladivostok."

The U.S. version of the motorcycles will be tested and certified for compliance with federal air quality and transportation regulations. Lynott said the export version of the motorcycle also includes an engine with higher compression ratios and upgraded components for the more demanding international markets.

Montreal's New Video Captures First Prize

The Port of Montreal's new commercial video, One Stop, One Port, produced to promote the advantages of the entire Port of Montreal System, captured first prize in its category at Corpovision 93, the Fifth Annual Gathering of Sound and Image Professionals of Quebec, held recently in Montreal.

The video, which beat out eight other nominees in the commerce, distribution and services category, was produced by Les Productions Pixcom of Montreal under the supervision of the port corporation's communications department.

The 15-minute commercial video is a marketing and communications tool which promotes the port's facilities and services. It is geared towards shippers — exporters and importers, customs brokers and freight forwarders, current and potential clients, and the transportation industry in general.

Through live action sequences and the latest in 3-D computer graphics, it showcases the port by highlighting its numerous advantages such as its strategic geographic location, its capability to handle all types of cargoes, its proximity to vital rail and road links, and, as the title suggests, the fact that shippers can serve huge markets quickly year-round with one stop at one port - Montreal.

The Port of Montreal has already distributed hundreds of copies of the video to everyone involved in port activity to assist them in their promotional efforts.

Copies also are being sent to other members of the business community, both in Montreal and abroad. Screenings have already been held for several groups of visitors to the port and others have been held during trade missions, exhibitions and promotional receptions.

Additionally, the Port of Montreal has produced a corporate version of the video, entitled Montreal by the Sea, for the general public so that opinion leaders, students and residents in the Greater Montreal region can become more familiar with their port.

The campaign for the general public is off to a good start with several school boards, colleges and universities, for example, already requesting cassettes.

The video also is being shown at the Old Port of Montreal as part of its summer schedule.

Also 15 minutes long, the corporate version is similar in content to the commercial video but of a different approach, featuring Montrealers discussing their port in vox-pop clips. The corporate version also touches on local issues. (Portinfo)

Africa/Europe

The Port of Le Havre and Switzerland

The Swiss economy is based on agriculture, tourism and processing industries producing high added value, such as chemicals, pharmaceutics, metallurgy, watchmaking and textiles. In 1992 the country's external trade came to 128 million dollars, and although it is still very largely carried on with the European community, and especially with Germany, via the river port of Basle, which accounts for a third of all foreign trade, a fair proportion of Swiss imports and exports are carried by sea.

In 1992, seaborne general cargo transiting via the port of Le Havre on its way to or from Switzerland amounted to 30,000t. About 15% of this was carried by road and the remainder by rail. The number of containers transported by the daily Intercontainer freightliner service between Le Havre and Basle worked out at 984 x 20ft and 558 x 40ft containers outwards, with exports amounting to 20,700t, against 491 x 20ft and 232 x 40ft boxes inwards, with 4,300t of imports. It must be stressed, however, that these figures fall far below the normal annual traffic of 80,000t. The traffic suffered badly from the deeply troubled period which accompanied the cargo handling reforms in French ports in 1992, but can now look forward to renewed growth, thanks to the agreed improvements in productivity and to the tariff cuts introduced by the Port of Le Havre.

Indeed, the main purpose of the meeting laid on for shippers in the Basle area was to provide them with all the information they need about the new arrangements, and as it turned out over 150 people came along to listen with great attention to the various points developed by our General Manager, Mr Jean Smagghe, our Commercial Manager, Mr Charles Knellwolf, and the Chairman of the Union of Port and Associated Professions, Mr Eric Leloup.

The meeting followed closely on a session of the Havre/Switzerland Committee set up in 1990 to encourage the development of the Swiss transit trade, in keeping with the respective interests of all concerned. The Committee is chaired by Mr Leloup for the Havre side and by Mr J. Hammer, of Gondrand's Basle office, for Switzerland. The agenda included questions about the application of the special tariffs for international traffic as well as about intercontainer's tariff system.

(Port of Le Havre Flashes)

Foreign Trade Increase For Eastern Germany

The Ports of Bremen/Bremerhaven have been handling increasing volumes of cargo to and from Hungary, the Czech Republic, and Slovakia, as well as the Eastern regions of Germany. Volumes for Eastern Europe in 1992 were a third higher than the year before. Because of this trade, the Bremen port business is convinced that the so-called "America Line" (a direct rail connection between Bremen and Berlin by way of Uelzen and Stendal) should be completed in 1997 as planned and approved in the German federal transportation plan. The revitalization and modernization of these rail lines will further improve transportation to and from the East. The Ports of Bremen/Bremerhaven are committed to offering overseas importers and exporters optimal connections to eastern Germany and all of Eastern Europe.

The gradual economic recovery of the new Eastern German Federal States

is showing positive effects for the Ports of Bremen/Bremerhaven. The Ports handled a total of over 260,000 metric tons of cargo for the States of Thuringia, Saxony, Saxony-Anhalt, Brandenburg, Berlin, and Mecklenburg-Vorpommern in 1992. That was an increase of two-thirds over the cargo volume of the previous year (167,000 tons). The Ports of Bremen/Bremerhaven not only offer cargo handling in the seaport, but also organize the complete chain of transport to destinations in the new Germany states and Eastern Europe.

BLG, the Port Operating Company of Bremen/Bremerhaven, recently demonstrated its ability to handle technically sophisticated cargo from the Eastern German region. Using a floating crane, BLG loaded a complete container gantry, broken down for shipment, onto a ship for transport to the port of La Spezia. The gantry crane had been built in Saxony-Anhalt for the Bremen firm Vulkan-Kocks, Ltd. According to the forwarder, Kuhne & Nagel of Bremen, the transport volume amounted to 4,500 cubic meters (158,915 cubic feet).

