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Ports Harbors

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Klaus Fortkord. Technical Director, Orenstein & Koppel. Fed Rep of Germany.

A Terminal's Flexible Response to Changing Ore & Coal Markets

J W Körner. Manager Corporate Affairs, EMO. Rotterdam.

Innovative Transport in the Delivered Cost Equation

Jeff Rankin. President, TECO Transport & Trade. USA

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Geoffrey Parker. Chief Executive, Highland Participants. UK

Operational & Marketing Efficiencies - The US Freight Railroads Since Deregulation

Richard E Briggs. Executive Vice President, Association Of American Railroads. USA

Bulk Port Developments in the People's Republic of China

Xu Tian Lin. Senior Engineer, Planning & Design Institute for Water Transportation of the Ministry of Communications. Beijing, PRC.

Expansion & Development of Bulk Terminals at the Port of Shanghai

Zhu Fei. Co-Chief Engineer, Port of Shanghai. PRC

Integrated Transportation - The Foster Yeoman Philosophy

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Continuing Expansion of the Self Unloader Concept Ray Johnston. Director of Marketing, Canada Steamship Lines. Canada.

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 - can carry steel's great strength and vital services to society
 - far into the 21st century and beyond.



IAPH ANNOUNCEMENTS AND NEWS

Report on Updated Tonnage Figures

Once every two years or every conference year, a survey is conducted of all Regular Members of IAPH for their updated tonnage figures which should form the basis for the coming two years' dues assessment.

Under the date of July 25, the Secretary General circulated the survey form to all IAPH Regular Members. Upon receipt of the entry form from the Head Office, each Regular Member is requested to file with the Secretary General a report of the tonnage handled during the latest one year after the last such report which was conducted in 1987.

The deadline for receipt of this information at the Head Office has been set at September 15, 1989 so that the data collected can be used when the Secretary General's office issues the invoice for the next year's dues to all members towards the early part of December. Members' cooperation will be highly appreciated.

Mr. Haar Reports On LDC Meeting

Mr. Herbert R. Haar (Port of New Orleans), Chairman of the IAPH Dredging Task Force, has sent the Secretary General a complete report on the recent meetings of DTF held during the Miami Conference. From among the documents attached to the DTF report, we reproduce later in this issue (see pages 15-21) Mr. Haar's report on the Meeting of the Scientific Group on Dumping of the London Dumping Convention, and a paper entitled "Assessment of the Use of Contaminant Concentrations in relation to Properties of Dredged Materials", prepared by Dr. Willis E. Pequegnat, Consultant to IAPH, which was submitted to the above meeting on behalf of IAPH. Furthermore, Dr. Pequegnat's remarks for the International Environmental Congress on the Harbour, which is scheduled for September 11-15, 1989, will be featured in the next issue.

IPD Fund: Contribution Report – US\$24,000 still needed

The contributions from members to the Special Port Development Technical Assistance Fund ("the Special Fund") as of August 10, 1989 are listed in the following box. The amount received in contributions in the past 14 months totalled US\$46,052, which represents about 65% of the targeted amount of US\$70,000. This reflects the donation from 54 members including several groups of ports.

Contributions to the Special Fund (As of August 10, 1989)

Contributors A	mount
Paid:	(US\$)
Associated British Ports, UK	3,000
South Carolina State Ports Authority, USA	1,000
Cyprus Ports Authority, Cyprus	700
Japan Port & Harbor Association, Japan	450
Toyo Construction Co., Ltd., Japan	234
Toa Corporation, Japan	500
Port Alberni Harbour Commission, Canada	200
Korea Dredging Corporation, Korea	300
Port Authority of New York &	
New Jersey, USA	1,000
Vancouver Port Corporation, Canada	1,000
Klang Port Authority, Malaysia	200
Saeki Kensetsu Kogyo Co., Ltd., Japan	250
Penta-Ocean Construction Co., Ltd., Japan	1,000
All French Ports by UPACCIM*	1,560
Shimizu Construction Co., Ltd., Japan	390
Taisei Corporation, Japan	390
Japanese Shipowners' Association, Japan	390
Port of Redwood City, USA	100
Puerto Autonomo de Barcelona, Spain	991
Port Authority of Thailand	100
Port Rashid Authority, UAE	500
Japan Cargo Handling Mechanization	
Association	390
Obayashi Corporation, Japan	400
Port of Copenhagen Authority, Denmark	1,000
Clyde Port Authority, UK	1,000
Public Port Corporation II, Indonesia	150
Toyama Prefecture, Japan	420
Georgia Ports Authority, USA	1,000
Port of Oakland, USA	350
Kuantan Port Authority, Malaysia	200
Port of Seattle, USA	1,000
Kajima Corporation, Japan	420
Port of Reykjavik, Iceland	500
Canada Ports Corporation, Canada	250
Nigerian Ports Authority, Nigeria	250
Port of Montreal, Canada	1,000
Ports Public Authority, Kuwait	1,000
Tanzania Harbours Authority	200
Junta del Puerto de Gijon, Spain	500
Sharjah Ports Authority, U.A.E.	500

Port of Yokohama, Japan	4,950
Port of Long Beach, USA	1,000
Mauritius Marine Authority	200
Chiba Prefecture, Japan	403
Dr. Frederik K. DeVos, Canada	100
Tokyo Metropolitan Government, Japan	3,941
IAPH members in the Netherlands**	3,209
,Mr. Robert W. Innes, Canada	250
Autorite Portuaire Nationale (APN),	
Haiti	100
Hiroshima Prefecture, Japan	666
City of Kobe, Japan	4,438
Port of Houston, USA	1,000
Port Authority of Fiji, Fiji	300
Osaka Port Terminal Development Corp.,	
Japan	710
Total USS	6 46,052
Pledged: Nil	

* Union of Autonomous Ports & Industrial & Maritime Chamber of Commerce

** Directorate-General of Shipping & Maritime Affairs, Port Management of Rotterdam, Port of Vlissingen, Port of Delfzijl/Eemshaven, Port Management of Amsterdam

Bursary Recipients

According to Mr. C.B. Kruk, Chairman of the Committee on International Port Development (CIPD), he has approved bursaries for the following individuals:

Mr. Naginu Omaru Deen, Traffic Co-ordinator, Gambia Ports Authority, to participate in the PACT (Practical Approach Concept in Training) Course at the Port of Rotterdam, for the period May 22-June 16, 1989.

Mr. Razak Salim, Bintulu Port Authority, Malaysia and Mr. Iacovos Papaicovou, Cyprus Port Atuhority. The both gentlemen participated in the IPER-UNCTAD Seminar on Port Finance held in Le Havre, France, for the period June 12-22, 1989.

Ports Canada Represents IAPH at CCC Sessions

Dr. Hassan J. Ansary, Executive Vice President, Canada Ports Corporation, participated in the 73rd and 74th sessions of the Customs Co-operation Council (CCC) on behalf of IAPH. Dr. Ansary's report covering the CCC meetings follows.

CCC Strategy for the 21st Century Annual Sessions of the Customs Cooperation Council in Washington, D.C., July 3 – 6, 1989

"A Strategy for the 21st Century" was the theme of the annual gathering of the Customs Co-operation Council held this year in Washington, D.C. These were the 73rd and 74th sessions of the Council, which held its first session in 1953. The 104 members of the CCC were hosted by the U.S. Customs Service, which is this year celebrating its 200th anniversary.

The Customs Co-operation Council is composed of the Heads of national Customs administrations from around the world. It holds annual general meetings, as well as many on-going technical committee meetings, training programs and various other activities. The objective is "... to secure the highest degree of harmony and uniformity in Customs system..."

The International Association of Ports and Harbors regularly attends meetings of the CCC and its technical committees as observers. Ports Canada had the privilege and honor to represent the IAPH at the Washington sessions.

The opening remarks of the sessions were made by U.S. Customs Commissioner William von Raab. He stressed the crucial importance of the application of digital technology by Customs administrations to efficiently handle trade in the 21st century. Immediately afterwards, U.S. Secretary of Commerce Robert A. Mosbacher gave the U.S. view of the state of world trade and trade policy. He emphasized the need for all countries to continue to strive for liberalized trade and avoid protectionism, and touched on U.S. actions and policies relating to that objective. These familiar issues included the U.S. trade deficit with certain countries, the U.S. budget deficit, the Super 301 provisions of the new U.S. Trade Act, the openness of Europe to trade after 1992 and U.S. export controls on strategic goods. In the area of Customs, he lauded the work of the Technical Committees of the CCC in establishing the GATT Valuation code, rules of origin and the Harmonized Commodity Coding system. He encouraged the Council to continue harmonizing and simplifying Customs procedures and to pursue the implementation of EDL

The detailed and laborious but vital work of the CCC, as embodied in the 5 kilos of documentation distributed to delegates and observers, was substantially accomplished before the sessions. The general meeting served to review and ratify reports and proposals. Among the specific topics commented on by members of the CCC secretariat and the Chairmen of the various technical committees were:

- a desire to see the adoption of the Harmonized System of commodity coding beyond Customs use;
- a concern that EDI could widen the gap between developed and developing countries;
- an intention for CCC to support the CUSDEC EDI message as an international standard and to create a "Single Goods Declaration" electronic document;
- an increase in the number of CCC staff devoted to automation and EDI.

The evolution in thinking in the CCC and the orientation of the strategy for the 21st century is distilled in the "Washington Declaration" issued by the Council. A major new emphasis is the push towards automation and EDI. Spefific initiatives to be pursued by the CCC include: "seek access for Members to additional resources to implement automation and EDI by cooperating closely with other governmental and non-governmental international organizations, ... promoting and enlarging EDIFCAT as a standard for the electronic interchange of customs information among its Members, international organizations and other partic-

(Continued on Page 9, Col. 2)

Technical Committee Activities Highlighted in Miami

More than ever before, the scope of the activities covered by the Association's Technical Committee has been increasing and the fruits of the diligent research work done by these committees have become an integral part of our Association's 'raison d'etre.' At the Miami Conference, the chairmen of the respective committees made presentations on each committee's current undertakings and projects to be handled in the new term. The following are edited versions of the presentations, which were made during the Working Session 2 held on April 25, 1989.

Cargo Handling Operations

By Robert Cooper (Auckland)

It is my honor and privilege to report on the work of the Cargo Handling Operations Committee to this 16th Conference of the International Association of Ports and Harbors.

As you have heard, this Committee deals with port operational activities. You will be aware that the Committee is comprised of eleven members representing eight countries in the three regions.

With the representatives as shown, you would be well aware that we have a nucleus of quality advice, but we



Mr. Robert Cooper

certainly have no monopoly on good ideas. And for that reason, we would welcome input from other members of the Association.

During our meeting in Abidjan and Miami, we continued our focus on ISO containers; more specifically, we focused on the trends away from what we might descrive as the norm in ISO container dimensions and ratings. We are trying to assess the trends of this move and their likely impacts on ports.

In the second part of our work today, I will deal in more detail on that subject.

What we have done is to initiate a survey to try and gauge the effect in the different ports and judge the impacts that face us. We have at the meeting here in Miami amended the questionnaire, and we will be seeking your assistance in filling out that questionnaire for us, either during the course of this Conference or when you return to your ports and have the benefit of some of the more technical advice that is available to you.

We have also identified two further projects for the next two years. First, we want to explore the use internationally of a container bar coding system. This is on a theme not unlike what you find in the average supermarket where with interrogation of the bar code you can identify a significant amount of information.

In regards to containers, clearly we would be able to identify containers not only by number but also by tonnage and rating. And we think that there is considerable scope to improve cargo handling operations.

The second of the new projects we wish to investigate is trade in perishable goods, such as fruit and vegetables presently moved by air — some, not all — between countries. And we want to look at what can be done to identify not only the trend of this but what could be done in capturing trade through the ports by the use of atmosphericallycontrolled containers.

In both of these projects the Committee would welcome your interest and participation. So if anyone feels that they have got a particular contribution to make, I would be obliged if you would either contact me or the IAPH Secretariat before the close of this Conference.

Committee on Port Safety, Environment and Construction

By Jean Smagghe (Le Havre)

I first would like to say how very grateful I am to President Wong for the organization of such a working session dedicated to the technical committees. That is something new and, I think, could be very educational.

About the COPSEC, I would like to say that the terms of reference of the COPSEC perfectly summarize the tasks that it has to complete as a committee of this Association: to consider matters relating to the design of ships; port construction and maintenance; safe operation of ports and harbors; and the protection of the port environment.

A few figures will highlight the importance of this. particular committee as a technical part of this Association. Fifty-three members of twenty-eight port authorities, and fifteen different associations and firms located in seventeen countries are working in five sub-committees.

Anyway, the work done by these being broad, active members are welcome to our sub-committees and I hope that this Conference will be a good opportunity to strengthen our Committee. As the COPSEC has numerous members and the time is very short, I will just introduce the Chairmen of the five sub-committees.

First of all, we must note that the Vice Chairman of the COPSEC is Mr. Alex Smith from the British Port Federation.

About the Ships Sub-committee: Up to now I was the



Mr. Jean Smagghe

Chairman of this sub-committee, but I have the pleasure to announce that the new Chairman is Mr. Jean Michel Moulod from Abidjan.

The Marine Safety Sub-committee - the Chairman is Captain van der Schaaf from Rotterdam.

Dredging Task Force Sub-committee - the Chairman is Herbert Haar from the Port of New Orleans.

Port Planning Sub-Committee: You know that Mr. Alam passed away a few months ago. He was a staunch supporter of our Association and worked particularly in our Committee. Mr. Peter Fraenkel was the Vice Chairman of this Sub-committee, and he is thus in charge of its chairmanship.

And finally the Port Safety and Environment Sub-committee – the Chairman is Peter van der Kluit from Rotterdam.

For a long time ships and ports have made people dream. That's why I've made a little poem to present very briefly the main topics the different Sub-committees are concerned with. It's a COPSEC tale.

"Once there was a ship" — that's the problem of the Ships Sub-committee — "approaching a port" — Marine Safety Sub-committee — "entering the access channel" — Dredging Task Force — "before swinging and berthing" — Port Planning Sub-committee — "in a clean and safe environment" — Port Safety and Environment Sub-committee.

Trade Facilitation

By Fernand Suykens (Antwerp)

People speak a lot about ports, about ships and ports, about cranes, warehouses and sheds. But we should not forget that the principle aim of a port is the handling of cargo, cargoes which have to pass through a port. And these cargoes should pass through a port in as an efficient and fast way as possible.

The Trade Facilitation Committee, which has existed since the beginning of IAPH, studies the possible improvements of port formalities and administrative procedures.

This used to be the paperwork where we got standard paper formulas which could be filled in an easy way. We know all the contracts with banks, with financial authorities, with customs and the like, but gradually these are becoming EDI formalities.

Not only do we have these formalities with port authorities and the port customers, but we have them also with customs. Customs, which are our friends or enemies





Mr. Fernand Suykens

- you name them as you like - they have to do the control in the port and they are being asked to do more than just control of cargo. They are being given other tasks to do, for instance, the controlling of drug traffic, army traffic, arms traffic, and also these customs are gradually starting to do cargo clearance by means of EDI.

That's the reason why we signed a memorandum of understanding on drug traffic with CCC. That's the reason why we invited, for next Thursday, the Secretary-General of the CCC here to this Conference.

The Customs takes a great interest in electronic data interchange and cooperation, but not only does customs to that; this is also the case with many other authorities.

When we speak about electronic data interchange we need standard procedures, which explains the interest of ports and the EDIFACT Standards. In the same way as we have standard pallets, standard containers, dimensions,

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Committee on International Port Development (CIPD)



Mr. Bert C. Kruk

By Bert C. Kruk (Rotterdam)

Since the Seoul Conference the CIPD, consisting of twenty-six members from all over the world, has pursued the further improvement of its various schemes.

The main objective of the work of the CIPD is to administer the various schemes designed to provide assistance for member ports in developing countries.

In the first place there is the Bursary Scheme. In June 1988, a new campaign started for contributions to the Special Fund to be used for the Bursary Scheme and the Award Scheme.

The amount received, as you have seen from your documentation, at this moment is approximately 39,000

U.S. dollars, which is a little more than half the target amount of \$70,000.

On behalf of the CIPD I would like to express here our gratitude for those contributions made, because they are very important for the continuation of our work.

However, since these schemes are an essential part of the activities of the CIPD, I would strongly like to support the appeal of the Secretary General to those members who have not yet contributed.

In total, between May 1987 and January of this year we received 49 bursary applications, out of which 10 bursaries have been awarded. The reports of the successful applicants have been published in the Journal.

A questionnaire has been sent to all IAPH members all over the world with a request to inform me in detail of the training possibilities they offer.

At the beginning of this year I received 155 responses of which the positive reactions have been collected in a booklet which is going to be printed and distributed to you very soon. I have here a copy of this book, which contains all the details of training possibilities within the IAPH family. It is a useful book for those who want to go on a training course and, indeed, I am happy and grateful for your support in this.

The other scheme is the Award Scheme. I had the pleasure to present this scheme to you yesterday when we awarded the first prize winner.

The monograph scheme, this joint IAPH/UNCTAD initiative to produce a series of papers of interest to the managements of developing ports, has continued successfully during the term since the Seoul Conference.

In total there are now seven monographs available from UNCTAD, and all are available in the English, French, Arabic and Spanish languages. At this moment some potential monographs have come to the attention of UNCTAD and myself and we will continue to try and increase the number of monographs. If you can support us there, we would welcome your initiative.

In my report at the Seoul Conference I explained the 57 + Scheme. However, in spite of frequent appeals in all possible publications, through the IAPH journal and through a letter that I have sent to IAPH members in developing countries, the number of positive reactions so far has been limited. The few positive reactions that we have received will be discussed further during this Conference here. The CIPD, for its part, is still convinced of the great usefulness of this scheme.

The objective of this scheme, the JOBMAR Scheme, is to improve the practical management skills of middle and senior managers from developing ports by providing them with an opportunity to work on the job in countries with more advanced marine or maritime sectors. This initiative has been developed by the shipping section of UNCTAD.

In 1988 the pilot project was executed in close cooperation with the CIPD and financed through IAPH. I am happy to announce that recently the United Nations Development Program, UNDP, has approved the scheme and has made funds available.

During this Conference Mr. Gary Crook of UNCTAD and Mr. Dieter Noll of Rostock and myself have concluded the agreement regarding a JOBMAR Scheme for three port officers from Mozambique to go on a JOBMAR training attachment in Rostock for a period of two to three months. We are very happy because this is another good pilot project. And hereby I would like to appeal to all the developing member ports present here at the Conference to consider this scheme, to ask for information and to contact Mr. Gary Crook who is among the participants.

The Regional Port Cooperation Scheme, which stands from the former CIPD Sister Port Scheme, has unfortunately not achieved much progress since the Seoul Conference. Again, the reactions on the contacts that I had with the regional ports were rather limited. And no concrete points of action have emerged from our initiative, with the exception of some ideas from West Africa as presented by Mr. Moulod yesterday and an interesting request from the Pacific Ports Association, which will also be discussed during this Conference.

I reported on my work as Liaison Officer of IAPH with

Trade Facilitation

(Continued from Page 8, Col. 2)

etc., we need, in order to be able to interchange information, standard messages and procedures.

The Trade Facilitation Committee wants to ensure that no such standards are approved by the U.N. EDIFACT Board without taking into account the port's interests.

It is not a question of interlinking the different customers with the port — the exporters with the forwarding agent, the forwarding agent with the shipping agent, the shipping agent with the shipping line and the stevedoring company. But gradually also we feel - and in Europe this is already very clear - that there should be interlinking between the different ports.

As you know there are port community systems existing in ports like Bremen, like Hamburg, like Rotterdam, like Antwerp, like Felixstowe, like London, like so many others. We also want that information, for instance on dangerous goods and on ships' departures, to be given between those port community systems which should be interlinked. This should, however, be an open system which can be opened worldwide. In that sense, we think that the Trade Facilitation Committee has still a big task in the years to come.

Ports Canada

(Continued from Page 6, Col. 2)

ipants in international trade, ... identifying standard Customs requirements for EDI in all international fora..." These statements are of a nature to suggest that IAPH and CCC interests are very close on these subjects and that consequently, there is the opportunity for cooperation and joint development by the two bodies.

Part of the reason for the emphasis on computerization is found in the second major trend in thinking within the the CCC. This trend is the recognition that Customs administrations, in addition to their enforcement and duty collection tasks, have a key role in facilitating world trade. As world traders automate, so must Customs administrations.

However, trade facilitation goes beyond computerization. The CCC recognizes this in the Washington Declaration when it states that "... the Council should immediately undertake a comprehensive, structure, co-ordinated initiative in the area of simplification, standardisation and harmonisation of Customs procedure, ..."

Ports of the IAPH should follow these plans of the CCC with great interest since concurrent action on automation and on procedures will be a great boon to the trading community and to ports. UNCTAD yesterday and, in addition, I think it is worthwhile to mention that the CIPD closely follows and monitors the various training programs of the UNCTAD, like IPP and also the TRAINMAR project.

I have been in the last two years in regular contact with Mr. Smith in London to discuss relevant items between the IAPH and the various committees. And also as a result of my daily activity in Rotterdam, I am in contact with ICHCA and PIANC to discuss port problems in developing countries.

Since the Seoul Conference I have undertaken five missions and attended meetings in my capacity as Chairman of the CIPD or as the official IAPH representative. During some of these missions I was able to convince ports in developing countries of the importance of IAPH membership if they were not a member as yet.

If I may come to a conclusion, Mr. President, of this short presentation, the conclusion is that the past two-year period has in certain fields made progress, but certain schemes require serious reconsideration as to their future development. The training survey that I have just introduced certainly can be mentioned as a successful undertaking and I should therefore, once again, on behalf of the IAPH, like to express my appreciation to all those who contributed to the publication of this booklet.

Unfortunately the cooperation of some CIPD members is very limited indeed. Therefore, I will continue on my course to limit CIPD members to enthusiastic, devoted members. Certain attitudes from now on will be a condition for membership. However I shall constantly, of course, take the difficulties that some of our friends from developing ports have in the fields of communication into consideration.

I would like to conclude by expressing my sincere gratitude to all persons and organizations who have assisted me or who have made it possible for me to execute my task as CIPD Chairman, in particular my Vice Chairman, Mr. Joseph Bayada from Cyprus, and the essay panel members mentioned yesterday.

Last, but certainly not least, I would like to thank Mr. Wong, Mr. Kusaka and all the other IAPH Head Office staff for their continuous support.

Committee on Legal Protection of Port Interests (CLPPI)

By Patrick Keenan (Cork)

It gives me great pleasure as Vice-Chairman of the Committee on Legal Protection of Port Interests to introduce CLPPI and tell you a little of what we are trying to do for the Association to further the common interests of ports the world over.

Ours is a relatively small committee, but our task is a heavy one, and I would like to mention each of the members by name and thank them for their contribution to CLPPI's work.

CLPPI's Chairman is Paul Valls of the Port of Bordeaux who, unfortunately, could not be with us today. And taking our members region by region in alphabetical order I would like to mention, from the European/African Region, Mr.



Mr. Patrick Keenan



Mr. Paul Valls

Dibong from Cameroon; Mr. Jurriens from the Netherlands; Mr. Moulod from the Ivory Coast; Mr. Pages, an Honorary Member from France; Mr. Smith, IAPH's European Representative from the U.K.; Mr. Veng from Denmark; Mr. Waiyaki, and now also Mrs. Gitau from Kenya.

From the American Region, we have Dr. de Vos from Canada, and from the United States we have Mr. Falvey of New York and Mr. McCarthy from Tacoma.

From the Asian Region, our members are Mr. Hirota from Japan; Mr. Rafieyan from Iran; and Mr. Stewart, an Honorary Member from New Zealand. CLPPI also has as a special advisor Mr. Ellen of IMB, who is based in the U.K.

I would like to mention one other name, that of Mrs. Pamela Le Garrec, who is in Bordeaux with Andre Pages and Paul, and who acts as the Committee's Secretary. We are extremely grateful to her for the time, effort and energy she devotes to CLPPI matters.

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

CLPPI effectively monitors the drafting of future international maritime conventions. This involves examining and studying in detail all the draft articles of a convention to ensure that the interests of ports are not neglected. This work is demanding and tedious and, in this respect, CLPPI would like to acknowledge and express its sincere thanks to Andre Pages and Alex Smith for the time they have spent on this task.

The next steps involved formulating a port's position on the convention involving the committee in the first instance, and then the IAPH Head Office, to whom we are greatly indebted for the efficient way in which they disseminate information on the conclusions we reach and the decisions that need to be taken, either through "Ports and Harbors" magazine or through letters, telexes, of fax messages to the Directors or Executive Officers of the Association.

Once these policies have been established, IAPH representatives are designated to participate in international meetings and promote the IAPH point of view.

The CLPPI has to maintain regular relations with a number of the United Nations agencies, as well as with other non-governmental organizations.

First and foremost and the easiest, the International Maritime Organization, IMO; but equally the United Nations Commission on Trade and Development, UNCTAD; the Economic and Social Council, ECOSOC; the United Nations Commission on International Law, UNCITRAL; the International Labor Organization, as well as non-governmental organizations such as CMI in Brussels; and UNIDROIS in Rome and BIMCO in Copenhagen.

CLPPI's task is a heavy one. It requires more committee members who will actively participate and help formulate ideas and proposals to put forward to IAPH to protect port interests.

I can only urge you to come forward and make yourselves known if you are prepared to join us in this sometimes complex but nevertheless fascinating and worthwhile task. As you will readily appreciate, sooner or later international legislation is adopted into national legislation and impacts on the daily operational life of our ports.

Public Affairs Committee (PACOM)

By Robert N. Hayes (Dublin)

The Public Affairs Committee of IAPH is one of the youngest committees. It was formed in 1982, principally by the activities of Mr. Frank Wilson from the Port of Brisbane.

Membership is drawn from the three world regions represented in the organization, and we have a fairly heavy task to do and would welcome additional members — as would other committees.

The Public Affairs Committee was formed to guide and assist ports worldwide in their dealings with local communities, with city corporations, regional councils and with national government, and to do this in the context of the continuing trends in containerization and the growth of trade worldwide, the growing trends and the increase in size of vessels, and the impact of these trends in developing countries and, indeed, undeveloped ports as well.

Community support is required by ports so that they can grow in step with their national economies, so they can obtain appropriate financial support at local and national levels, so that they can extend existing container-handling facilities in competition with other urban demands. They can provide additional deep water facilities in competition with community, recreational, environmental and urban demands, and provide up-to-date highway and railway links to service the existing facilities.

Community support must be based upon an understanding of the port's role in international transport and trade, in the handling of growing volumes of imports and exports, and in the supporting manufacturing industries which totally depend upon ports; also, in the creation of



Mr. Robert N. Hayes

employment, both directly and indirectly, and in the contribution to regional and local taxes.

The Committee has been involved in and completed three projects to date: the community attitude study which was completed by Mr. Frank Wilson, an economic impact analysis and an IAPH children's coloring book.

The Committee feels that the economic impact analysis is a very powerful and vital tool in persuading any community of the value of its port to them. Copies of all of these publications are available from the IAPH Headquarters in Tokyo.

Currently there are three further projects in hand: a book for children in primary schools, one for children in secondary and high schools, and an information book for teachers. These publications will continue the policy of creating a standard set of IAPH books available to schools worldwide.

A further project under consideration is the production of videos for the promotion of ports worldwide.

The purpose of standard literature is to inform children and students of the important roles that ports play in their lives; to inform teachers of the importance of ports; and, through the children and the teachers, to inform the parents; and then, through the parents, toward public opinion throughout the community.

As various speakers have mentioned this morning, committees can only work by the participation of loyal and devoted members who are prepared to be involved and work with a commitment in various committees that are involved.

And perhaps, Mr. Chairman, I can end with a lighter note by saying that I have used both the words "involved" and "committed" and some people feel there isn't a great difference between the meaning of the world "involved" and the word "committed." A friend of mine explains that the best explanation you can get of that is to take the favorite American breakfast, which before the days of cholesterol consciousness consisted of eggs and bacon. Now in that breakfast, the chicken is involved, but the pig is committed.

Visitors to Head Office

On June 29, 1989, Mr. Y.P. Remond, Commercial Director, Port of Marseilles, France

On July 9, 1989, Ms. Lori Goodman, PR and Marketing Assistant, Port of Miami, U.S.A.

On July 23, 1989, Mr. Peter J. Rimmer, Senior Fellow, Department of Human Geography, Reserach School of Pacific Studies, the Australian National University, Canberra

Ms. Goodman, Miami Coordinator, in Japan

At the invitation of the IAPH Foundation in Japan, Ms. Lori Goodman, PR and Marketing Assistant, the Port of Miami, who acted as Conference Coordinator for the 16th World Ports Conference of IAPH, visited Japan for 10 days from July 9.

Ms. Goodman was the guest speaker for the gathering of IAPH Japanese members held in Tokyo on July 12, 1989. This year's meeting of IAPH Japanese members was attended by some 90 people, among whom a number of the Miami Conference participants were included. The program of the 3-hour meeting included the reports by those who participated in the Miami Conference from the Ports of Tokyo, Yokohama, Nagoya, Kobe and Osaka, and one from the IAPH Secretary General focusing on the Working Sessions. To highlight the gathering, Ms. Lori Goodman addressed the audience and received a warm welcome from the Japanese



Speech by Ms. Goodman

(delivered at the IAPH Japanese members' meeting on July 12, 1989)

Minasama Kon-nichiwa!

Secretary General Kusaka, members and friends of IAPH: I am Lori Goodman from the Port of Miami. As Coordinator of the 16th IAPH Conference in Miami, I had the privilege of meeting some of you earlier this year. Or you may just have caught a glimpse of me running frantically around the Fontainebleau Hotel. It is a pleasure to be here with you under more relaxed circumstances.

I am deeply honored that you invited me to come to Japan — both to speak to this gathering and to spend time visiting several of your notable cities. This is the opportunity of a lifetime for me, and I am very happy to be here.

Before I left Miami, Carmen Lunetta, our Port Director and your Conference Chairman, gave me a three-set message for you.

First, he asked me to thank you on his behalf for your kind invitation to me.

Next, he asked me to tell you again how delighted he was to host the Conference and to see many leaders of the worldwide port community in our comparatively



Lori Goodman (second from left in the front row) shows up at the Japanese members' meeting.

members. (Her speech is featured in the box below.)

During her stay in Japan, Ms. Goodman, escorted by the IAPH Secretariat Staff members, visited the Ports of Tokyo, Yokohama, Kobe and Osaka, at each of which she found red carpet treatment waiting for her.

young port city.

Finally, with Japanese maritime interests turning to the cruise side of our business, he asked me to tell you that the Port of Miami is open to you. We would like to share our experiences with your cruise industry leaders and help them in any way possible. So Mr. Lunetta is looking forward to seeing you all back in Miami as you pursue new cruise opportunities.

And now, I'd like to say a few words about the Conference. When we reviewed our records, we found that our Conference Theme, "Ports — The Intercontinental Connection," was echoed in the Conference registration. Delegates from more than 100 ports in 66 countries made that intercontinental connection a reality. If you don't mind my excluding Antarctica, I can report that our Conference was attended by people from every continent! Among the record 750 who attended the Conference were port directors, commissioners, municipal officicials and regional representatives.

Japan had the biggest delegation of any of the countries. This support demonstrates Japan's longstanding commitment to the maritime industry. The rest of the delegates owe Japan a debt of gratitude for its unwaivering leadership in this unique international forum. The presentation by Yukitoshi Sasayama, the Deputy Mayor of Kobe was one of the highlights of the Conference. Mr. Sasayama gave the delegates an opportunity to understand the scope of Japan's maritime objectives.

The topics addressed at the Conference also reflected the global orientation of the delegates. Three of the working sessions spanned the world of port activities, issues, and projects. Other sessions concerned technological advances, new concepts in port management and development and the impact of changing market conditions on ports throughout the world.

The record attendance, the high quality of presentations and the stimulating array of issues addressed these are all testimony to the vitality of the IAPH, and proof that the goals of the IAPH and the IAPH Foundation are being furthered by seaports all over the world.

Thank you.