Fine Prospects Seen For Port of Hamburg

The world economy is still weak. Although some countries' economies have begun to grow again, e.g. the USA, Canada and the UK, recession is still the overriding feature in other industrialized countries. This is particularly true of Western Europe. Despite the difficult economic climate, the Port of Hamburg has a good chance, in 1993, of maintaining its high cargo-handling figures of the past two years.

In the first six months of 1993, 31.452 m t of cargo were handled in the Port. Although this was a 5% fall on last year, the results in the second quarter of 1993 were much better than in the first so one can see positive trend is emerging. This is true of both cargo-handling sectors — general cargoes and bulk.

As is always the case in recession, the traffic in raw materials and semifinished goods has fallen. This naturally had a negative effect on developments in the bulk sector (down 14.4% to 15.472 m t.). But the fall in the first six months of this year was considerably less than in the first quarter (down 18.8%) so that a slight recovery is already apparent.

2.545 m t of suction cargoes were handled — a 12.8% fall on the same period last year.

5.748 m t of grabber cargoes were handled from sea-going ships (down 19.5%). But the volume of trade has stabilized in this sector, too. The second quarter of 1993 was some 40% better than the first, almost reaching last year's levels. A slight, and possibly temporary, recovery in the steel market led to a higher degree of capacity utilization for the ore- and coal-handling facilities. During the first few months of this year stockpiles were reduced and this led to an extremely low volume of cargo handled.

Despite a rise in the second quarter, exports of potash and fertilizers were still below last year's levels due to the collapse of important markets in India, which enjoyed state subsidies last year. Imports of "miscellaneous grabber cargoes" increased by 9.5%. This term refers to crushed stone and building materials required by the construction industry — not only in the Greater Hamburg region but also in the hinterland (e.g. Berlin).

Liquid cargoes also revealed a slight improvement towards the end of the first six months. Whereas the January-May period saw a fall of 12.4%, the drop after six months was only 10.5%. This fall is likely to be the result of developments in the economy as a whole. German imports of crude oil and petroleum products have both fallen in 1993.

But there has also been a substitution effect. Imports of petroleum products (down 15.8%) were replaced by imports of crude (up 6.7%) which is processed in Hamburg to make petroleum products. But Hamburg receives only part of its crude by sea. Oil for the Holborn Refinery is landed at Wilhelmshaven and transported by pipeline to Hamburg. So an increase in crude imports has less effect on the cargo-handling figures than a decrease in petroleum products.

The decline in bulk cargoes described above was more than compensated for by a very positive development in the general-cargo sector. Here, the volume of cargo handled rose by 6.3% to 15.98 m t though two contrary developments were noticeable. The volume of conventional general cargo handled fell by 11%, mainly due to increasing replacement of conventionally handled goods by containerized cargoes and the fall in project cargoes. In container traffic, however, the increase was a strong 12.7%. The Port of Hamburg's containerization rate reached 77.4%, 4.4 percentage points higher than in the first six months of last year.

In the first half of 1993 a total of 1,209,865 TEUs were handled. Since, as a rule, the second half of the year culminates with a higher level of traffic than the first, one can expect a figure of nearly 2.5 m TEUs for the whole of 1993. The growth rate in the first six months was 9.9%, in the case of loaded containers an impressive 12%. These excellent results are considerably better than those of rival ports. Though traffic in empty containers decreased slightly (down 0.5%), this points to a more balanced relationship between loaded and unloaded traffic.

An analysis of container traffic by trade routes shows that one container in two was handled in trade to and from Asia. The biggest increase in percentage terms, however, was in container traffic with America (up 17.9%) and Europe (up 17.8%). Asia also showed a clear rise — up 8.3%. However, container traffic with Africa and Australia continued to decline.

Hamburg — Germany's No. 1 Tea Port

Germany's tea lovers eagerly await the new harvests from the world's tea-growing regions. Right now topqualities teas are arriving in Hamburg from India, Sri Lanka and Indonesia. Tea is unloaded in the Port of Hamburg virtually all the year round because the world's tea-growing regions have greatly differing harvesting times. What's more, tea connoisseurs distinguish between first flush (spring), second flush (summer) and autumnals. In some regions, e.g. the Dimbula District of Sri Lanka, the tea harvest starts as early as January while in others such as North India it may be as late as March. In Indonesia they harvest all the year round.

In the last century even the super-fast tea clippers took months to bring their cargoes to Europe. Today's modern ships have cut journey times to an average of three weeks. Moreover, tea chests — for centuries the traditional means of packaging tea — are increasingly being replaced by paper or plastic bags with an inner lining of aluminium foil. The reason is simply that timber is scarce and heavy. The growing tendency in further shipment is to pack these bags in containers.

Hamburg is Europe's second most important tea port after Rotterdam. 60% of all Germany's imports of tea are handled in Hamburg. In 1992 the total was 20,821 t (down from 26,996 t the year before).

Transit cargoes accounted for nearly 14,000 t more (up from 8,771 t in 1990). 66% of the tea imported by ship from overseas countries comes in through the Port of Hamburg. Some 25,000 t of tea are always stored in the warehouses of Hamburg's picturesque Speicherstadt. Around 42% of the tea handled as transit cargo in Hamburg is bound for Poland, 15% for Switzerland, 7% for the Czech Republic and 5% for Denmark.

In 1992 a total of 25,000 t of black tea worth DM 135 m was delivered to Germany (without the Free Ports or bonded warehouses). Green and aromatic teas also passed through Hamburg though these blends are not recorded as individual items in the official statistics.

In western Germany the average household consumption of (black) tea is around 363 g a year; in eastern Germany, in contrast, a mere 143 g. With an annual per capita consumption of around 240 g, or 256 cups of tea, Germany is in the bottom third of the world's tea-drinking nations.

The average British tea drinker, in contrast, gets through 2,750 g a year in brewing up his traditional cuppa. Only Germany's East Frisians can keep up with that — they drink an average of around 2,500 g a year.