Lori Goodman clad in "yukata" (Japanese summer kimono) with Kimiko Takeda of the IAPH Secretariat, enjoys a festive night in Kyoto during her tour to Kobe and Osaka.



Lori is pictured with her IAPH friends at a dinner hosted by Secretary General Kusaka (second from right).

International Maritime Organization (IMO)

Report on the Int'l Conference on Salvage, 1989

By Pamela Le Garrec IAPH Representative Port of Bordeaux

1. Introduction

An International Conference was convened by IMO under the Chairmanship of His Excellency Dr. Francisco KERDEL-VEGAS of Venezuela to consider the adoption of a new convention on the law of salvage.

This Conference was held in London, at the Headquarters of the International Maritime Organisation, from 17th to 28th April 1989.

It was attended by the representatives of 66 states, as well as Hong Kong, an Associate Member of IMO, while one other State sent an observer (Romania).

The Office of the United Nations High Commissioner for Refugees (UNHCR) was also represented.

Two intergovernmental organisations sent observers to the Conference:

- International Oil Pollution Compensation Fund (IOPC Fund);
- Arab Federation of Shipping (AFS)

19 non-governmental organisations (including the IAPH) also sent observers to the Conference.

1.1. Aims

The aim of the new convention according to the Secretary General of IMO, Mr. C.P. Srivastava, was not only to improve the safety of shipping but equally to improve the protection of the environment by providing rewards for salvors who incur specific additional expenses by their endeavours to protect the environment when carrying out their normal duties as salvors.

1.2 Background

The draft convention had had a long gestation period.

The initial text was drawn up by the International Maritime Committee (CMI) and accepted at their Montreal Conference in 1980, before being submitted to IMO.

In the following years it had undergone careful examination by the IMO Legal Committee before being presented to the present Conference.

Mention might also be made of the fact that the Convention is one which contains both Private Law and Public Law clauses. However, throughout the preparatory work there was a reluctance on the part of many delegates to introduce too many mandatory Public Law clauses, thereby placing obligations on States, in what they consider is essentially a Private Law Convention.

2. IAPH's Main Concerns

It will be recalled that the main concerns for IAPH were:

In draft Article 9, where it was necessary to ensure that the wording provided Ports with the right to choose whether or not they could accept a disabled vessel, as well as the conditions relating to such an acceptance.

In draft Article 19 relating to salvaged property, where Ports needed to ensure that they have sufficient latitude to be able to order the movement of such property within port limits.

In these respects the Conference decided to:

- retain the wording used in the basic draft Article 9 (which has become Art. 11 in the final instrument), relating to Co-operation by State Parties. The wording used had already been considered and was acceptable to Ports. In this case, it was the reluctance to include mandatory Public Law clauses which led to the decision.

- make only minor alterations to draft Article 19 (Art 21.3, in the final instrument) and these did not affect the position of Ports, which still retain the ability to ensure that salvaged property or a salvaged vessel, can be moved within the port limits so that operational berths are not blocked by their presence.

3. Other Matters

Although these are of lessor interest to Ports the writer feels that it should be mentioned that the main centres of debate involved:

- The scope of application: the conference finally opted for as broad a scope as possible.

- The Criteria for Assessing Awards and Compensation: the final result in this instance was a package deal, whereby delegates agreed to vote in block for Articles 13 and 14 of the new instrument, together with a Common Understanding concerning those articles.

- The title of the Convention in the different languages: the writer, as far as the French version was concerned, was invited to join an informal working group of the Frenchspeaking delegations to draft a foot-note clause to the title, which was adopted by the Conference.

- The number of State Parties required to ratify the Convention before its entry into force and the number of State Parties required to request amendments: the Conference finally accepted 15 ratifications and a minimum of 8 requests from State Parties or requests from a quarter of the State Parties, if this figure were higher than 8.

4. Conclusion

Debates were long and sometimes complex, with compromise being the order of the day. Nevertheless the final result was a new Convention which was widely acceptable to the Member States present.

It is now to be hoped that the Convention will be rapidly ratified and enter into force without too long a delay. (A copy is attached in annex to this report and could, perhaps be held by the Secretariat General, should IAPH Members wish to refer to it).

The writer would also draw attention to Attachment 3 of the final instrument which is a Resolution on International Co-operation for the implementation of the Convention and particularly to the recommendations made therein:

(a) that the Organization promote public awareness of the Convention through the holding of seminars, courses or symposia;

(b) that training institutions created under the auspices of the Organization include the study of the Convention in their corresponding courses of study.

International Maritime Organization International Conference on Salvage, 1989

> LEG/CONF.7/26 28 April 1989 Attachment 3

RESOLUTION ON INTERNATIONAL CO-OPERATION FOR THE IMPLE-MENTATION OF THE INTERNATIONAL CONVENTION ON SALVAGE, 1989

THE INTERNATIONAL CONFERENCE ON SAL-VAGE, 1989,

IN ADOPTING the International Convention on Salvage, 1989 (hereinafter referred to as "The Convention"), CONSIDERING IT DESIRABLE that as many States as possible should become Parties to the Convention,

RECOGNIZING that the entry into force of the Convention will represent an important additional factor for the protection of the marine environment,

CONSIDERING that the international publicizing and wide implementation of the Convention is of the utmost importance for the attainment of its objectives,

I RECOMMENDS:

- (a) that the Organization promote public awareness of the Convention through the holding of seminars, courses or symposia;
- (b) that training institutions created under the auspices of the Organization include the study of the Convention in their corresponding courses of study.

II REQUESTS:

- (a) Member States to transmit to the Organization the text of the laws, orders, decrees, regulations and other instruments that they promulgate concerning the various matters falling within the scope of application of the Convention;
- (b) Member States, in consultation with the Organization, to promote the giving of help to those States requesting technical assistance for the drafting of laws, orders, decrees, regulations and other instruments necessary for the implementation of the Convention; and
- (c) the Organization to notify Member States of any communication it may receive under paragraph II(a).

Report by Bursary Recipient

Practical Approach Concept in Training (PACT) Course On Multipurpose and Container Terminal Operations organized from 22 May to 16 June, 1989 at the Port of Rotterdam

By F.L. Ukonu

Senior Training Officer Nigerian Ports Authority

Introduction

The Practical Approach Concept in Training on Multipurpose and Container Terminal Operations commenced on Monday, 22 May as scheduled and ended on Friday, June 16, 1989, under the auspices of Rotterdam Municipal Port Management.

Course Aims and Objectives

The training course had far-reaching objectives for developing ports among which were:

 training participants in the consequences of handling multipurpose cargo in respect to terminal lay-out, equipment, personnel, administration, safety, etc; to introduce to the participants the various disciplines required for the efficient development and operation of a Container Terminal.

The realisation of these objectives manifested itself as the training progressed from theory to practice.

Course Subjects/Technical Visits

The contents of the Course were indeed tailor-made and very rich towards improving the efficiency of developing ports. The practical aspects of the programme offered a great opportunity of meeting well experienced terminal operators who were willing to share from their wealth of experience with trainees. The sequential field trips, or technical visits as it were, to respective companies and institutions also afforded all the time to relate theories to the realities of terminal management and operation. The outstanding lectures on Port Management and Crane Operation Simulation Games, Computer and Data Processing, Maintenance of Port Equipment, Port Strategy and Logistics were a good cream to the programme because they are basic to efficient terminal operations.

Lectures

The lecturers were very dedicated and therefore delivered the information with keen interest. There is no doubt in my mind that each and every one of them is an expert in his or her own field.

Conduct of Participants

Participants in the training course came from different developing ports of the world and it was wonderful, unbelievable and indeed gladdening to see such a high level of social interaction amongst participants. The course seemed a family affair as there was no question of ethnicity or religion or race. It was "a small world". One glaring advantage of such mixed participants and the subsequent close association was the possibility of discussing port problems with course colleagues, resulting in a cross-fertilization of ideas.

Benefits

To say I have gained tremendously is to state the obvious. The Nigerian Ports Authority — my organisation — attaches great importance to this course as a means of ensuring that its training officers are adequately trained professionally to perform effectively on their jobs. The complexity of the transport industry, part of which is the seaport, demands that a trainer be exposed to an in-depth study of the system. The obvious advantage in my undergoing the PACT course is that I go back to impart the knowledge I have acquired to a large number of other workers, thereby making a great impact on the efficiency drive of my organisation.

Thanks

I must therefore, at this point in time, thank TEMPO of the Rotterdam Municipal Port Management for embarking on the task of organising such an intensive course for developing ports of the world. The course no doubt has gained international recognition. My special thanks go to Mr. C.B. Kruk in his capacity as the Chairman of the Committee on International Port Development (CIPD) of the International Association of Ports and Harbors (IAPH), Tokyo, Japan for granting me the Bursary to benefit from the programme.

I must also thank the Managing Director of the Nigerian Ports Authority — Maj. General A. Shelleng (Rtd) — for his great interest in the training of personnel of his organisation, and of course the Deputy Director — Training and Management Development Department for his encouragement and support for me to undergo the training course.

Finally, to the people of the Netherlands I say "thank you" for your unqualified hospitality.

April 20, 1989

Report on the Meeting of the Scientific Group on Dumping of the London Dumping Convention

By Herbert Haar, Jr. Chairman, IAPH Dredging Task Force

Introduction

The twelfth meeting of the Scientific Group on Dumping of the London Dumping Convention (LDC) was convened at IMO Headquarters, London, from 10 to 14 April, 1989.

The meeting was attended by delegations of 20 nations from the following Contracting Parties to the London Dumping Convention and one observer State:

Belgium Brazil Canada China Mexico Nauru Netherlands Norway

Denmark	
Finland	
France	
Germany, Federal	
Republic of	
Ireland	
Japan	

Portugal South Africa Spain

United Kingdom United States of America Cyprus (not yet a signatory).

There were 9 observer groups of which the International Association of Ports and Harbors, headed by Herbert R. Haar, Jr., and supported by Willis E. Pequegnat as consultant, was one.

After adoption of the agenda, which included several

items that would require extended discussion, the 12th Meeting of the Scientific Group on Dumping of LDC, under the chairmanship of Dr. Robert Engler, began with a discussion of the report of the Ad Hoc Group of Experts on the LDC Annexes that had met last at IMO in January-February 1989 (Dr. Willis Pequegnat represented IAPH at that meeting).

Discussion of the Group of Experts Report

The Group of Experts on the Annexes is attempting to craft a new approach to the implementation of LDC that will deal more effectively with waste over the present situation where substances are treated without consideration of the waste in which they are carried. The developing new approach is intended to replace Annexes I and II with a Prohibition List (i.e. wastes with substances that cannot be dumped with "no exceptions"), and an Action List containing substances for which three levels of concern will be established. That is to say that wastes with priority substances having concentrations at or above a given level may not be dumped, whereas wastes having substances whose concentrations are below an established lower level may be dumped without further concern. Finally, the intermediate group must be subjected to further testing before eligibility for dumping can be established. The IAPH Consultant is very concerned by the present definition of the Prohibition List and is dedicated to the task of seeing that there is an exclusion clause for dredged material. One of the dangers involved is exemplified by the fact that mercury, which is a prominent member of the Prohibition List along with cadmium and petroleum, may exist in virgin clays in concentrations as high as 50 ppm, which would probably prohibit dumping such materials into the open ocean.

Greenpeace International's Interest in Dredged Material

We should note that it is rumored that Greenpeace International is planning to appoint a consultant who will conduct a two-year study of dredged material with a plan to eventually seek a ban on its ocean disposal worldwide.

Sediment Quality Criteria

One of the very active movements by various federal and state agencies in the United States and elsewhere centers in attempts to establish sediment quality criteria, as we have had for water for a very long time. For instance, a criterion for lead (Pb) might be set at 600 ppm, which would mean that any dredged material having lead above that concentration could not be dumped into the ocean because it would cause adverse biological effects. As one can easily see, this approach does not take contaminant sequestering qualities and their affect on bioavailability into account. IAPH has for years attempted to establish the fact that dredged materials generally have such qualities which, however, may vary with location. Early in the present meeting, IAPH presented a paper (Assessment of the Use of Contaminant Concentrations in Relation to Properties of Dredged Material) evaluating two of the most widely discussed techniques for estimating sediment quality, viz., the Apparent Effects Threshold (AET) and the Triad. Finding that both techniques are very labor intensive and that neither has been adequately tested in the field, IAPH recommended that neither should as yet be used as a regulatory guide, as unfortunately appears to have been done in some regulatory agencies in the United

States.

At this point Denmark, Finland and Greenpeace indicated that they supported the work of the Group of Experts, bud admitted that they considered the schematic involved in the new approach to be only an interim measure since they wish to see a phasing out of all ocean dumping.

The Federal Republic of Germany, the United States, the Netherlands and France voiced general support for the new schematic. However, France added that in their view the approach should be realistic in the dredged material and sewage sludge could not be treated in a similar manner.

Call for Other Meetings of the Group of Experts

At this point, the Secretariat announced that it seemed clear that at least two further meetings of the Group of Experts on the Annexes should be held before a final document could be prepared. It is expected that these will be held during the next two intersessional periods, with the first being scheduled for January 1990.

Review of the Position of Substances in the Annexes

The Scientific Group of Dumping attempts to keep under continuing review any new information on the positions of substances in the Annexes. These substances were discussed at this meeting — organotin compounds, primarily tributyltin (TBT), copper-based antifouling paints, and organosilicon compounds.

Tributyltin: TBT is acknowledged to be toxic to marine life through its use in antifoulant paints, but it has not yet been considered for inclusion in the Annexes because it is not a candidate for ocean dumping in any substantial amount. However, since it may accumulate in marine sediments, especially in paint chips under marina and repair docks, dredged materials containing TBT may well begin to pose a problem. The IAPH consultant pointed out that much of the research thus far carried out on the toxicity and pathogenicity of TBT has not been validated by any relevant statistical analysis beyond simple standard deviation. Also, charges that TBT causes thickening of oyster shells are not full supported nor can TBT be isolated from copper as a possible cause of this condition. Other scientists also believe that the "jury is still out" on the ecological significance of TBT (it is biodegradable by various organisms, and its half-life in water is only 6-7 days), but it is probably prudent to resort to the precautionary principle and restric its use on hulls of boats under 25 meters length, as has been done in the United States.

Copper-base Antifouling Compounds: It has been reported that there is a new generation of copper-based antifouling paints that are intended to replace TBT, but a document introduced by the Secretariat indicated that some scientists are not convinced that all of the copper compounds used in these paints are ecologically safe. In fact, some of these could be the cause of oyster shell thickening.

Organosilicon Compounds: The Consultative Meeting at its tenth session agreed in principle to remove organosilicon compounds from Annex II to LDC. However, it also instructed the Scientific Group to continue reviewing new information on these compounds. The European Council of Chemical Manufacturer's Federation (CEFIC) introduced LDC/SG 12/3 which summarizes recent publications related to the ecotoxity of organosilicon compounds.

In closing this section of the report, it should be noted that several delegations have voiced the opinion that lead should be removed from LDC Annex II (the special care annex) and placed in Annex I, where its disposal would be banned unless present as a trace contaminant. IAPH will continue to oppose this move for two reasons: (1) we do not consider lead to be a severe ecological threat in the marine environment, and (2) the universal appearance of lead gasoline additives in sediments could bring about a virtual ban on dredging.

Review of Summary Reports on Dumping and Incineration at Sea

There was a long discussion on the lack of reporting to IMO by Contracting Parties of their ocean dumping and waste incineration activities, as is required of all signatory nations. The Scientific Group expressed its deep concern that only half of the 64 Contracting Parties had submitted information to the Secretariat, with the remainder not fulfilling their obligation under Article VI (2) of the Convention. IAPH will not report further on this issue since it is not of immediate concern to our interests. However, it should be noted that the IAPH Observer suggested that his association would assist the Secretariat in compiling on a worldwide basis data on dredging activities and the disposal of dredged material on land and sea.

Reports Related to Monitoring

There ensued a long discussion of monitoring. As a prelude, the definition of monitoring a formulated by the Fifth Consultative Meeting of Contracting Parties was reviewed, as follows:

"Monitoring for the purpose of surveillance of the marine environment is meant as the assessment of the spatial and temporal changes in the distribution, fates and effects of contaminants introduced by specific dumping operatons; and

Monitoring as part of scientific investigations and research programmes is aimed at increasing knowledge of the processes that control the transport, fates and effects of contaminants released to the marine environment through dumping."