"Tea clears the senses", as an old Far Eastern saying goes. But how old is man's tea-drinking tradition? Nobody knows for sure. What we do know is that tea first reached Germany in 1650 via Holland. But initially this drink only became popular in Germany's coastal regions, especially East Friesland which still heads the German tea-drinking statistics by an impressive margin.

Away from the coasts tea only made slow inroads into a coffee-drinking



View inside a warehouse in Hamburg's Speicherstadt: here teas from all the tea-growing regions are expertly stored; in the background a warehouseman is weighing and blending various kinds of tea.

culture because it tended to be seen more as a medicament or remedy against alcohol abuse than a pleasurable experience.

In view of Hamburg's importance as a port and trading city, it soon became the main trading centre for tea in Germany. In 1793 the first firm to import tea was founded in Hamburg. For almost 40 years now the German Tea Office (Teebüro) has been based in the city.

Tea is bought as a finished product by importers at tea auctions, direct from the plantations or on the basis of samples. Germany's tea industry merely mixes the various blends and fills them into retails-sized quantities.

But for such work tea tasters need an excellent nose since they are ultimately responsible for the quality and taste of the various brands. Before the harvest of a particular plantation is bought up, samples of the tea are carefully tested.

The tea tasters are also responsible for the various kinds of aromatic tea. What we have here are teas of favorably priced quality to which aroma essences such as Earl Grey (20% market share), vanilla (11%), wild cherry (11%), orange (7%), blackcurrant (7%) or jasmine (5%) are added. Sales of aromatic teas were only about a tenth of those of black tea though in food outlets the quantity of fruit or herbal teas sold is almost as high as black tea. Germans demand very high quality tea. This is particularly obvious if we take a look at sales of tea bags (which normally contain lower-quality teas). In western Germany the ratio of tea bags to loose-leaf tea is 22:78, though in eastern Germany nearly twice as may tea bags are used.

In Britain, in contrast, nearly 90% of tea is sold in tea bags. German consumers prefer fine, aromatic leaf teas from the traditional tea-growing regions. Thus Hamburg's importers are particularly popular partners in tea-growing regions.

The most important suppliers are, in descending order, India, Sri Lanka, China, Indonesia, Argentina, Malawi and (since 1991) Vietnam. Of the total quantity of black tea drunk in Germany (around 25,000 t) some 30% came from India, 16% Sri Lanka, 10% from China (incl. Taiwan) and 8% from Indonesia.

Tideland Solar Buoy For Reykjavik Harbour

Tideland Signal Limited, the Surrey-based aids to navigation specialist, is to supply a new fairway buoy for Reykjavik Harbour. This is the latest in a long series of orders from Iceland and will be the sixth Tideland buoy in rejkjavik Harbour.

The buoy is equipped with a Tideland solar powered ML-140 lantern assem-

bly with a range of 6nm at T = 0.74 and a solar array in which two Tideland solar module assemblies, each with two MMG-900/12 modules are mounted 180 degrees apart under the lantern. By day, the solar array charges a battery bank in a compartment in the buoy body, which in turn supplies power to the lantern as required.

Tideland's ML-140 is one of a range of durable, lightweight, corrosion-resistant lanterns and was specifically developed to provide a wide vertical divergence in order to compensate for buoy roll. The 140mm one-piece acrylic Fresnel lens delivers maximum beamed light for the lowest possible power consumption.



Tideland's latest 3m buoy with solar powered ML-140 lantern waiting to be installed in Rejkjavik harbour.

Amsterdam: Containers, Cargo on the Rise

Container transport in Amsterdam is on the rise. Once again, in the first half of 1993 a volume increase was recorded of over 13%. The half-year report of the Municipal Port Authority shows that more than 500,000 tons of containers were handled.

The transshipment of general cargo (unit loads, ro-ro, containers, bags and bales) grew by 8.8% in the first six months of this year to 1.6 million tons. As a result of this increase general cargo now represents 11% of total port transshipments.

The volume of both dry bulk (animal

feeds, coal, fertilizers, sand and gravel) and liquid bulk (oil and oil products) has been under great pressure as a result of the economic recession. In the last half year, 8.7 million tons of dry bulk (17.8%) and 4.6 million tons of liquid bulk goods (-14.4%) were handled in the port of Amsterdam.

In total, the port of Amsterdam handled almost 15 million tons of goods (-14.5%) in the last half year. The declining trend in total transshipment in the first five months of the year reversed in June with an increase of 3.1%. At more than 3.1 million tons, June 1993 transshipment proved a top month for the port and the best since July 1991.

Over the past half year, 2,393 ships with a total capacity of 24.4 million tons (deadweight) laid anchor in the port compared with 2,552 ships with total capacity of 27 million tons during the first half of 1992.

Vice-executive Director of the Municipal Port Authority, Jan Koster, estimates that based on the half-year results, and the successful month of June, transshipment in the port will be retained at around 30 millions tons. "The decrease of these first six months was caused largely by the coal sector. If we omit this sector, then the decrease is only 2,1%. I am anticipating a recovery in coal transshipments over the coming year due to new port activities in the sector. In the container sector we are counting on continued growth due to recent expansion of a Latin American container service to Amsterdam, and to the increased success of the so called inland waterway shuttles in The Netherlands and to Germany".

Port of Bilbao at a glance

The Port has given life to the city from its very beginnings. In the year 1300, thanks to the importance of the Port of Bilbao, the city was granted its charter and founded.

From then, to the present times, the history of the Port has been one of constant expansion from the heart of Bilbao towards the sea. Successive organisms have collaborated in this task and throughout these almost 700 years they have guided the Port. Of these entities, one of the most outstanding is the "Consulado de Bilbao" which was founded in 1511 and which worked for the improvement of the River until it was substituted by the Ministry of Development.

In 1877 the Committee Works for the Port and River of Bilbao was established and they took charge of the control, development and management of the Port, until in 1977, it became the Autonomous Port of Bilbao, with a greater degree of self-government.

From the beginning of January 1993, the Port Authority of Bilbao has been the body responsible for the management of the Port of Bilbao.