It was stressed that one of the major weakness in environmental monitoring activities is the meaningful measurement of biologibal effects.

A paper submitted by the United States described present and planned monitoring activities at the deepwater sewage sludge dumping site (106 Site) of the New York Bight. It was noted that in 1986 about 8 million tonnes (wet weight) of sewage sludge were dumped, and that from 1991 this dumping will be phased out. The U.S. also reported that no industrial waste has been ocean dumped from 1988 onward.

Canada reported on major efforts to upgrade their monitoring programs and the need to identify laboratories that can carry out chemical analyses with accuracy and precision to ensure that monitoring date are of high quality.

Matters Related to Incineration at Sea

The delegation of the Federal republic of Germany (FRG) and Greenpeace sponsored a paper "Distribution of Organochlorine Pollutants in North Sea Sediments" based on sediment samples from the North Sea and the Skagerrak which were analyzed from polychlrinated biphenyls, hexchlorobenzene and octachlorostyrene. The author of the paper stated that the elevated concentrations of HCB and OCS in the sediments under the incineration site in the North Sea could be related to the incineration at sea activities carried out there. His findings were rather severely criticized by a representative of the Association of Maritime Incinerators (AMI). There then followed a lengthy debate on these issues among FRG, Greenpeace, Canada, and AMI. This ended with a lively discussion of the future of incineration at sea. One view holds that such incineration is destined to be terminated by the end of 1994, whereas another believes that we should examine the possible role of incineration at sea in a global waste management context prior to making a final decision on the termination of incineration at sea before the end of 1994.

At this point the delegate from Nauru entered the debate and carried out arguments (ad nauseum) that in view of the fact that ocean incineration was to be phased out, it was unnecessary to carry out extensive research efforts. His views were supported by Denmark, Greenpeace and FRG but not by a majority of delegates.

Removal of Offshore Installations and Structures

There was some discussion of this topic by the Secretariat, a representative of the Oil Industry International Exploration and Production Forum (E&P Forum) and various delegations as to the adequacy of LDC to handle this issue as related to ocean dumping. The Scientific Group agreed that the existing provisions of Annex III to the London Dumping Convention and of the Guidelines thereto were sufficient to address the environmental aspects of the disposal of offshore platforms and installations at sea and at this stage the development of special guidelines was not necessary.

Future Work Program

The Scientific Group on Dumping was requested by the Eleventh Consultative Meeting to provide a two or three year work program identifying priorities and reporting dates. Items on the list for discussion at the 13th meeting in 1990 are:

- 1) Consideration of reports of the Annex Working Group,
- 2) Position of substances in the Annexes,
- 3) Monitoring and disposal activities at sea,
- 4) Incineration at sea,
- 5) Waste management issues,
- 6) The role of hazard assessment in LDC,
- 7) Sea disposal of offshore installations and structures,
- 8) Cooperation and information exchange.

Conclusion

No attempt is made here to provide a complete review of conclusions. Rather IAPH wishes to emphasize that as more and more nations curtail and perhaps eventually eliminate sea dumping of sewage sludges and industrial wastes, dredged material will come into sharper focus as a target for those who wish to achieve a complete ban on ocean dumping. In LDC this campaign will be spearheaded by some countries bordering the North Sea and by Greenpeace and other organizations of similar mandate. Although in some fora the issue may be discussed from emotional and political viewpoints, IAPH believes that in LDC the initial debate will be carried by straightforward scientific facts. It seems likely that the first stage in the debate will begin in 1990 at the January intersessional meeting when the Prohibition List (as noted earlier in this report) must be shaped to accommodate dredged material.

OPEN FORUM

Assessment of the Use of Contaminant Concentrations in Relation to Properties of Dredged Materials

Submitted by The International Association of Ports and Harbors For consideration of The Scientific Group on Dumping of the London Dumping Convention April 1989

Transmitted by Herbert R. Haar, Jr. Observer on behalf of IAPH March 18, 1989

Prepared by Willis E. Pequegnat Consultant to IAPH

Introduction

In the United States at the present time there appears to be a move among some environmental regulators to establish sediment quality criteria much as we have long had for water quality. The common factor in two of the more prominent of the techniques being evaluated at the present time is the establishment of numerical values for pollutant concentrations that will always cause unacceptable adverse impacts upon the biota. The two methodologies being referred to above are the Apparent Effects Threshold (AET) and the Sediment Quality Triad. We do not intend to describe these two techniques in much detail here, but a minimum treatment will be necessary in order to understand our unwillingness to accept either one or the other technique in its present form. This becomes relevant to the present deliberations of the Scientific Group on Dumping of LDC because there may be some movement toward establishment of numerical criteria as part of possible revisions of the Annexes. IAPH is quick to admit that one can establish a cause and effect response in a liquid system where an organism is exposed to a single pollutant in otherwise pure seawater, but most bioassayists will advise that as soon dredged materials are introduced into the aquarium a cause-and-effect relationship cannot be assessed with certainty. It is this lack of application of the established mitigative properties of dredged sediments that motivate IAPH to not subscribe to either AET or Triad at this time. And by the same token, IAPH is not inclined to lend support to any revision of the Annexes that depends heavily upon establishment of pollutant concentrations to predict biotic impacts.

Brief descriptions of both AET and Triad may be

appropriately instructive at this point. Both assessments require carrying out a bulk chemical analysis of the sediments, solid phase bioassays, and an analysis of the benthic fauna.

The Apparent Effects Threshold Approach to Sediment Quality Assessment

AET establishes empirical sediment quality values for a range of biological indicators that are used to assess the biological effects associated with sediment contamination. An AET can be defined as the sediment concentration of a given chemical above which a particular adverse biological effect is expected to be statistically significant at the 95% confidence level relative to appropriate reference conditions. Already one can see something disturbing about AET, namely, it depends on determining concentrations of contaminants in sediment without analyzing those characteristics of the sediment that will affect mitigation, and the outcome depends in large measure on the reference material, but there are no guidelines for selecting an appropriate site. Nevertheless, an AET is then defined for each chemical as the highest concentration of the chemical in the sediments that did not exhibit significant sediment toxicity. Above these AETs, siginificant sediment toxicity can always be observed in the data set examined. This points up another major problem that IAPH has with AET; the data set used must be quite large to be sure that all of the critical concentrations of the chemical involved are represented. As a result, one must conclude that AET is extremely sample intensive, and thus costly, since for each chemical contaminant of concern additional AET values could be defined for other biological indicators that were tested (e.g. benthic fauna richness or

solid-phase bioassays). AET can be expected to be more predictive when developed from a large, diverse database with wide ranges of chemical concentrations and a wide diversity of measured chemicals. Another way of looking at AET is to note that it is that sediment concentration of a given chemical above which all samples for a particular biological indicator were observed to have adverse effects. Another difficulty with AET that we need to cite is that the approach cannot quantify synergistic or antagonistic effects among contaminants, nor can it designate the effects of unmeasured chemicals for which a measured chemical is the surrogate. However, one may evaluate the seriousness of the above considerations, IAPH is particularly concerned by the use made of these data in ranking the degree of degradation of sites. Such rating systems, although based upon test results, are more or less subjective and thus are little more than estimates.

The Sediment Quality Triad

The Triad consists of measures of the quality of sediments by determining three parameters: (1) the degree of anthropogenic chemical contamination of test sediments through bulk chemical analysis, (2) the level of sediment toxicity by conducting laboratory bioassays with appropriate species of marine organisms, and (3) the degree of alteration of resident biological communities through field and laboratory studies in the areas of interest. It is the conclusion of those who are promoting Triad that the three measurements complement each other and are needed to establish that any degradation observed has resulted from chemical pollution. The null hypothesis associated with the Triad is simply that no one of the above individual measures can suffice to define pollution induced degradation and as a consequence only by measurement of the Triad components and evaluation of all the evidence can problem areas be identified.

When preparing to use the Triad method, one should establish a reference site which is known to be relatively free of anthropogenic sources of pollution. Data from reference stations are critical to establishment of the Triad. Ordinarily, sediment samples for all tests are collected with a sample grab. Five replicates are taken for benthic infauna and washed down through a 1 mm stainless steel screen. Sediment samples are analyzed for grain size, TOC, TVS, and sulfides, 21 metals and metalloids, low molecular weight aromatic hydrocarbons, high molecular weight aromatic hydrocarbons, and chlorinated hydrocarbons. Four sediment bioassays are used to measure sediment toxicity, e.g., an amphipod, a clam, mussel larvae, and a copepod. Benthic infaunal analyses involve identifying each taxon to the lowest possible level and then performing community descriptive statistics (diversity, equitability, dominance, and cluster analyses). Each category of data, i.e., chemical, bioassay, and benthic infaunal, is expressed as arithmetic means that are then divided by the means of each parameter from the reference site to yield RTR values (Ratio-to-Reference). By so doing, one can ascertain a measure of the degree of alteration of each sampling station and site compared to the reference site and to each other.

RTR values are also calculated for the results of the four bioassays and for the benthic infaunal analyses where species richness, total abundance, numerical dominance, and relative major taxon proportions (Polychaeta, Mollusca, and Amphipoda). These are calculated as the proportions of the taxa abundance to total abundance for each sample.

The foregoing makes it clear that Triad determinations require not only a great deal of field and laboratory work but also an immense amount of data handling and analysis. One can properly question whether such intensive work is required to determine the quality of sediments intended for dredging. The proponents believe it is and feel that the calculation of indices based on RTRs lends objectivity to the process. In calculating indices, the relative degree that the chemical concentrations in the sediments are elevated above the mean concentrations (RTR) of the reference is used as a criterion for selecting the chemicals most likely to be anthropogenically enriched and of concern. The concentration data are used to calculate an aggregate contamination index by averaging all of the trace elements to a single value prior to averaging this value with individual values for the organic compounds. This results in a single composite index that is thought to identify contaminated sites. For example, the chemical concentration RTR for one site might be 0.86, for a second 2.32, and for a third, 6.29, showing a trend of increasing potential for degradation. However, the toxicity of a chemical substance in sediment can vary not only with concentration but even more with factors that control its bioavailability, including its mineralogy, organic content, pH, cation exchange capacity and the chemical species involved. Toxicity of a sediment can easily be due to an unmeasured chemical whose distribution parallels that of the measured substance. So, sediment chemistry can only alert one to the possibility of toxic impacts. It will take bioassays to determine toxicity.

Interpretation of the results of bioassays is not always an easy task. Cases are known where sediment texture has controlled toxic effects. Nevertheless, laboratory bioassays are at this time the most practicable way of assaying toxicity. In the Triad, RTR indices are calculated by dividing mean mortality of stations by the mean of the stations in the reference site. However, as note above, these bioassays cannot establish with certainty what effect the toxic elements will have upon the assemblage of organisms in the field.

In the case of biological community analyses, RTRs are calculated for taxa richness, total abundance, and numerical dominance. One modification must be made for the first two categories. High numbers indicate least altered sites, but in the case of chemical concentrations and bioassays high values mean most altered sites. Thus, the values for richness and abundance are entered as the reciprocals. Most of us are aware that biotic factors can account for reductions in species richness and these in turn may be a result of textural changes. If only benthic infaunal results are available and infaunal reductions are noted, pollution by organics in a harbor could be suspected. Thus, it is useful to TOC data available.

The final step in the Triad is the simultaneous plotting of RTRs for chemistry, toxicity and community structure. The three types of RTR values for each sampling station are plotted on scales with a common origin and placed at 120 degrees from each other to form triaxial plots, i.e., one axis plots chemical contamination, a second plots bioassay toxicity, and the third plots infaunal alteration. The area of the triangles formed by lines interconnecting station RTRs on each axis is calculated to give both a visual and mathematical assessment of relative degradation. This graphic plotting also permits a clear comparison with reference stations. Certain kinds of analyses of the triangle may be useful to environmental managers. For example, if the infauna exhibits moderate alteration and both the bioassay and chemistry RTRs are low, one would conclude that measured chemicals were not involved. For any one site, it is easy to see which of the three parameters at each sampling station is having the greatest influence on degradation. Although the relationships are not firmly established, some feel that the areas of the triangles are relatively proportional to the degree of deg radation of the site.

IAPH Has Some Problems With These Techniques

In the opinion of IAPH it is not possible to establish universal toxicant concentrations in sediment that will always impact the biota, as some proponents of Apparent Effects Threshold have attempted to do. For instance, some investigators believe that it should be possible to establish AETS for a given bay or estuary. But IAPH believes that even this practice could lead to unfortunate decisions. The basis for this conclusion is simply that the toxicity of metals or organics in marine sediments varies with the characteristics of the sediments, which in turn certainly differ from one estuary to another and may easily vary from one locus to another in the same estuary. For this reason, IAPH believes that it is premature to support techniques built to such a large extent on concentration rather than on characteristics. Let us examine briefly some of the characteristics of marine sediments that are relevant here. These characteristics determine bioavailability of toxicants and thus their ecological toxity.

Components of Dredged Materials that can Sequester Toxic Substances

Large Molecular Weight Humic Materials

An important property of the naturally occuring organics is their ability to form stable combinations with metal ions. The predominant immobilizing effect is related to the insoluble large molecular weight humic acids. The stability of humic complexes with metals increases with increasing pH due to the ionization of more functional groups of the humic-polyelectolyte molecule.

Small Molecular Weight (Fulvic) Humic Materials

Fulvic acid is a good modifier of metal-ion chemistry. Divalent cations generally form much more stable complexes with fulvic acids than monovolent cations. At low pH, hydrogen ions compete effectively for the reactive sites on fulvic acids reducing metal complexing, but at high pH the hydroxyl ion competes for the metals. Cadmium (valence plus 2) is known to be less toxic to aquatic organisms when it is part of a complex with fulvic acid or other ligands than when it is not complexed.

Clay Minerals

Clay minerals are fairly effective at immobilizing metals and organics by cation exchange reactions. Those clay minerals with a greater surface area and cation exchange capacity are more effective in immobilizing contaminants. In this regard, montmorillonite, as we shall see, is one of the best of the clays. Probably the most important sequestration process is related to the relationships between clays, large molecular weight humic materials, and hydrous iron oxides. Where appreciable levels of humic materials and hydrous oxides are found, they are largely present as coatings on the clay mineral micelles. This relationship is more important in immobilizing metals and synthetic organics than simple sorption to clay minerals.

Clays, as well as the hydrous oxides, and humus have colloidal properties, which is a fact of extraordinary environmental importance. The surface and collodial chemistry of dredged material is determined primarily by two basic properties of the above colloids, their large surface area, and the presence of a surface electrical charge. The charge on soil or sediment colloids may result from either structural imperfections in the interior of the crystal (micelle) structure or preferential adsorption of certain ions on particle surfaces. Typical of the first type are the colloidal 2:1 type of clay minerals such as micas or smectites, both of which are common in sediments dredged form estuarine ports and harbors. In the case of these clays, which consists largely of Si4 + or A13 + and Fe3 + and Mg2 +, ion size limitations on the crystal structure usually result in a substitution of cations of lower valence for those of higher valence resulting in a net negative charge on the clay structure. Hydrous oxides exhibit hydroxylate surfaces through the chemical adsorption of water whereby the H2O is split into H+ and OH-ions. Charge can develop on these hydroxylated surfaces through either amphoteric dissociation of the surface OH groups or by adsorption of H+ or OH-ions. This charge is pH dependent and can thus be made positive or negative by raising or lowering thew pH.

The smectites, of which montmorillonite is a very important example, are held to be the most environmentally important clay minerals in sediments. The smectites plus vermiculites are responsible for a large portion of the cation exchange capacity in sediments found in temperate climates. Smectite is responsible for most of the shrinking and swelling that occurs in soils. Montmorillonite adsorbs metals and of equal importance it can be a sink for natural organic compounds as well as herbicides and pesticides so that they are not bioavailable. It is interesting to learn that the sediments of the Mississippi and Missouri rivers, as well as the watershed of San Francisco Bay, have a very high montmorillonite content.