Bilbao as a World Port

Due to its privileged geographical position, the Port of Bilbao is an ideal entry and exit for cargo from and to the five continents.

Through an extensive network of motorways and trains, it provides service to extensive areas of the Iberian Peninsula and the South of France.

The Port of Bilbao is the backbone of the greater Metropolitan Bilbao Area with 1 million inhabitants and extensive industrial estates.

In a radius of 200 kilometres there are 4 million inhabitants and 16 million in a radius of 400 km.

More than 200 regular shipping lines connect the Port of Bilbao with 500 ports throughout the world.

The Port and Its Future

The diversifying port demand means that the ports must adapt their supply to the necessities of new transport infrastructure systems in which they are no longer mere links in a chain. Now they will be turned into zones established by companies which need to be near maritime transport.

With this end in mind, the Port of Bilbao has begun a work of great dimensions which will provide 350 ha of land area and 8 km of docks with draughts of between 21-25 metres. This will allow a Zone of Logistic Activities to be established which will figure as a cargo distribution centre for oceangoing transport.

In short the new project, together with the road network, the airport, the future development of the railway and telecommunications fits perfectly into the new system of transport infrastructure which will brig about the introduction of industries and services which every modern society needs for its development in harmony.

(Port of Bilbao Authority)

Automatic Video Inspection at Gothenburg

An automatic system for technical inspection has been introduced by the Port of Gothenburg at its Gate 6, serving the Tor Terminal. Trailers and containers passing the gate are now recorded by still-video cameras, and the pictures are stored on compact discs.

The system has been delivered and installed by the Belgian company IMC and is called Dicamos (for DIgital CAmera Monitoring System). The system covers one entrance and one exit lane at the gate, each lane being covered by 14 still-video cameras. The cameras are activated when the lorry driver enters a bar-code 'passport' into a reader at the gate. A total picture coverage of a trailer takes some 20 seconds.

The scenes relayed by the cameras are digitally recorded by a computer. The pictures are matched with other information related to that specific trailer; then, the pictures are stored on a standard, music-type compact disc. With fourteen takes of each trailer, a CD can store total picture information



The automatic inspection system at Gate No. 6 at Gothenburg's Tor Terminal uses 14 still video cameras to record a trailer or container entering or leaving the terminal. Here, a trailer is on its way in through the export lane. Cameras like the ones in the picture relay information to a computer that records it on compact discs. of about 500 trailers.

These discs are then stored for possible claims discussions between representatives of different links in the transport chain. It is not uncommon for discussions to arise whether a dent in a trailer or a tear in a tarpaulin was made during sea voyage, in the port, or inland. The pictures showing the condition of the trailer at port's gate can then be viewed on a computer monitor — 14-picture over-all view, individual takes, or blow-ups. Colour prints can be easily produced using desk-top equipment.

The Port of Gothenburg AB has invested some Swedish Kronor 3.2 million (US\$400,000; £260,000) in the system, one-third of which is internal costs for gate adaptation, et al. Apart from being a good inspection system with a high proof capacity, it also reduces the need for manpower; the Port of Gothenburg hopes to be able to trim the manual inspection crew at Gate 6 from eight to three. The remaining five will get other jobs within the company.

New Terminal Completed At Port of Felixstowe

Mrs Lesley Henniker-Major, Chairman of Stuffolk County Council, officially opened the Port of Felixstowe's newest development on Tuesday, September 7, 1993.

By inaugurating 94 Shed she will also

mark the completion of the FinnTransit Terminal, with total covered storage space exceeding 40,000 square metres for newsprint, fine papers, kraft liner board and other products of Finnish and Canadian forests. Felixstowe is the UK leader for quality paper imports, which need and get careful handling.

Built at a cost of £1.8 million, 94 Shed is Britain's widest single-span structure serving this trade. It has 11,150 square metres of clear storage space without internal columns or other impediment, dimensions inside being an 84 metre width and 132.75 metre length, its floor half-a-million hand-laid concrete blocks. Latest sodium lighting ensures energy conservation, both within the warehouse and in the surrounding floodlit area.

Canopies 12 metres wide extend the undercover working area by 3,200 square metres, enabling vehicles to be loaded in all weather conditions. The Port of Felixstowe and FinnTransit Ltd jointly deploy state-of-the-art computer systems, incorporating laser barcode readers, tracking cargo through the warehouse and on to its final destination.

ABP Holdings Plc 1993 Interim Results

The overall result for the first half of 1993 was substantially improved on the same period of 1992, with a pre-tax



Four-high Container Stacking Trucks

The Port of Gothenburg has taken delivery of two new Kalmar LMV counterweight trucks for empty container handling. The trucks feature raised cabs and are able to stack containers four high. They grab the container by the inner top corner fittings, thereby avoiding the need for a conventional spreader.

profit of £29.4m (1992: £15.1m).

The ports and transport business contributed £28.4m (1992: £32.5m). The reduction incorporated a higher level of severance payments of £4.0m, compared with £2.0m in the same period last year.

Results from the property business were considerably improved. Port-related property income contributed $\pm 10.2m$ (1992: $\pm 9.8m$). Other property investment income increased from $\pm 4.5m$ to $\pm 5.4m$. Property development activity contributed a profit of $\pm 1.0m$. (In the first half of 1992, property development incurred a loss of $\pm 1.6m$.)

No property development provisions were required (1992: £10.0m).

The sale of an investment property yielded a profit of £1.5m (1992: nil).

Interest charged to the profit and loss account was reduced to $\pounds 17.1m$ (1992: $\pounds 20.1m$).

Earnings per share were 11.9p compared with 9.6p in the same period of 1992 before property development provisions, and 5.7p after property development provisions. Tax charge for the first half of 1993 has been estimated at 24.5% (1992: 30.5%) which takes into account a higher rate of capital and other allowances.

Dividend

The directors have declared an interim dividend of 3.5p per share (1992: 3.25p per share). It will be paid on Wednesday, 3 November 1993, to shareholders on the register at Friday, 1 October 1993.