Montmorillonite has a high cation exchange capacity, which arises from the substitution of A13+ for Si4+ in tetrahedral sheets and the substitution of divalent cations like Mg2+ and Fe2- for trivalent cations like A13+ and Fe3+ in octahedral sheets. The large internal surface area of montmorillonite and other smectites (up to an astounding 800 m2/gram). Metals as well as organic compounds, including petroleum hydrocarbons, will be adsorbed by montmorillite.

Hydrous Oxides

Iron and manganese oxides are important in regulating the mobility of many toxic metals. Both cations and anions show a strong tendency to interact with hydrous oxides over a considerable pH range. The solid complexes formed with potentially toxic metals will tend to settle out of suspension. If the hydrous metal oxide becomes buried by other sediment material, it will dissolve as the buried horizon becomes reduced and the adsorbed metals will be released. However, under such conditions they can easily combine with sulfide or undergo complexation with humic materials. Some investigators believe that Fe/Mn hydrous oxides and organic coatings on clay micelles substantially control the sorptive

(Continued on the next page)

International Maritime Information **WORLD PORT NEWS**

PACT Training Course On Terminal Operations

Besides the course scheduled for the period August 21 - September 15, 1989, also two PACT courses will be conducted in 1990, on the following dates: March 12 to April 6, 1990 August 20 to September 14, 1990

The course is particularly meant for middle management staff of multipurpose and container terminals in developing ports, with emphasis on practical training.

The course fee is Dutch Guilders 3,400 (approx. US\$1,700) Detailed brochure available upon

request at: Rotterdam Municipal Port Management TEMPO P.O. Box 6622 3002 AP Rotterdam Telex: 23077 eurot Fax: 31-10-4778240

Monographs on Port Management

Resolution 35 (IX) of the Committee on Shipping of the UNCTAD recommended "the production by the UNCTAD secretariat, in collaboration with the International Association of Ports and Harbors (IAPH), of a series of monographs covering various aspects of port management and operations specifically oriented to the needs

(Continued from the previous page)

behavior of estuarine particulate matter.

Iron Oxides

Iron plays an important environmental role in dredged material, a role that is complementary to those of clay minerals and humus. This arises from the reversibility of its oxidation-reduction reaction and the fact that its oxides can scavenge toxicants, especially other metals, and that it can complex with organic matter enhancing its toxicant sequestering capabilities. In sediments on the seabed oxygen is or becomes deficient so that some microroganisms will utilize Fe3 + oxide as final electron acceptors to accomplish their oxidative decomposition of organic matter. The Fe3+ is reduced to the Fe2+ ion that is more soluble and moves through the sediment. When the sediment is oxygenated, reoxidation of the insoluble Fe3+ occurs and it is precipitated. At this time the high specific surface area of iron oxides in particles and as coatings on other particles make them excellent sinks for both anions and metallic cations. As a result of their hydroxylated surface, the surface charge and potential of iron oxides are determined by the concentration of H+ and OH- in solution, i.e., by pH. The surface charge is created by an adsorption or desorption of either H + or OH-. There is a pH at which both anions and cations can be adsorbed. In a multicomponent system of ions of equal valency these ions are adsorbed in simple proportion to their equilibrium activity in solution.

Manganese Oxides and Hydroxides

Manganese oxides and hydroxides have a high sorption capacity for heavy metals and can thus effectively sequester such toxicants as mercury and cadmium in dredged material. This comes about in part because the manganese minerals in sediments are finely divided, and have large surface areas. Also, in marine sediments at pHs around 8.0 they carry a high negative charge which also boosts their sorption capacity for metal cations. In fact, in marine sediments or dredged material on the seabed the manganese oxides accumulate rather high concentrations of metals, particularly cobalt and lead. While the sediments are in place, the metals are not bioavailable.

Summary Conclusions

The IAPH cannot technically support either of the two sediment quality assessment techniques (AET and TRIAD) for the regulation of the disposal of dredged material. Whereas these techniques may have utility as screening tools in identifying contaminated areas, they bear no relationship to the effects based approach necessary for assessing dredged material for the various disposal alternatives. The physico chemistry and biological inter-relationships of sediment/ water interactions are far too complex to be evaluated through a simplistic statistical approach that cannot delineate cause and effect relationships. The preferred approach for identifying and assessing dredged material disposal problems is the guidelines for application of the annexes to dredged material adopted previously by the LDC.

Membership Notes:

New Members

Regular Member

Department of Marine and Harbours (Australia) Address: 1, Essex Street, Fremantle, W.A. 6160 Telex: DMHFRE 94784 Tel: (9) 335 0888 Fax: (9) 335 0850 (Mr. J.M. Jenkin, Executive Director)

Associate Member

Nynex International Company [Class A-2-1] (U.S.A.) Address: 4 West Red Oak Lane, White Plains, N.Y. 10604 Telex: 286169 Tel: (914) 397-1234 Fax: (914) 682-8757 (Ms. Susan C. Simon, Director-Strategy Assurance) of port management in developing countries." Thanks to the excellent co-operation with IAPH, several monographs, all prepared on a honorary basis, have been produced and are now available in English, French, Spanish and Arabic.

They can be obtained at UNCTAD, Ports Section Shipping Division, Palais des Nations, CH 1211 Geneva 10, Switzerland. The Monographs are free of charge for port staff from developing countries, whereas port staff from developed countries have to pay the amount of US\$10 per Monograph.

UNCTAD/SHIP/494 (1)

Changing from day-work plus overtime to two-shift working by Stuart Bradley, 1983.

Describes how a port authority in the United Kingdom went about introducing two-shift working in a port previously operated on the basis of day-work plus overtime. The monograph describes the reasons for such a change and chronicles the steps leading up to the introduction of the new working method. The paper offers guidance, based on this experience, to other ports which may be contemplating a similar change.

UNCTAD/SHIP/494 (2)

Planning land use in port areas: getting the most out of port infrastructure by R.E. Takel, 1983.

The first part of this monograph describes the various purposes for which land is needed in a port and analyses how to assess a port's requirements. The second part discusses how land resources should be efficiently managed.

UNCTAD/SHIP/494 (3)

Steps to effective equipment maintenance by E.D. Munday, 1983.

Provides a general introduction to this important subject. It discusses how to plan, control and manage the equipment maintenance function and is based on experience in a major United States port.

UNCTAD/SHIP/494 (4)

Operations Planning in Ports by B.J. Thomas, 1985.

Discusses a systematic approach to operations planning in seaports and is directed to those middle managers - traffic officers, berth superintendents, etc. - who are responsible for controlling cargo handling operations at a berth or a group of berths.

UNCTAD/SHIP/494 (5)

Container Terminal Pavement Management by Marios Meletiou and John Knapton, 1987.

Introduces the concept of pavement management for those responsible for container terminal pavements. The monograph proposes a new approach for selecting a suitable pavement type, describes the surface loading characteristics of container handling equipment and discusses the available choices for terminal pavement. The principles of design, monitoring, maintenance, rehabilitation and upgrading of heavy duty pavements are also discussed.

UNCTAD/SHIP/494 (6)

Measuring and Evaluating Port Performance and Productivity by Gustaaf DeMonie, 1987.

Discusses the difficulties of quantifying port performance and suggests various methods for measuring productivity. Performance measures for cargo handling and berth occupancy are given. Variables affecting productivity are discussed and typical productivities for break bulk and container operations are given. Finally some guidelines are given for comparing port performance values.

UNCTAD/SHIP/494 (7)

Steps to effective shed management by Yap Cheng Hua, 1987.

Discusses the role and importance of transit sheds. Covers the design of transit sheds including size, location, doors, lighting, safety, etc. The management of transit sheds is also covered including planning and the day-to-day activities.

27th Int'l Navigation Congress of PIANC

Ports and Waterways -A New Dimension for the Earth

Japanese Minister for Transport invited the Permanent International Association of Navigation Congresses to hold its 27th Congress (May 1990) in Osaka; the invitation was accepted by the Permanent International Commission in June 1985.

The 27th Congress, as a venue for international exchange of the latest information and research results, will thus contribute to world prosperity through development of worldwide navigation, ports and coastal areas.

The 27th Congress in the first to be held in Asia in the 100-year-long history of PIANC; many participants are therefore expected from Asian countries and we believe that fruitful discussions among congress members will accelerate the socioeconomic development of this region.

We sincerely hope that many interested individuals and organizations from all over the world will participate in this Congress, in fulfilling the aims of our society.

We look forward to welcoming you in Osaka in 1990.

The 27th International Navigation Congress is placed under the high patronage of His Imperial Highness the Crown Prince of Japan.

1. Period: May 20 (Sun.) – May 26 (Sat.), 1990

2. Venues: Royal Hotel (main venue); also used will be Hotel New Otani Osaka, Miyako Hotel Osaka, and International House, Osaka

3. The Congress will be held:

Under the Auspices of:

Permanent International Association of Navigation Congresses

Japan Organizing Committee for the

27th Congress of PIANC

Under the Sponsorship of:

Ministry of Transport

Fisheries Agency

City of Osaka

Japanese Section of PIANC

4. Attendance Expected: 1,000 participants from overseas and Japan.

5. Languages:

English, French and Japanese (Simultaneous interpretation will be available.)

For further information, please contact:

PIANC 27th International Navigation Congress Organizing Committee Secretariat

Address: c/o Port and Harbor Bureau, Osaka City. 8-24, Chikko 2chome, Minato-ku, Osaka 552, Japan Phone: (Osaka 06)572-6633 Fax: (Osaka 06)573-6553 Telex: 5254566 PJOC J

International Seminar On Dredging Activities

Nantes (France) November 27 - December 1, 1989 Arranged by: The Minister of the Environment and The Minister for the Sea

Co-sponsored by: The Oslo Commission, The International Maritime Organization (IMO) as depository of the London Convention on Dumping, The Intergovernmental Oceanographic Commission (IOC), The International Council for the Exploration of the Sea (ICES), The co-ordinating Unit for the Mediterranean Action Plan, and The International Association of Ports and Harbors (IAPH)

INTRODUCTION

Dredging of ports, harbours, marinas, estuaries, sand bars and navigation channels is an essential activity for maritime countries. It involves a range of sophisticated technologies and accounts for a significant part of the cost of managing the marine transport industries and protecting coastal areas from the effects of erosion. Of special importance is the knowledge that sediments may contain contaminants introduced to the aquatic environment as by-products of human activities, and that dredging may induce the transport of theses contaminants to coastal waters and the open sea.

This international seminar has been designed to examine all aspects of dredging that contribute to changes in the quality of the marine environment. In particular it will provide a forum for multi-disciplinary review of scientific information that could provide a basis for better prediction of environmental impacts due to dredging. This, in turn, should lead to improved assessment and control procedures at both national and international levels.

Since the quantities of dredged material deposited in the marine environment are very large in relation to inputs from other sources, the seminar should be seen as an important step in improving regulatory approaches to marine pollution control. Marine scientists, environmental managers, and regulatory personnel are encouraged to participate and to contribute their experiences towards the development of more practical and effective procedures for the management of dredging activities.

R.G. BOELENS, Chairman

GENERAL INFORMATIONS VENUE

VENUE The semin

The seminar will take place at Nantes (France) in the NEPTUNE conference center. The meeting on 1st December (Forum) will take place in the Hôtel de région Pays de Loire.

REGISTRATION

Attendance at this seminar will be limited. Therefore, we strongly urge you to register as soon as possible and in any case no later than 10 September 1989.

A registration form is included in this programme. This registration form has to be completed and returned to NANTES CONGRÈS (Tour Bretagne, 44047 NANTES Cedex).

HOTEL RESERVATIONS

A block booking has been made at reduced rates for seminar participants. To make a reservation, please complete the enclosed Hotel reservation form and return it, along with one night's deposit as required, to NANTES CONGRÈS.

CONTACT ADDRESS

For any information concerning the seminar, please contact:

Monsieur Claude ALZIEU

Institut francais de recherche pour l'exploitation de la mer (IFREMER)

Centre de Nantes

B.P. 1049 Nantes Cedex 01

Tel.: 40 37 40 00; Telex: 711 1966 F; Telefax: 40 37 40 01

New Publications

World Directory of Liner Shipping Agents

The World Directory of Liner Shipping Agents now includes details of agency relationships between 770 container shipping lines and more than 2,500 liner agents in 178 countries

worldwide.

Over 300 agents have been added in the latest edition and over 100 agents have been removed.

The 1989 Directory, produced by Containerisation International, provides a guide to ocean carriers operating on all the world's principal trade routes, as well as full contact details for each liner operator and general agent. Information includes addresses, telephone, telex and telefax numbers, branch offices, contact names and details of routes covered by agency agreements.

The 300-page Directory is published in a pocket-size softbound format by:-National Magazine Co Ltd National Magazine House 72 Broadwick Street London W1V 2BP Telephone: +44 (1) 439 5214 Telex: 263879 NATMAG G Telefax: +44 (1) 437 6886 Price (including postage and packaging): £35 (US\$66) by surface mail, and £39 (US\$74) by airmail. ISBN: 0 85223 758 8 ISSN: 0951 5879

Survey of State Funding of Landside Port Facilities, Cargo Terminals and Harbor Improvement Projects 1977-88.

By the Standing Committee on Water Transportation, American Association of State Highway and Transportation Officials (AASHTO). (Washington, D.C.: June 1989). 30 pages. Tables. Order from: AASHTO, 444 N. Capitol Street, N.W., Suite 225, Washington, D.C. 20001. Tel: (202) 624-5800.

The AASHTO study shows that during the period 1977-88, the governments of 28 of the 40 states located on navigable waterways invested \$1.7 billion on landside port facilities and terminals. That included \$1.49 billion on tidewater facilities, \$81 million at Great Lakes ports, and nearly \$115.1 million for inland waterway terminals.

Other AASHTO findings:

• Expenditures by region: East Coast – \$983.9 million; Gulf Coast – \$356.7 million; Mississippi Valley/Midwest – \$138 million; West Coast/Pacific – \$218.4 million. • Georgia ranked first among the states with expenditures of \$269.4 million, followed by Maryland (\$252.6 million); Louisiana (\$212.4 million); Alaska (\$135.0 million); and Alabama (\$134.7 million).

• Sources of state funds invested in landside port facilities and terminals: general obligation bonds — \$618.9 million; general revenue funds — \$301.2 million; revenue bonds — \$268.6 million; transportation trust funds — \$188.2 million; user charges — \$115.5 million; toll revenues — \$92.4 million; private contributions — \$2.4 million; state lottery — \$1.3 million.

• During fiscal years 1987 and 1988, seven states spent a total of \$63.2 million as the non-Federal share for harbor improvement projects authorized by the Water Resources Development Act of 1986. In addition, one state spent \$350,000 for a previously authorized project funded under the cost sharing provisions of the 1986 Act.

• Sources of state funding of harbor improvement projects: state transportation trust funds — \$41.3 million; general revenue funds — \$14.3 million; general obligation bonds — \$7.7 million, port authority funds — \$200,000.

(AAPA Advisory)

Strategic Planning Guide

AAPA published a Spanish-language edition of its Strategic Planning Port Industry Guidebook. The Spanish version, Planeamiento Estrategico: Una Guia para la Industria Portuaria, sells for \$10 per copy to AAPA members and \$20 each to non-members. Orders should be directed to: AAPA, 1010 Duke Street, Alexandria, VA 22314. Telephone: (703) 684-5700. Fax: (703) 684-6321. Telex: (710) 832-9823 AAPA WSH. (AAPA Advisory)

Socialist World Shipping Directory 1988-1989

Anatomy of Socialist Shipping in ONE Volume –
Editorial Office: Mr. M.Z. Michalczonek
Editor
PO Box 465
PL 81-705 SOPOT 5
Poland
Phone: (058) 51-3706

The Americas

Ports Canada Creates EDI Steering Committee

Although the United Nations has been working for 20 years on a universally acceptable set of rules for Electronic Data Interchange (EDI), in most major ports worldwide, the model is still being worked on. To assure a coordinated Canadian approach, Ports

BIMCO Protests Sudan Price Hike

BIMCO — The Baltic and International Maritime Council — has strongly protested to Sudanese authorities about port expense increase of 240-300 percent which were announced on 3 July and introduced in Port Sudan on 1 July.

The BIMCO protest states: "We are astonished that you have arbitrarily decided this dramatic increase of port charges without having given proper warning to the international shipping community — an action which has left the community without any possibility of including the increased expenses in their contract negotiations."