Balance Sheet

Net borrowings on the balance sheet at 30 June 1993 were £359m, representing 60% of shareholders' funds (December 1992: £349m and 60%). The Group's share of other borrowings, in joint ventures where the Group's shareholding is 50% or less, was reduced to £7.0m (December 1992: £15.0m). These changes reflect in part the acquisition of the remaining 50% interest in Ocean Village, Southampton.

Capital investment in the ports and transport business during the first half of the year was £19.0m on operating assets and £7.0m on port-related investment properties. Some £8.0m was spent on other investment properties, most of this related to investments in Cardiff Bay, and £9.0m of property in Ocean Village became wholly-owned.

Ports and Transport

Total tonnage of cargo passing through the Company's ports was 53 million tonnes, about the same as in the first six months of 1992 and one million tonnes higher than in the second half of last year.

Commenting on the ports and transport business, Sir Keith said:

"The improving trends in the overall business through our ports have been sustained during July and August. In addition, the high level of capital investment at the ports is providing the foundation for further expansion."

There were increases in cargoes such as steel, timber and containers, but movement of coal imports was at a substantially lower level.

"Southampton Container Terminals (SCT), our joint venture with P&O Containers Limited, has undergone a major reorganisation, including a reduction of 132 employees by 31 August. As a result of this restructuring, SCT is now strongly placed to meet the challenge of a highly competitive market," Sir Keith said.

The Group's capital investment programme at the ports includes:

Hull: the construction of "River Terminal 1", the first riverside roll-on/roll-off terminal is well underway and is scheduled to open in November this year when the first of North Sea Ferries' 'superfreighters' comes into service on the Hull-Rotterdam route.

Immingham: the construction of a new jetty at the oil terminal will be completed in the first half of 1994 with resultant additional revenues.

Property Investment

Income from port-related properties continues to rise as rentals come up for review and port estates attract increased industrial and commercial interest.

Other property investment income is on a strong upward trend, and this will be reinforced with the recent completion of the new 150,000 sq ft office at Cardiff Bay for the Welsh Health Common Services Authority.

A second major lease at Cardiff Bay has been signed with NCM Credit Insurance Limited and work on the construction of the 119,000 sq ft office is now underway.

Describing the strategy behind the

rationalisation of the property investment business, Sir Keith said:

"We are making useful progress in rationalising our property investment business, with increased emphasis on properties located on land at ports. Properties which are peripheral to this strategy are being sold as and when opportunities arise, as exemplified by the sale of the shopping centre at Torquay."

Property Development

Further good progress has been made in letting space within Grosvenor Square Properties' developments, including 24,000 sq ft at The Athenaeum, Glasgow, and 28,000 sq ft at Tower Bridge Court. These and other lettings achieved over the past 18 months have substantially reduced holding costs,



Asia-Pacific Ports Symposium in Kobe

For two days, September 6 and 7, 1993, a symposium on Asia Pacific Ports was held in Kobe, Japan. It was attended by some 260 participants including 67 delegates for 23 ports and related agencies, representing some twenty countries and economies in the region. The event, intended to create a freer and firmer basis of dialogue among the ports in the Pacific Rim countries, was organized and hosted by the Japan Overseas Ports Cooperation Association (a friendly affiliation of interested parties based in Tokyo) with a resultant improvement in financial performance.

Prospects

On future prospects, Sir Keith commented:

"The ports and transport business has seen some encouraging features during the first half of 1993, and the trend has been maintained during the recent summer months.

"The new investments now in hand at the ports to meet our customer requirements will yield additional revenue and profits from 1994 onwards.

"The property business is also now well-placed to produce a positive contribution, following the 'clearing the decks' exercise in 1992, particularly in relation to the increasing property investment income."

and the City of Kobe, and was cosponsored by the Ministry of Transport, Japan International Cooperation Agency (JICA) and Overseas Economic Cooperation Fund (OECF), with the cooperation of the Japan Port and Harbour Association, Overseas Coastal Area Development Institute of Japan (OCDI), Kobe Port Terminal Corporation and Sasakawa Peace Foundation. IAPH was one of the cosponsors of the event and was represented by Mr. Robert Cooper, Ports of Auckland, Mr. John Hayes, Maritime Services Board of N.S.W., and Mr. H. Kusaka.

The ports represented at the sumposium were: Cambodia (Ministry of Communications, Transport and Ports, Canada (Port of Vancouver), China (Ports of Dalian, Keelung, Shanghai and Tianjin), Fiji (Port Authorities of Fiji), Hong Kong (Marine Depart-



Delegates with Mr. Sasayama, Kobe Mayor, center in the first row

ment), India (Bombay Port Trust), Indonesia (Port Corporation II), Japan (Ports of Fushiki-Toyama, Kitakyushu, Kobe, Nagoya, Niigata, Osaka, Tokyo, and Yokohama, and the MoT), Korea (Port of Pusan), Myanmar (Port of Yangon), Pakistan (Port of Karachi), Philippines (Philippine Ports Authority), Singapore (PSA), Sri Lanka (Sri Lanka Ports Authority), Thailand (Port Authority of Thailand), U.S.A. (Ports of Los Angeles and Seattle), and Vietnam (Vietnam National Maritime Bureau). Also in attendance were representatives of the Asian Development Bank, Korea Maritime Institute, and Korea Ocean Research & Development Institute.

Waigaoqiao New Harbor: First Free Trade Zone

In 1990, the Chinese Government made a strategic decision of opening up and developing Pudong, an area to the east of Shanghai city proper, which will act as a "dragon head", pushing the rapid development of the Yangtze River Delta and all the areas along the Yangtze River, and enabling Shanghai to become the economic, financial, and trade center of the Far East.

As ports play a crucial role in the development of their cities, the Pudong Project is spearheaded by the construction of the Waigaoqiao New Harbor.

The new harbor is located in Area A of the Waigaoqiao Free Trade Zone, on the east bank of the Yangtze River estuary, fronting Changxing and Hengsha Islands in the river. It is approximately 6 km away from Wusongkou on the west, 85 km from the East China Sea on the east, and 23 km overland from the city center across the Huangpu River.

The first phase of the Waigaoqiao project began officially on July 1, 1991. By the end of 1992, one berth had been put into preliminary operation. The whole terminal, the investment for which amounts to RMB 640 million yuan, is expected to be completed and put into operation in October, 1993. It will consist of 4 wharf berths for vessels of 10,000 dwt and up, with a total quay length of 900 m, width of 42 m, and shoreside water depth of 12 m, capable of accommodating third generation full container vessels.

The terminal will cover a land area of 500,000 m², and the land strip from the quayside to the outer limit will be as wide as 500 m. Its annual throughput capacity will reach 24 million tonnes, and it will mainly handle containers, steel, timber and breakbulk cargo, etc.

The planned second phase project will mainly consist of an excavated basin. It will occupy a land area of 6.4 km². As planned, 20-30 berths for vessels of 10,000 dwt and up will be constructed, with the annual capacity projected to be 20 million tonnes.

The Shanghai Waigaoqiao Free Trade Zone Harbor Co. Ltd. is a state-owned enterprise directly responsible for the construction and overall management of the Waigaoqiao New Harbor area (i.e. Area A of the Free Trade Zone).

Its main business scope covers infrastructure construction within the Free Trade Zone, real estate development and management, import and export cargo stevedoring, international trade and trade agency within the Zone, bonded warehouses, simple commercial processing of goods, shipping agency and freight forwarding within the Zone, customs brokerage, supplying for ships' store, project investment and establishing subsidiaries within the Zone, engineering contracting within the Zone and related consultation services, etc. The Company will strive to build the Waigaoqiao New Harbor area into a novel-type port that conforms with international customs and practices.

The Waigaoqiao Free Trade Zone is the first free trade zone set up in China. It combines the patterns of free trade and export processing. Its first phase project has developed 10 km², of which 2 km² was subject to inspection by the National Customs Administration on April 18, 1993, and was enclosed for normal free trade operations.

The Free Trade Zone comprises Area A (for port and terminals), Area B (for warehouses), Area C (for administrative center and traders), Area D (for processing plants), and Area E (living quarters).

As China's most liberal free trade zone, the Waigaoqiao Zone enjoys a series of preferential policies, which have attracted large numbers of overseas investors. At present, there have been more than 400 enterprises established in the Zone, with investment totalling over US\$1,300 million. The investors are from more than 20 countries and regions such as Hongkong, Taiwan, the U.S., Japan and Britain.

With the completion of the Waigaoqiao New Harbor, the 21st century will see the emergence of a totally new Shanghai, more outwardly oriented, more diversified in its functions, and more renowned internationally.

S. Korea Leads Asian Oil Demand Explosion

The Surge in S. Korean oil imports is having a strong impact on tanker demand, according to the tankers article in the September issue of *Lloyd's Shipping Economist*. S. Korean oil imports have increased dramatically, and are now one third those of Japan.

The article analyses the explosive growth in oil demand in the newly industrialising Asian economies, and its affect on tanker demand.

With much of the region's oil sourced from the Middle East and at best stagnant local oil production, the likelihood is for a further boost to tanker demand during the 1990s to serve this increasingly important economic area.

The dramatic growth in oil demand has been led by the two primary markets of China and S. Korea which have, however, impacted differently on the world oil markets. S. Korea has always been heavily dependent on imports, with China previously a net exporter. But this, says *Lloyd's Shipping Economist*, is set to change.

S. Korean crude imports, at 1.4m b/d in 1992, have almost doubled since 1988 and trebled since 1980, with the annual increase in 1991 and 1992 averaging 29%.

An analysis of suppliers by source shows the dominance of the Middle East Gulf suppliers, which in 1992 supplied 72% of S. Korea's crude oil needs. Supplies from this region have more than trebled since 1985, reversing the reduction in market share which gathered pace to 1985 as MEG exports fell and Asian and other suppliers gained market share.

The impact of this increase on tanker demand is shown by an analysis of tanker callings at the ports of Daesan, Inchon, Ulsan and Yosu. Total tanker callings increased to 65m dwt in the first half of 1992 from 20.1 m dwt in the same period of 1987.

China – Asia's largest oil consumer excluding Japan – has till now been a net contributor to the international oil markets, but is expected to become a regular net oil importer by 1994, despite the recent restrictions on oil imports in response to recketing inflation and the plunge in the value of the newlyconverted Yuan.

A taster for China's new role on the international oil scene was provided last December when an end year buying spree led to net oil imports of some 0.46 m b/d — the first such occurrence for 27 years.

Chinese demand is currently only about 60% of Japan's, but with growth rates of 7-8% and 1-2%/year respectively it should be only a matter of time before the two converge.

The inexorable movement towards net importer status is also being seen in Indonesia, where static oil output is being outstripped by increasing demand.

There is a consensus among forecasters that Asia will continue to be the focus of new oil demand for the remainder of the decade. With crude oil production in the region likely to remain stable at the current level, and only small increases in refining capacity due to financing constraints, a regional deficit of 3m b/d of crude oil and 2m b/d of refined products by the end of the decade is implied.

The growth in net imports into the region thus seems assured, say *Lloyd's Shipping Economist.*

Ports of Auckland Benefits City, Areas

"The major contribution that the port makes to the life and economic viability of the City of Auckland and the surrounding regions has been highlighted by the Economic Impact Report," said Mr R.G. Alexander, Chairman of Ports of Auckland Limited.

"The port is sometimes criticised for 'spoiling' the Auckland waterfront, yet these uninformed critics fail to recognise the importance of the port as an income earner both directly and indirectly", he said. "The city had been established in Auckland because the harbour provided sheltered and safe anchorage.