Members of BIMCO has already reported that instead of paying about US\$16,000 for an approximately 17,000 DWT vessel calling at Port Sudan, they will now have to pay about US\$120,000, i.e. an increase of over US\$100,000.

BIMCO comments in its protest: "An action of this nature is totally unheard of within the shipping industry, and is in clear contradiction with normally accepted principles and procedures.

"It is imperative to carriers that they at least receive notification three months in advance of any increases which will have a serious effect on their business."

BIMCO points out to the Sudanese Sea Ports Corporation in Khartoum that carriers have no other alternative than to add the dramatic increases to the ocean freight. This, states BIMCO, in the end will mean that the Sudanese population will suffer from the increased prices to the overall serious detriment of the Sudanese economy.

The Sudanese authorities have been asked by BIMCO to reconsider the increases.

Canada established a Ports EDI Steering Committee with members from the staff and boards of the ports of Halifax, Saint John, Montreal and Vancouver.

Last September, Halifax established an EDI user committee of about 17 including people from steamship agencies, rail, customs, container terminals, trucking, Agriculture Canada, Transport Canada, and provincial department of transportation.

Being a voluntary group, it was felt that a more formal organization could enter into contracts and agreements which could make funding available.

Thus, the Steering Committee is incorporating under the name EDIPORT Atlantic.

As EDI develops, this local EDI Steering Committee will represent the interests of the port community as well as keep abreast of developments in other ports. By establishing a Pilot Project, the committee will develop a strategy for the implementation of EDI in the Port of Halifax.

(Port of Halifax)

Port Operations Helping Local Economy

An economic impact study conducted by the Canada Ports Corporation last fall has determined that about 550 people are directly employed by port-related companies and agencies working within the Port of Prince Rupert.

It was estimated that these companies and agencies spend an estimated \$50 million annually with more than half spent in wages.

Mr. Bob Tytaneck, general manager and CEO of the Prince Rupert Port. Corporation says that the economic impact of the Port of Prince Rupert is generally underestimated because of the difficulty of quickly assessing all companies and agencies working within the Port.

"But when the figures are combined, you can see that port activity is critical to the economic well-being of an area the size of Prince Rupert."

Aside from the port's impact on the local economy, the CPC study also assessed the contribution of cargo handling activities to the regional and national economies.

The results indicated that the Port

of Prince Rupert contributes to 2,461 direct jobs and 1,760 indirect jobs across western Canada. The revenue generated by this activity is about \$370 million.

About 80 percent of the economic benefits contributed by the port are related to inland transportation, namely truck and rail. The remaining 20 percent of jobs and economic activity are created directly by port terminals and related businesses.

Mr. Tytaneck says the magnitude of the statistics demonstrates the importance of port and related transportation industries to the Canadian economy. "The figures for Prince Rupert alone reflect clearly the significance of the business of transporting cargo to tidewater for loading vessels."

(Currents)

Fraser Port Reports Another Good Year

The Fraser River Harbour Commission, which administers Fraser Port, had another active and successful year — a fitting tribute on the 75th Anniversary of the Commission.

Deepsea and coastal tonnages were both higher in the year totalling over 6.5 million tonnes. Deepsea export/import tonnages at 1.5 million tonnes were 400,000 higher than the previous year. Increases were reported at all facilities with the Commission's Fraser Surrey Docks handling more than double the number of TEU containers, compared to 1987.

Gross income for the year was higher than in 1987 but due to increased expenditures for repairs, maintenance and development resulted in net income of \$3,888,408. This is consistent with the \$3,957,751 reported the previous year.

"A number of initiatives were launched or completed during the year that will bring long-term benefits to the Port and to all Canadians," Mr. Bill Vogel, Commission chairman stated.

"The Commission is estimating that \$12-15 million will be spent on capital projects in 1989," Mr. Rick Pearce, Port Manager and CEO reported. This includes major improvements to Fraser Surrey and Fraser Annacis Autoport. Since 1982, the Commission has no long-term debt thus being able to pay for expansion of holdings and facilities from earnings. To meet future expenditures the Commission is taking steps to again borrow to meet the forecast increase in expenditures.

Bridgepoint Harbour Market Officially Opened

On May 25, 1989 Premier Bill Vander Zalm, Richmond Mayor Gil Blair, and North Fraser Harbour Commission Chairman, Mrs. Irene Frith headed up a group of dignitaries who officiated at the official opening of the Bridgepoint Harbour Market.

Local residents have watched with anticipation since the spring of 1988 when site development and construction began at a cost of over \$15 million.

Before construction began, a large area of intertidal plants were relocated to another area in the harbour where they were preserved as a natural marshland habitat. A whole area, adjacent to the project, is being preserved as a bird sanctuary. This area can be viewed and enjoyed from the easily accessible boardwalk that fronts the entire Bridgepoint Market.

The development is located on the North Arm of the Fraser River, on River Road, close by the Oak Street Bridge. The developers feel they have an ideal location on the riverfront and have come up with a market that is going to be a destination spot as much as a shopping attraction.

The Bridgepoint Harbour Market includes a number of exciting and unique features that are bound to prove popular. Some of these include: a fresh food market, specialty retail shops, fast food area, 140-foot-tall landmark clocktower (the largest, free-standing clocktower in the Greater Vancouver area), a 130-berth marina, public boardwalk that is 14 feet wide and will be 900 feet long, an adjacent natural wildlife and bird habitat and a restau-



Halifax Pier B Terminal Nearing Completion

This artist's impression of the Pier B Container Terminal offers a visual representation of the comparative size and position of Halifax's newest terminal scheduled for completion this August.

According to Mr. Richard Pentland, Vice President of Engineering and Works for the Halifax Port Corporation, dredging along sections of the north side of the seawall is now finished, demolition of 9,800 sq. m. of sheds is complete and engineering design work is proceeding.

With 1,200 ft. of seawall, the new container handling facility will easily be able to accommodate a third-generation-sized vessel.

With a 27% increase in containerized traffic this past year and a 50% increase over the last five years, this new facility will keep the Port of Halifax ahead of ever increasing demand. (Port of Halifax)

rant.

The marina at Bridgepoint offers three types of moorage: permanent moorage, moorage for transient boaters and moorage for day boaters.

Future development will include a waterfront restaurant overlooking the marina, a marina building with pub and full marine facilities, a hotel and a treasure vessel. The treasure vessel will be a specially designed and constructed boat built along the lines of those seen in Hong Kong harbour and will provide space for restaurants and boutiques.

Bridgepoint's food market and specialty retail shopping areas are joined by a 60-foot high Central Hall and this is where visitors will be intrigued by the large Tide Pendulum. This pendulum will track the tides and the phases of the moon as it sweeps back and forth.

Nanaimo Observes Nat'l Transportation Week

Nanaimo Tourism is combining National Transportation Week and Tourism Awareness Week '89 to recognize the role played by transportation on the economy of Canada.

The Port of Nanaimo is pleased to recognize this event and in co-operation with the Nanaimo-Ladysmith School Board has provided copies of a learning resource entitled "Port Coloring Book."

The book was printed in Nanaimo from a format provided by the Committee on Public Affairs of the International Association of Ports and Harbors (IAPH). Drawings by Han Kleinbloesem and Concept by Wim van Horssen, Port of Rotterdam.

Mr. Tom. K. Krall, Assistant Superintendent of School District 68, expressed his appreciation for the project being undertaken and the learning opportunities which will become available to primary grade students in Nanaimo and Ladysmith.

The first copy of the coloring book was presented to Mr. Krall by Commissioner Jack Fyfe.

(Nanaimo Harbour News)

Containerized Shipping To Return to Québec

The Port of Québec will invest \$12 million to develop a new container terminal which will begin operations in 1990 at its Beauport facility. The Port is currently negotiating with partners in the shipping industry to launch an interim service this year.

"The return of containerized shipping is the most important news in maritime transportation at Québec City in the past decade," stated the Honourable Pierre Blais, Solicitor General of Canada and Minister of State for Agriculture, at a recent press conference.

The decision to build a container terminal on Pier 54 at Beauport follows two studies carried out by the Port of Québec's marketing division. They showed that many regional industries,



generating a yearly volume of 60,000 TEUs could benefit from a direct transportation link between Québec City and international markets. The studies also indicated that an additional major client would be required to make such a facility viable. However, the reports concluded by warning that long-term industrial development in the Québec City region could be adversely affected if the port authority did not take steps to create a container service.

The recent announcement by *Glaverbel inc.*, a consortium of Belgian investors, to build a huge glass factory at the Québec City suburb of St. Augustin, tipped the scales in favour of the container project; the new plant will generate the necessary base cargo. The Port was a key factor in Glaverbel's decision to locate at St. Augustin, by providing an interesting transportation package to supply raw materials and ship the finished product.

An innovative aspect of the project, a new gantry crane will both move containers and unload vessels at the adjacent bulk terminal. The Port plans to handle 17,000 TEUs in 1990.

The Pier 54 site at Beauport is advantageous for container operations, with excellent road and rail connections. A dockside depth of 15 meters of water at low tide will enable the Port to handle the world's largest container vessels. Beauport also offers virtually unlimited space for future expansion.

"The return of container shipping should enable local companies to reduce their transportation costs for goods sent directly to Europe. The support of regional industries will be of key importance to the success of this initiative,

Nanaimo Operations Study Commissioned

The Port of Nanaimo has engaged the engineering and planning firm of Willis Cunliffe Tait & Co. to undertake a study of the Port's terminal operations.

The study is part of the long-term planning for the efficiency of cargo-handling facilities.

The study will also assist in ensuring that the appropriate facilities and equipment to best serve the present and potential needs of the Port's users are kept in the forefront.

(Nanaimo Harbour News)

as competition from other ports including Montréal, Halifax and New York will no doubt be strong," concluded Ross Gaudreault, President and Chief Executive Officer of the Port of Québec.

The presence of a container terminal at the Port of Québec will be an additional incentive to industrial development in eastern Québec.

(Port of Québec)

Saint John Helpful To Local Economy

The results of an economic impact study have recently been released which verifies the importance of the Port of Saint John to the local, provincial and national economies.

The study, conducted by Martin O'Connell Associates of Bethesda, Maryland, said the Port generated 2,198 direct and indirect jobs in Canada last year, with 1,289 being direct jobs for New Brunswickers. Another 269 jobs were created indirectly in New Brunswick, with a further 640 indirect jobs created by the Port in other provinces.

The study quantifies and confirms what we had already known, said Mr. Ken Krauter, General Manager of the Saint John Port Corporation. It confirms the Port of Saint John is important to the City of Saint John, and makes a vital contribution to the provincial economy.

The personal income impact of the Port amounted to almost \$113 million, of which \$64 million was income earned in New Brunswick, with another \$49 million as a result of re-spending outside of the province.

The study showed the Port of Saint John generated the following economic benefits:

- \$120 million of business sales revenue
- \$31 million of federal, provincial and local taxes
- \$2,198 direct and indirect jobs
- \$113 million of personal income, including re-spending throughout New Brunswick and Canada

The total business revenue generated at the Port represents the revenue of all firms supplying transportation and maritime services to shippers/consignees using the Port.

This would include banking and insurance company which supply services to Port operations, as well as all local organizations providing Port services.

It provides us with a methodology so we can do studies in the future to get a comparison with 1988, Mr. Krauter said.

In 1988, the Port of Saint John handled 15 million tonnes of cargo. General cargo commodities such as containers, wood products, pulp, paper and steel, account for 44 per cent of direct job impacts, even though those commodities only account for 7 percent of total Port tonnage. This reflects the greater labor intensity required for general cargo as compared to bulk commodities.

In contrast, petroleum and petroleum products accounted for 77 percent of total Port tonnage, and only about one-third of the direct jot impact. (Port Progress)

Canadian and US Port Container Traffic 1988

CANADA		
Port	TEUs	Metric Tons
Fraser	31,586	n/a
Halifax	412,166	3,500,000
Montreal	560,441	5,728,379
Saint John	n/a	134,000
St. John's	73,648	333,769
Toronto(a)	1,515	18,180
Vancouver	305 738	2 732 000

UNITED STATES

UNITED STA	163	
Port	TEUs	Metric Tons
Anchorage	137,087	1,038,790
Baltimore	n/a	4,400,000
Boston	129,709	864,231
Charleston	717,477	5,094,526
Chicago	943	n/a
Cleveland	135	1,621
Coos Bay	n/a	278
Corpus Christi	246	4,020
Detroit	462	6,000
Fernandina	47,748	263,252
Freeport	37,236	189,410
Galveston	57,550	386,440
Glouster City	69,840	565,590
Guam (fy)	111,205	984,883
Gulfport	n/a	838,492
Hampton Roads	611,677	4,386,158
Hilo (fy)	26,890	293,686
Honolulu (fy)	329,710	3,507,728
Houston	530,593	3,839,888
Jacksonville (fy)	136,002 (b)	1,250,828
Kahului (fy)	34,796	381,448
Kanakakai (fy)	585	6,418
Kawaihae (fy)	9,801	106,806

Long Beach	1,539,803	n/a
Longview	3,787	n/a
Los Angeles	1,652,070	n/a
Manatee	4,506	26,684
Miami (fy)	207,109	2,362,600
Milwaukee (a)	263	1,673
Mobile	12,380(b)	109,188
Nawiliwili (fy)	15,400	168,399
New Orleans	400,000 ±	n/a
New York/		
New Jersey	2,095,530	12,242,000
Oakland	1,020,600	12,800,000
		(mrt)
Palm Beach (fy)	119,164	830,378
Panama City	1,208	6,400†
Philadelphia	103,000 \pm	n/a
Portland(OR)	164,596	1,684,806
Port Everglades	228,462	1,242,939
Portsmouth(NH)	2,047	n/a
Richmond(VA)	22,160	207,653
San Diego	7,363	67,942
San Francisco	122,285	2,926,000
		(mrt)
San Juan	1,120,986	5,300,000
Savannah	365,850	2,656,509
Seattle	1,024,035	7,736,616
Tacoma	781,816	5,213,000
Tampa	3,651	32,212
Toledo	100 \pm	1,400 \pm
Vancouver(WA)	857	14,515
Wilmington(DE) (fy) 54,276	282,996
Wilmington(NC)	82,474	533,242

Abbreviations

fy = fiscal year

mrt = metric revenue ton

rt = revenue ton

TEU = Twenty Foot Equivalent Unit

Notes

- (a) Containers handled to and from vessels only. Excludes containers handled at railtruck transfer facilities located on port property.
- (b) Container units of varying lengths, not TEUs.

(Data are calendar year except where noted. Date reported in short tons were converted by AAPA to metric tons at 1 short ton =.9078 metric ton.)

Source: AAPA telephone survey and statistical reports furnished AAPA by ports.

Port of Corpus Christi: Sixth Busiest in US

For the second year in a row, the Port of Corpus Christi has risen in ranking among U.S. ports, and is currently the sixth busiest in the United States in terms of total tonnage.

According to the latest figures released by the United States Army Corps of Engineers, and based on 1987 tonnage, the port ranks sixth behind New Orleans, New York/New Jersey, Houston, Valdez and Baton Rouge. Last year the port climbed from ninth place to seventh place by virtue of 1986 tonnage.

"The port's success can be attributed to increased movement of almost all types of commodities, says Mr. Harry G. Plomarity, executive director. "Petroleum and chemicals have remained strong and break bulk and grain shipments have also risen significantly. In 1988, 67.6 million tons moved through the Port of Corpus Christi, resulting in our busiest year ever and marking the sixth consecutive year of increased activity at the port. 1989 also looks promising, with first quarter figures showing a five percent increase over last year's first quarter figures.

Jacksonville: Chassis Pool Makes Debut

To better serve its customers, the Jacksonville Port Authority (JAX-PORT) has contracted with Interpool Ltd. to operate and manage an independent, cost-efficient chassis pool for shippers, shipper agents, non-vessel operators and truckers.

The chassis pool, which began operating June 1 at JAXPORT's Talleyrand Docks & Terminals, has already been used successfully by a host of customers, said Interpool Vice President Anthony Marquette.

The chassis pool is designed to improve the receiving and delivery of cargo and to reduce equipment costs for the steamship lines and truckers. Instead of having a steamship line, for example, keep its own inventory of truck chassis on the terminal, it can now rent chassis on an as-needed basis.