"This is still the case today, but modern ports require land area, cranes and mechanical equipment, as well as skilled manpower. The port at Auckland is not vacant disused docklands like London. It continues to be New Zealand's largest and busies port, handling 7 million tonnes of cargo every year.

"Everyday we have ships in the port, handling thousands of tonnes of cargo. That provides direct employment in the port but also indirect employment in many factories, and processing plants in the Auckland and Waikato regions, because that is where the materials go to or come from. These are the cargoes handled in the port each day. In turn, these employees shop, spend their leisure, buy homes and generally support the commerce of the region.

"That is why this study is so important in identifying the economic benefits to the area, and the employment opportunities", Mr Alexander said.

"We are not opposed to waterfront development but we do have to ensure the needs of the port are met now, and provided for in the future. Overseas trade trends are continually changing. New ship design is also changing, and the facilities of the past may not be suitable for the future.

"We cannot 'freeze' the port as it is now, and say 'This will do the future!' It definitely will not do! We need to plan for the future and the benefit of this is reflected in the Economic Impact study."

Highlights from the McDermott Miller Study are:

* Economic activity which is directly or indirectly dependent on trade through the Ports of Auckland contributes an estimated \$7.5 billion to the national economy (1988 figures). This represents 13% of the national Gross Domestic Product - a measure of New Zealand's total economic output.

* Some 87,000 people are employed in the Auckland region producing these products or services which are port-related. With a further 200,000 outside Auckland contributing to the trade of the port. This gives a national total of 289,000 or 19% of New Zealand employment.

* The Ports of Auckland and One-

hunga play a central role in the local economy (i.e., Auckland region) and the national economy. Business dependent on trade through the ports account for one-eighth of national economic activity and one fifth of national employment.

* Auckland has a tradition since 1840 of encouraging or facilitating New Zealand trade. Overseas exports handled at Auckland represented 28% of the national seaport total by value (1988 figures). Overseas imports through Auckland and Onehunga accounted for 60% of the total seaport imports value.

* Auckland handles mostly value products. Average value per tonne of exports through was \$2,706 compared with \$781 for the remainder of New Zealand's ports. Equivalent figures for imports were \$3,181 per tonne through Auckland, \$393 per tonne for the rest of New Zealand.

* The Ports of Auckland and Onehunga have a double impact on the region, helping port dependent production, i.e., import of raw materials and/or export of finished product, and secondly, through providing jobs and demand for local services needed to run the port.

* The Auckland region's importance relates to its high percentage of intensive labour industries in the area. These include manufacturing, chemicals, rubber and plastics products and transport equipment. Each of these industry groups is significant in its own right and each is concentrated in the Auckland region needing relatively high plant, equipment and labour input.

* The study highlights the close integration of the Ports of Auckland with its hinterland and advantages which the port offers to importers and exporters both through its location well-established links with the farms and factories and distributors of the region. It also points out that increased efficiencies and productivity in the port will help those port-dependant sectors to grow. The net gain from this should far exceed any loss to the regional economy resulting from expenditure on port operation.

Auckland Ports Doubles Profit in Year of Records

Ports of Auckland Limited has nearly doubled its pre-tax and after tax profit

in the year ended June 30 1993, a record performance by the company in a 12 month period when other key port operating indicators were also at record levels.

The pre-tax profit of \$33,897,000 compares with \$17,666,000 in the previous year, and the after-tax profit of \$22,105,000 is also nearly double the previous year's figure of \$11,337,000.

Mr Graeme Alexander, the company's chairman, says the company completed a major four year restructuring programme in 1992, reducing operating costs and increasing efficiency and productivity. The 1993 year is therefore the first since the company was formed in 1988 in which restructuring costs have not been incurred.

"We are now reaping the full benefit of that restructuring, winning greater market share, operating more efficiently and sharing some of the gains with out customers by way of very competitive charges.

"The Port of Auckland has maintained and enhanced its position as the country's largest general cargo port, handling more than half of New Zealand's container traffic and handling two thirds of all imports and a third of all exports on a value basis," said Mr Alexander.

"In the year under review, revenue

B) 5 Year Comparison

rose from \$106,520,000, up from \$100,533,000 the previous year. This was earned on a record tonnage of 7.84 million tonnes of cargo, up from 6.9 million tonnes."

The return on overall company assets including land (14%) was double that achieved in the previous year.

The company now has shareholders' funds of \$252,590,000 compared to \$240,195,000 at June 30, 1992.

Mr Alexander said the dramatic profit increase demonstrated how efficiently the port is working. The company had been able to handle an increase of a million tonnes of cargo during the year, with no significant impact on operating costs.

"As a result of restructuring, oper-

A) Year at a Glance

	1993 \$000	1992 \$000
Revenue	106,520	100,533
Operating Costs	72,633	82,867
Net Profit before Taxation	33,887	17,666
Cash Flow from Operating		
Activities	20,133	15,602
Share Capital	198,759	198,759
Shareholders' Funds	252,498	240,195
Total Assets	300,718	298,545
Shareholders' Equity	84.0%	80.5%
Net Asset Backing per Share	\$1.27	\$1.21

1989 1990 1991 1992 1993 Revenue 110 112 101 101 107 (i) **Operating Costs Before Reorganisation** 78 73 (i) 93 87 74 23 26 34 Net Profit Before Reorganisation 16 25 (i) (i) Net Profit Before Taxation 16 21 17 18 34 776 504 Stuff Numbers (Av for year) 852 790 570 Total Tonnage Handled 6.4 6.8 6.5 6.8 7.8 (ii) 15.5 (iii) Tonnes of Cargo per Employee 7.5 8.6 8.4 11.9 Return on Equity 6% 6% 4% 5% 9% (iv) Earnings Per Share 5.8 6.8 4.5 5.7 11.1 Net Asset Backing Per Share \$1.09 \$1.21 \$1.25 \$1.21 \$1.27

NB 1991 figures have been annualised

(i) \$ million

- (iii) thousands of tonnes
- (iv) cents

C) Comparison 1989 to 1993

	1989	1993
Man hours per container	5.5	2.6
Plan utilisation	58%	70%
Berth Occupancy	44%	35%
Total Tonnage (millions)	6.8	7.8
Total Containers	251,838	306,302

D) Distribution of Income

58.8%
7.6%
1.1%
0.7%
11.1%
10.0%
10.7%

ating costs are down dramatically and ship and container handling times have been heavily reduced. The port is able to work seven days a week, all year round, in all weathers and at all stages of the tide.