"A chassis can sit for months on a terminal and not get used, and that costs money," said Ms. Donna Marie Chillemi, owner's representative for equipment control for E.L.M.A. Lines, which is one of several lines using the JAXPORT chassis pool.

A chassis costs \$8 a day to rent at JAXPORT, and includes all maintenance and repairs, Mr. Marquette said. Currently, there are 30 20-foot chassis and 20 40-foot chassis at Talleyrand. Each is marked with the Alpha prefix JAXZ.

"We will increase the supply to meet demand," he said.

"From JAXPORT's perspective, the

chassis pool will be another benefit to offer new and prospective customers, and it will allow us to make more efficient use of our marine terminals," said JAXPORT Managing Director Paul D. deMariano.



Long Beach/Los Angeles Busiest US Harbor

Tonnage and customs collections statistics from calendar 1988 reflect the San Pedro Bay harbor complex of the Port of Long Beach and the Port of Los Angeles widening the gap and reinforcing their reputation as America's busiest harbor ... the world trade center of the United States.

The twin West Coast port giants surpassed New York/New Jersey in foreign cargo handled last year, and the gap widens with each successive quarterly report. U.S. Customs revenues for the Los Angeles/Long Beach District are running 44 percent ahead of the former leaders, as the value of goods shipped locally has grown six times faster than New York levels since the dollar peaked in February 1985.

Customs collections in fiscal 1988 grew to \$2.6 billion in Long Beach and Los Angeles harbors, while New York and New Jersey reached \$1.8 billion. The bulk of the international trade transported in or out of the Los Angeles District passes through the ports of Long Beach and Los Angeles. The economic impact of foreign trade on Southern California, in terms of jobs and revenue generated, is substantial, estimated at \$135 billion per year.

During calendar 1988, Long Beach broke its previous Pacific Coast record, handling 66.6 million Metric Revenue Tons of cargo. Los Angeles was close behind with approximately 60 million MRTs, making the two ports' combined tonnage the greatest of any harbor nationwide.

The ports of Long Beach and Los Angeles offer shippers a combined count of 15 container terminals, served by nearly 60 gantry cranes. Each of the two ports is among the ten busiest container ports in the world, jointly moving a total of \$90 billion worth of goods annually.

This boom in trade activity is why the Greater Los Angeles World Trade Center is being built in downtown Long Beach, in close proximity to both harbors. The first phase 27-story office tower is complete and many international trade and commerce companies have moved in. The new Federal Building is now nearing completion on an adjacent site, while the Long Beach Hilton will shortly break ground on the Trade Center site.

The dynamics of world commerce ... one more reason why the two great ports of San Pedro Bay are part of the fastest growing seaport complex and cargo center in the nation, and the premier Trade Center For The World.

Trends in Sea Trade And Implications for US

By Michael L. Sclar Tample, Barker & Sloane, Inc.

Summary:

- There will be modest growth in U.S. liner trade through 1992, despite some recent declines by port and by direction.
- There will be more U.S. trade with the NICs, following the decline in

1988, and exports will grow faster than imports.

- Japan's shift to becoming a major importer will continue.
- U.S.-Europe trade growth will be moderate, with export growth exceeding import growth on this trade as well.
- Southeast Asia is a region to watch as it builds on its role as a low-cost producer with a strong export orientation.
- But even as U.S. total liner trade slows, both ports and carriers are in

Cruise Passenger Trends in US, Canada

During the past 10 years, cruise passenger activity has become of growing importance to ports in both the United States and Canada. While much of the trade remains concentrated in Florida, thriving and growing cruise operations have emerged elsewhere, particularly British Columbia, California, Hawaii, and in the Northeast. In 1988, at least 20 U.S. ports and five in Canada participated in the cruise business to varying degrees.

CANADA	*		
	1988	1985	1980
Halifax	15,837	10,645	2,731
Montreal	26,239	20,428	
Prince Rupert	9,466	20,621	21,792
Québec	36,003	12,000	7,500
Vancouver	324,261	262,472	74,373
UNITED STATES			
Baltimore	7,567	4,423	2,574
Boston	20,502	11,832	·
Charleston	7,286	8,293	847
Guam (fy)	9,959	10,184	9,120
Hampton Roads	4,160	7,484	5,517
Honolulu (fy)	80,355	78,791	angeogram.
Los Angeles (fy)	443,863	408,907	100,034
Miami (fy)	2,502,411	2,326,685	1,466,581
New Orleans	19,321	10,595	5,102
New York	403,153	441,334	342,520
Palm Beach (fy)	239,798	1,991	
Port Everglades	1,699,844	227,018	121,716
Port Canaveral (fy)	633,739	178,613	7,581
Philadelphia	34,000		
St. Thomas (fy)	1,041,124	609,363	598,377
San Diego	181,255	169,569	320
San Francisco	36,705	102,688	41,391
San Juan (fy)	766,555	428,894	512,011
Tampa	223,506	445,278	8,381
Wilmington (NC)	2,060	3,600	

(fy) = fiscal year

Includes port calls as well as passenger traffic generated by homeported cruise ships.

SOURCE: AAPA telephone survey and port statistical records. (AAPA Advisory)

the midst of adding substantial capacity, at least partly in response to changes occurring in liner industry structure. The increasing globalization of trade and the growing balance between regions both are contributing to the consolidation we are now seeing in the carrier industry. The larger the carriers become, and the more extensive operations they run, the more they will gravitate toward the larger port facilities that offer the carriers more capacity, more control and lower rates.

Consequently, some ports find themselves spending substantial sums on new capacity simply to stay in the game, even in the face of slowing growth rates and declining container imbalances. Additionally, ports that have lost the larger carriers will inevitably have excess capacity that they can market at attractive rates to the smaller carriers. In the end, the industry will see more intense price and service competition. Also, the shift to export-dominant markets will create new challenges for the distribution systems set up for import cargo flows.

Factoring changing container imbalances into this equation, we have some idea of the complex environment facing many U.S. ports as the world trade winds shift. The environment will be more competitive, with strategic implications for both carriers and ports. At a minimum, three challenging issues discussed in this paper are important to underscore:

- Increasing carrier and port capacities in the face of slowing U.S. trade growth rates.
- Shifts in relative import and export volumes and growth, reducing imbalances in some ports while increasing imbalances in others.
- Increasing export volumes moving through import-oriented systems.

Thus, as container balances shift, individual ports will need to re-examine their own capacity plans. In general, faster export growth and slower import growth could add up to less pressure on capacity for previously import-dominant ports. What this means for each individual port will have to be determined by carefully integrating the trends in U.S. liner trades outlined in this article with the port's own capacity expansion plans.

(Via Port of New York – New Jersey)

World Trade Center Opens at Long Beach

First phase of the Greater Los Angeles World Trade Center in downtown Long Beach had its formal christening





Seen as they cut the ribbon officially opening the World Trade Center in Long Beach are, from left, Mr. Michael J. Choppin, President and Board Chairman of IDM; Dr. Shoichi Kajima, President and CEO of Kajima Corporation of Japan; and Mr. George F. Talin, Sr., President of the Long Beach Board of Harbor Commissioners. recently before 1,000 invited guests. Facilities now in use include the 27-story Tower One and adjacent Plaza Annex containing shops, business and personal services, dining opportunities and World Trade Club facilities.

Sponored by the Port of Long Beach and developed by IDM Corporation of Long Beach and Kajima International, the center will have three additional high-rise office towers upon completion. Hilton is breaking ground on the site later this year for a 400-room hotel. The adjacent Federal Building is scheduled for completion in 1990.

Fourteen Japanese financial institutions provided the \$107 million financing for Phase 1 construction, while the Port of Long Beach spent \$30 million in acquiring the 12.7-acre site, located where the Long Beach Freeway enters the City of Long Beach.

Among major tenants scheduled to move into the World Trade Center is the Pacific Regional Office of the U.S. Customs Service. The Pacific Region covers not only the West Coast but Alaska and Hawaii as well.

The Greater Los Angeles World Trade Center Association is already well established and has calendared a full slate of seminars and other trade-related activities for the coming year. WTCA recently sponsored a number of successful forums and has a large and growing membership.

Among the many officials participating in the christening were Long Beach Harbor Commission President George F. Talin, Sr., IDM Chairman Michael J. Choppin and Dr. Shoichi Kajima, President and CEO of Kajima Corporation.

NY&NJ Welcomes VTS Reactivation

Mr. Stephen Berger, Executive Director of The Port Authority of New York and New Jersey, commended Congressional action to reestablish a Vessel Traffic Service in the Port of New York and New Jersey to ensure safe navigation of vessels carrying petroleum and other potentially hazardous materials.

"Since the Exxon Valdez incident in Prince William Sound," Mr. Berger said, "we and other port interests have considered what can be done here to diminish the chances of such incidents and avert the serious environmental consequences of a major oil spill. I am pleased to say that Members of New York and New Jersey Congressional Delegation, particularly Congressman Frank Pallone and Senator Frank Lautenberg, have taken steps to fund and reactivate the VTS that was closed last year. An active, Coast Guard-operated Vessel Traffic Service would be a significant preventive measure."

The Coast Guard closed the New York and New Orleans Vessel Traffic Services in 1988 in a budget-cutting move. The VTS is a program that assists in vessel movement in the port by radio, radar, and television cameras. The reactivated VTS system in New York Harbor is expected to incorporate the most up-to-date technology.

Mr. Berger noted that more than 6,000 commercial vessels a year call in the bistate Port. "Last year petroleum accounted for over 39 million tons of the 57 million tons of cargo that entered or left our Port," he said. "While we have been fortunate that there have been no major incidents in recent years, it is incumbent on the federal government to use all available means to ensure safe navigation for the benefit of seafarers as well as the protection of our coastal and marine environment."

The Congress acted to reestablish the VTS program in New York Harbor and other ports where there is a large volume of petroleum trade. The House Merchant Marine and Fisheries Committee, including several representatives from the bistate area, adopted an amendment sponsored by Congressman Frank Pallone to return VTS services to the Port of New York and New Jersey. In the Senate, Frank Lautenberg's provision to fund a local VTS with \$5.6 million was included in the supplemental appropriations bill and endorsed by the House of Representatives. If the two bills are enacted as is expected, the Coast Guard could begin the renewal work in 1989.

Oakland Votes Funds For Bioscience Center

The Oakland Port Commission acted to join the city of Oakland and private industry in a campaign to promote bioscience industries in the Bay Area. The Commission moved to allot up to \$57,000 annually for three years to the project, known as the Bioscience Center.

It is expected that the city of Oakland will also contribute \$75,000 a year and the remainder of the first year's budget of some \$300,000 will come from private industry, the Bay Area Economic Forum and other cities in the Bay Area.

The program has been endorsed by the Association of Bay Area Governments (ABAG), the Berkeley and San Francisco campuses of the University of California, the San Francisco Chamber of Commerce, the Bay Area Council and a number of corporations.

The product of discussions among these groups that began early this year, the Bioscience Center will act as a clearinghouse for data on bioscience development. It will promote communication between research institutions, such as the region's universities, private companies engaged in or planning bioscience work, and the general public. It will work to gain public support for bioscience research and its applications, and it will promote the Bay Area in the U.S. and overseas as a bioscience leader. It is expected that the Bioscience Center will be located in the East Bay.

The Bioscience Center also will develop a coordinated approach to local environmental and commercial regulation, and act as an information center for developers and others looking to provide space for the industry. It will keep track of new firm start-ups, new techniques and new investment opportunities, providing a financial matchmaking service for regional biotech firms.

A 1988 survey by U.C. Berkeley's Institute of Urban and Regional Development found that the greatest concentration of bioscience firms in California now occurs in the Oakland/East Bay area, followed by Los Angeles, the upper San Francisco peninsula and the Santa Clara Valley. As a result, the survey states that "the strongest concentration of bio-industry employment is found in the Bay Area, with Santa Clara and the Oakland/East Bay area being the most prominent.

The survey also found that the most important factors to the industry were: "proximity to universities and research institutions, availability of a qualified workforce and manufacturing facilities, accessibility to markets and ease of participation in the dominant industry networks." In its state-wide evaluation, the survey concluded that "California in general, and the San Francisco Bay Area in particular, provide advantageous locations for most firms."

"Other areas of the country, notably Austin and Dallas, Texas, and the North Carolina Triangle, have gained strong high-tech momentum because of a public-private, institutional presence," said Mr. Douglas J. Higgins, President of the Oakland Port Board. "The Bioscience Center, by coordinating strategies to attract and retain the industry, can now fulfill that mission for the Bay Area."

Oakland: Progress in Solving Dredge Problem

The Port of Oakland advanced another step toward gaining final approval for its plan to dredge the Oakland Inner Harbor Channel to -38 feet at mean lower low water and use the dredge material to reinforce levees on Twitchell Island and the Lower Jones Tract in the San Joaquin Delta.

The Central Valley Regional Water Quality Control Board voted 5-0 to approve the project, subject to review of detailed final plans for the disposal program and of monitoring and contingency plans.

The Port, as Phase 1 of its dredging program, would bring 440,000 cubic yards of dredge material to the Delta islands and agree to monitor the runoff from the levees for as long as necessary in order to guarantee that there will be no adverse impact on water quality. The Port has also proposed a contingency plan to cope with any problems that might arise.

Ultimately, both the Inner and Outer Harbor Channels will be deepened to -42 feet at mean lower low water in order to accommodate fourth generation container ships that have a draft of some 40 feet fully loaded. The present depth of Oakland's channels is 35 feet.

Both Maersk and American President Lines are bringing the big container ships into Oakland now, but they can't do it with a full load and they sometimes must wait for high tide before entering the channels.

"We are delighted by the unanimous vote of the Central Valley Regional Water Quality Control Board endorsing the Port of Oakland's plan," said Mr. Douglas J. Higgins, president of the Board of Port Commissioners.

"This vote affirms the Port's position that the dredging program and the disposal of the dredge material on these two islands will have no adverse impact on the quality of drinking water that originates from the Delta."

The Port originally planned to dispose of the materials in the Pacific Ocean, some 26 miles south of the Golden Gate, but protests from fishermen who claimed it would destroy their fishing grounds led the Port to seek an alternative site.

Both the U.S. Army Corps of Engineers and the Environmental Protection Agency are currently conducting studies that will lead to identification of permanent disposal sites that can accommodate the 6.5-million cubic yards that must be dredged to bring the channels down to -42 feet.

Port of Oakland Creates New Port Planning Div.

The Port of Oakland is creating a new 30-person Port Planning Division to provide continuing support for the Port's revenue producing departments.

Port Planning will be the largest and most significant new element in the restructuring of the Port's organization chart.

It will come under the jurisdiction of the Executive Director, Port Development, a post still to be filled. The Executive Director, Port Development, will oversee both the Planning Division, which will be headed by a Director of Port Planning, and the Commercial Real Estate Division, headed by Mr. Henry Kammermeier, currently the Port's Director of Properties.

Mr. John Glover, who currently heads the Port's Strategic and Management Planning Department, has been named acting Director of Planning.

The new division, which will have a budget of about \$2 million annually, will consist of two major departments - Environmental, and Planning and Compliance - plus a section for Land Records Management.

The Planning Department will have four major functions.

• The first, and perhaps the most critical, will be to prepare and update an overall port master plan, and master plans for each of the major revenue-

producing departments – maritime, aviation and commercial real estate.

• It will assist the revenue departments in defining and evaluating projects to be screened under a new capital improvement project selection process.

• It will support the strategic planning activities of the Chief Executive Officer.

• It will have responsibility for reviewing and issuing Port permits.

The Environmental Department has three major assignments:

• It will perform environmental assessments of proposed Port projects and then provide environmental documentation for them.

• It will have responsibility for the management of hazardous wastes on Port property, including plans for clean-up, auditing, and control of contaminated materials.

• It will have responsibility for applying for and obtaining permits from regulatory agencies and then following through to assure compliance with permit conditions.

Additionally, the Environmental Department will assist in the formulation of overall environmental strategies for the Port and work to improve relationships with regulatory agencies and thus improve the Port's ability to implement projects.

The Land Records Management Section will provide a computerized storage, retrieval, and manipulation system for Port land and facilities records, including property descriptions, maps, utility systems, etc. The goal is to centralize the Port's land and facility records and make them accessible and useful to those who need access to them.