"With significant over-capacity in the New Zealand ports system, our team recognises that the customer is king today. We are in a service business and our focus is on efficiency and giving value for money. As a result we are handling cargoes from all over the North Island."

Mr Alexander said the company could not have achieved its current position without great efforts from all staff, and positive interaction with the wider port community.

"Further efficiencies will come from planned new port/rail and port/road links, and further development of our existing sophisticated computer system to optimise the efficiency of ship loading and unloading and the movement of containers."

Ports of Auckland is one of only a handful of ports around the world to have invested in a sophisticated port operating management computer system.

The company has paid some \$10.7 million in dividends - over 48% of its net afar tax profit to its shareholders, the Auckland Regional Services Trust and the Waikato Regional Council.

PSA Purchases Radio Data Terminal System

By Mary Chai Public relations Department Port of Singapore Authority

PSA has invested some \$4.5 million on a Mobile Radio Data Terminal System (MRDTS) from Singapore Computer Systems Limited (SCS).

Mr Lee Chee Yeng, Director (Operations/Information Systems) of PSA and Mr Tay Siew Choon, Managing Director, Singapore Computer Systems signed the contract at the PSA Building on 4 June 93.

PSA renders pilotage and tug services to help ship masters bring their vessels in and out of the Port. To optimise utilisation of Singapore's anchorages and Port resources and maintain a high

⁽ii) millions of tonnes



level of service, PSA has introduced the Computer Integrated Marine Operations System (CIMOS).

The MRDTS is an executive component of CIMOS. It receives and sends operational data to and from the Port Traffic Management System (PTMS), which is the central data base server of CIMOS. The MRDTS facilitates this data transmission between the CIMOS centre and PSA's pool of marine resources (such as pilots, tugs and launches) through radio waves.

Deployment schedules generated by the CIMOS expert systems can be relayed to pilots, tugs and launches by the MRDTS and displayed on both hand-held and fixed mounted terminals. The information made available include details of the next job, the vessel's name, its location and the required service start-time.

Likewise, pilots, tug and launch masters can also directly update the CIMOS central database with the status of their jobs by keying into these terminals relevant information regarding the start-time, end-time. and their availability for the next job.

The system also provides on-line tidal information and pilot guidelines so that pilots can make better assessment and decisions to manoeuvre vessels in any given situation.

The contract with Singapore Computer Systems includes the supply of 127 hand-held data terminals for PSA's pilots and tugs, the installation of 27 fixed mounted data terminals onboard PSA's launches and the installation of six radio receivers/transmitters.

The MRDTS will be installed by January 94 and be fully operational by the first quarter of 1994.

With the MRDTS, job assignments and service details will be transmitted and updated on a real-time basis resulting in more efficient and accurate deployment of PSA's marine resources. There will also be less reliance on voice communication by VHF so pilots, tug and launch masters need not spend unproductive time waiting for free radio channels to make contact with our Port Operations Centre.

MRDTS can be extended to harbour craft such as bunker tankers and ferries in the future.

The MRDTS represents PSA's commitment to enhance service levels for port users through investment in information technology. (*Port View*)

Re-usable Plates – Environmentally Friendly

By Mary Chai Public Relations Department Port of Singapore Authority

What's good and green? Goodpack Metal Crates! Ideal for packing cargo, they are simple, strong and well-designed. Goodpack Metal Crates are totally re-usable, and therefore environmentally friendly.

What prompted Goopack System

Pte Ltd, to develop these crates was the age-old problem involved in conventional cargo packing, especially the packing and shipment of rubber. Made of steel and lined with plastic, the metal crates completely eliminate woodchip contamination of the rubber that occurs when wooden pallets become defective and puncture rubber packed within.

Such contamination is known to have caused entire batches of new tyres to be scraped — a costly affair. Rubber bales are usually compressed during packaging. When transported by sea the rubber bales tend to expand and cause the wooden pallet wrap or shrink wrap to rupture.

Contamination occurs when water and dust sets in. Goodpack solves the problem with dunnaging. After 36 bales of rubber are placed to a height of six bales in the first crate, another crate is placed on top of the packed crate to press the rubber down for two days to a level just below the top rim. The rubber will stay in shape throughout the voyage.

The crates are designed for stacking six high, although only four in height is recommended. With four flaps at each corner of the crate, four fully loaded crates can be stacked one top of another. Each flap can withstand a weight of 1.5 tonnes.

The crates are also tapered at the bottom and can be nested and stacked high to save on storage space when not in use.

There are only advantages in using Goodpack Metal Crates. Because they are reusable unlike wooden crates and plastic shrink wraps, they enable users to realise their ideals in environment conservation. Goodpack practices "return to sender". Apart from its unique product, Goodpack has a unique way of promoting its use.

The supply of the metal crates to customers is negotiated under a lease agreement. The lease costs are based on the period from delivery of metal crates into the designated supplier's premises up to return of the empty metal crates to Goodpack who has agents worldwide.

Goodpack System Pte Ltd is a local company affiliated to Hong Leong Corporation Ltd, one of Singapore's leading industrial and financial groups. They can be contacted at 8, Pereira Road #03-01 Singapore 1336; tel: 382 1788 or fax: 382 1708. (Port View)



PORT OF STOCKTON

"Diversity is our Watchword"

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Warehousing Industrial Development Property

Deepwater Channel

Fast Intermodal Connections

We invite you to tour our facilities and compare our rates. See why we're second to none when it comes to handling your cargo efficiently and economically.



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