Of the approximately 30 people in the new division, Mr. Glover said, 12 will be "new hires" and the rest will be employees currently in other Port assignments.

The Environmental Department will be moved intact from the Engineering Department and expanded to meet its new responsibilities. A portion of the Engineering Planning Department will be embraced by the new structure as well as the present strategic planning staff and the land records management staff.

"It is our hope," said Mr. Glover, "that this new division will guarantee that our Port projects are thoroughly investigated and carefully planned, and thus they will give our revenue departments a solid platform for success while using Port resources wisely. We will provide maximum support for the major revenue-producing departments and for the executive office."

(Port Progress)

Redwood City: Highest Tonnage in 8 Years

Commission Chairman Guy Smith said that import/export tonnage passing through the port of Redwood City was up 81 percent to 437,000 metric tons for the 1988-89 fiscal year; the previous year tonnage increased 71 percent.

The tonnage is the highest since 539,000 metric tons in 1980-81.

Mr. Smith said that Port received 36 cargo vessels, up 13 percent. Non-cargo vessels also were up, from 72 to 76.

Total dockage days were 529, up 15 percent from the previous period's 459.

Port Executive Director Floyd Shelton credits the continued upswing to improved relations and economic environment at the port.

"Service is the key element in the port's marketing strategy and must come first," Shelton said, noting that over the last year providing quality services and better communications with existing tenants and prospective clients has lead to economic growth for the port.

Strategic Management Planning at Seattle

Stressing that customers should be the primary focus of all Port activities, Port of Seattle Executive Director Zeger van Asch van Wijck has initiated a year-long effort to develop a Strategic Management Plan to establish the Port's mission, goals, priorities and action plans.

"Clearly, in order to accomplish this important task which will define just where the Port should be headed, we need the insight of people both inside and outside the Port," says Mr. van Asch van Wijck. "The Port is more than just a transportation facilitator. Its future rests on its ability to become a customer/market-oriented organization. The challenge to be competitive in global markets demands collaboration and cooperation among the private and public sectors, labor and management, education and business."

Sixty management staff members, divided into six working groups and known as the Strategic Management Planning Team, have been chosen to help create the plan. "During the first six months, the focus will shift back and forth between the Strategic Management Planning Team, the Port's Executive Management Team and the Port Commission as we zero in on the Port's mission and objectives," said Mr. Lynn Taylor, director of Harbor Development and Relations and Strategic Management Plan coordinator.

"In the last six months, our focus will shift to the Port's external constituencies — our customers, citizens of the Port District as well as the region, organized labor, government officials and others — as we seek their ideas about our draft mission statement."

(Tradelines)

Record Container Growth at Charleston

The Port of Charleston has marked its fourth fiscal year of record container growth.

"The Port of Charleston's throughput of containerized cargo for Fiscal Year 1989 totaled 6.16 million tons," announced Mr. W. Don Welch, executive director of the South Carolina State Ports Authority. "The increase of 1.26 million tons represents a growth rate of 25.7 percent over the previous year and is largely reflective of the excellent growth enjoyed by the established lines in Charleston."

On June 30, the South Carolina State Ports Authority ended its 1989 fiscal year. This marks the fourth consecutive year that the Port's container tonnage growth rate has exceeded 20 percent. The compounded rate for the last four years is 115 percent for growth in container traffic.

"These tonnage figures not only indicate our success as a container port," said Mr. Welch, "but also the soundness of the Port's planned and phased growth program." Planning at the Port is geared to bringing new facilities on-line as the market requires.

Currently the Port has a \$17 million expansion project underway at the

North Charleston Terminal and a \$15 million renovation project in progress at the Columbus Street Terminal. Completion of the Wando Terminal, authorized in May 1989, will add 2.2 million tons of container capacity and include a fourth container berth and a second container freight station. An entirely new terminal is being planned which will accommodate growth into the next century.

In the Forefront Of Transportation EDI

By Marion Bull

A milestone in electronic data interchange (EDI) has been reached in Charleston with the recent computer interface between the U.S. Customs Service's Automated Manifest Systems (AMS) and the Port of Charleston's ORION system. The new service brings about a level of cooperation and access to information unprecedentated in U.S. ports.

The new combined systems will give parties involved in the transportation of cargo (carriers, brokers, Customs and the SPA) all the benefits of the localized ORION System while simultaneously participating in AMS.

The ORION System is the Port of Charleston's local, on-line, real-time, computer system used to direct and control the movement of cargo through its facilities. AMS is the national Customs automation effort which allows for national electronic filing of manifests and clearance of the cargo on those manifests.

As a result of its initiating national automation, Customs is stressing participation in AMS for all cargo movements, even to the point of stating that cargo of steamship lines participating in AMS will be released more quickly than cargo carried by lines not involved in AMS.

Therefore, in order to guarantee expedited movement of cargo, a line must participate. However, many lines, particularly smaller lines, cannot afford the computer systems necessary to directly connect with AMS. The Port of Charleston has agreed to shoulder the responsibility of interfacing those lines with AMS, using the ORION System.

THE PORT'S ROLE: "The Port of Charleston is excited about the marriage of the Port's ORION and U.S. Customs' Automated Manifest Systems," said Mr. Thomas Wilcox, SPA manager — information services.

"ORION has been an excellent local system and has been an effective tool for our customers to expedite and control the movement of their cargo through the port. But as Customs places more and more reliance on their own national automation efforts, a local system, built on local criteria, is no longer sufficient. To continue to serve our customers we need to offer a system that includes both specific cargo movement features unique to our Charleston community and access to the national system for cargo clearance," he said.

"We see this as one way we can help our customers as they make the transition from the requirements of the 1980s, which were addressed very well by the original ORION System, to the new demands of the 1990s, which will be addressed equally well by the integrated capabilities of ORION and AMS," he said.

Mr. Robert Stokes, who designed and programmed the interface for the Port, also had praise for the original ORION system and for the interface. "The coupling of ORION and AMS means that our users will now have the best of two worlds - all the current benefits of ORION and the new enhancements of AMS. The design and coding to provide this service was very However, involved. because of **ORION's** current capabilities, the task was less complicated than it might have been."

Under the previous system, carriers wishing to utilize the national AMS would have to interface directly with Customs' computers. This requires technology generally available only to the larger carriers, those the size of Sea-Land, Maersk and OOCL. The smaller carriers were not able to utilize AMS without the costly computer hardware needed to participate. The Port of Charleston, already possessing ORION hardware, agreed to provide the interface at no charge to the carriers.

HOW IT WORKS: The new process will work like this:

As of April 1, 1989, all carriers were required to adapt their manifests and bills of lading to comply with the AMS format. This means that all bill of lading numbers must be unique within a 3-year period and carry a four-letter SCAC code prefix name for the carrier. Customs will levy fines against those not complying.

The companies already linked to AMS will have no changes. Those lines wishing to participate in AMS through the Port must continue to submit their manifest to the Port, as they already do for ORION. The line must then notify the port, in writing, that it wishes that information to be entered into AMS on its behalf. The manifest will then simultaneously be entered into both systems, saving valuable time and duplication of effort.

CUSTOMS: The U.S. Customs Service introduced Automated Commercial Systems (ACS) in 1982 as its own computerization effort. AMS is but one part of ACS, which is the overall national plan for the computerization of Customs.

Ideally, says Customs District Chief Inspector Ty Bowers, Customs would like everyone to utilize AMS. But, some lines cannot afford the equipment to hook-up directly with AMS.

"The interface will allow those lines that are not able to participate in AMS, to be a part of AMS through the SPA," said Mr. Bowers. "That will be good for Customs, good for the Port, and good for the carriers.

"By June of this year, we should have 90 per cent participation in AMS and 90 per cent participation in ABI at the Port of Charleston — far ahead of all other U.S. ports," Mr. Bowers said. ABI stands for Automated Broker Interface, another part of Customs' national computerization effort designed to assist in the submission and reception of entry papers by computer rather than on paper.

LINES, AGENTS AND BRO-KERS: The Charleston waterfront community is extremely excited about the ORION/AMS interface. Even the larger steamship lines that already have direct access to AMS are supportive, because the interface reaffirms the SPA's commitment to quality service to its customers — something from which all lines benefit.

"We are committed to making the Port of Charleston a 'shining star' among ports with our cooperation in this field of electronic communication," said Ms. Bonnie Ackerman of Sea-Land.

Ms. Sharon Fitzgerald, of OOCL and president of the Charleston Steamship Council, added, "The cooperative spirit of all the different groups involved makes this system unique among ports, and makes the Port of Charleston unique. It is a great benefit to all the Port's users."

Mr. Richard Simpson, manager of W.G. Carroll Co., emphasized the benefits of the interface to the smaller lines. "The smaller lines should take advantage of the interface. There's no reason not to participate with AMS now. The interface offers the smaller lines everything to gain and nothing to lose." (Port News)

US President Signs Puyallup Settlement Bill

President George Bush has signed a bill that authorizes the federal government's participation in the \$162 million Puyallup Settlement Agreement. President Bush's signature is one of the final steps in a five-year process to clear the way for development at the Port of Tacoma by lifting claims by the Puyallup Tribe of Indians to hundreds of acres of land in Pierce County, Washington. President Bush signed the bill on June 21, 1989.

Port of Tacoma Commission President Jack Fabulich said, "I am delighted at the prospect of finalizing this agreement and moving forward. This settlement will allow the Port of Tacoma and the private property owners of Pierce County to meet their full economic potential."

The settlement will clear the way for the expansion of Sea-Land's terminal at the Port as well as providing funds for the widening and deepening of the Blair Waterway in the heart of the Port.

President Bush's signature followed unanimous approval of the authorization by both the U.S. House and Senate and the State of Washington. The only remaining step needed to complete the process is the appropriation of the \$77 million federal share of the settlement. Washington Congressman Norm Dicks has said that he is hopeful the appropriation process can be completed this year.

The first step in that process was recently taken when the House Interior Appropriation Sub-committee approved the federal share.

Africa/Europe

Port of Helsinki in Profile

Four hundred and thirty-nine years is a long time to look back on. Much has taken place in the time since King Gustavus Vasa of Sweden founded the city and port of Helsinki in 1550; the port has been moved to a new site, new harbour areas have been built, cargo handling has become mechanised, computers have arrived to handle invoicing, etc. A harbour can never claim to be complete, and Helsinki is no exception — development and new building work are going ahead all the time.

The Port of Helsinki Authority is a municipally-owned body, the capital investments of which are covered from income derived from harbour services. The City of Helsinki is thus responsible for the day-to-day running of the port: the Port Authority sees to the technical and operational development of the harbour, maintains the necessary harbour services, and supplies crane-, vessel-, and warehousing services. Private companies attend to stevedoring work and have their own warehousing facilities.

The Port of Helsinki is developing into a harbour specialised in general cargo traffic. The main hinterland covers the Greater Helsinki area and the main railway line north as far as Hämeenlinna, even up to Tampere. The port is situated in the most densely populated area of the country, producing around one-quarter of Finland's annual output.

The Port of Helsinki has excellent transport connections inside Finland and with destinations abroad. Liner connections link up the port directly with the harbours of more than 40 countries. Vessels depart weekly for our major market areas, and for the most important ports there are even daily sailings.

Helsinki is Finland's largest general cargo import harbour, the largest container port, and the leading passenger harbour. The overall cargo traffic through the Port of Helsinki in 1988 was 7.9 million tons, with imports accounting for 4.5 million tons, exports for 2.2 million tons, and coastal traffic for 1.1 million tons. A total of 2.95 million passengers passed through the port.

The Port of Helsinki is renowned for its operational efficiency and reliability. With its consistently high standard of equipment and services, the port is geared to meet the demands of modern seaborne trade and the handling and warehousing of goods. The Free Zone, with sheds and storage areas, operates in principle as a free port.

A skilled staff and a healthy attitude to the value of good service are two of the Port of Helsinki's best competitive attractions.

Port Administration

The Port of Helsinki is one of 30 municipally-owned harbours around Finland. The City of Helsinki is responsible for the upkeep and development of the port, and executive management is in the hands of the Port Authority.

The Harbour Committee oversees the operations of the Port Authority. The Harbour Committee consists of nine members elected by the City Council for a four-year term. Each regular member has a deputy. The election is carried out such that the members and their deputies reflect the political balance pertaining within the City Council itself. A City Board representative also participates in Harbour Committee meetings.

The Port Authority

The Helsinki Port Authority is a municipally-owned and self-supporting utility, which primarily serves the interests of customers involved in foreign trade in the Greater Helsinki area and Southern Finland. The Authority's function is to offer competitive harbour services for a port specialising in general cargo- and passenger traffic.

(Port of Helsinki Handbook 1989)

Rouen: Big Increase in Private Investments

The competitiveness of the Port of Rouen in the export of food and agricultural produce is well known. It is by far Europe's number one port for grain with over 9 million tonnes expected to be exported this year. It is also the world's top wheat port. Rouen also exports over one million tonnes of flour and sugar annually.

The working methods which are Rouen's strength in the food and agricultural sector are also applied to other kinds of traffic such as primary energy (coal and petrolelum products), half a million tonnes of forest and paper products a year (wood, raw material in the paper industry and board) and regular lines (containers and general cargoes) to numerous countries the

HHLA Reports Record Handling at Hamburg

From both the handling and returns points of view 1988 was a highly positive year for HHLA following a difficult period. Despite continuing strong competitive pressure the company moved 10,788,000 tons of cargo, a new record in HHLA history.

"Even more significant, however," as Board Chairman Senator a. D. Helmuth Kern stressed, "is the fact that compared to the preceding year the operating result increased by 30 million DM. This meant that the HHLA was not only able to pay off the 6.5 million DM loss carried over from 1987, but also to reduce by 10.9 million DM the advance of some 16 million DM allocated by the City as a competition adjustment."

Senator Kern emphasised that the consistently implemented consolidation measures of the past years, following the years 1986 and 1987 which were still marked by considerably negative operating results, have for the first time taken full effect and led to the clear rationalisation results striven for. This was all the more remarkable because the handled cargo growth of 9.3 percent brought about in the turnover yields only a rise of little more than 1 percent. This underlined the fact that the improved operating result was mainly achieved through expense-reduction measures in all the company and central departments, and that with its consolidation concept the HHLA is on the right road.

One precondition for the resultant success was consistent adaptation of

world over.

In the intense competition between ports Rouen is implementing an ambitious three-part investment programme worth 950 million Francs.

The first part of the plan involves improvement of land-based transport facilities. The maritime freeway is to be linked to the future motorway bypass to the west of Rouen thus enabling the Port to strengthen its privileged situation inland.

Secondly, the seaway access to the port is to be further upgraded to improve the volume of cargoes that can be loaded onto ships.

the labour force to the permanently progressing structural change in seaport business. In addition to this, however, a noteworthy reduction in effective costs, in particular those concerning maintenance and materials, also contributed to the positive outcome.

Senator Kern underlined that the average quantity growth was predominantly accounted for by container handling which, with an increase of 12.8 percent, was clearly above the port average. In 1988 a total of 838,861 TEUs amounting to 8.4 million tons were handled via the HHLA terminals. At HHLA therefore containers have already reached a handling share of 78 percent. The importance of containers is intensified further by the spin-off business connected with them.

The other business sectors also developed favourably. For instance fruit handling rose by 5.3 percent to 621,000 tons, the "forest products" field, mainly paper and cellulose, increased by 2.7 percent to 526,000 tons, while rolling traffic with an overall figure of 738,000 tons even showed a 20.4 percent growth.

The goods throughput quantity in the company division Storage and Distribution was, at 238,573 tons, below the preceding year's level. The reason for this is the targeted abandonment of deficit businesses. This has clearly improved the results situation.

In accordance with the consolidation concept, the number of staff was further reduced in 1988, although in the year under review it also proved possible to avoid dismissals resulting from operating conditions.

As of 31st December, 1988 the active staff totalled 2,761, which was 305 fewer than on 31st December, 1987.

The third aspect of the plan is to continue the concentration of port traffic into specialized terminals endowed with the most efficient equipment. This policy of concentration, which is already underway for sugar, flour and liquid bulks is already bearing fruit and has enabled a reduction in the costs of handling goods and shares of the market to be gained. The concentration programme will be speeded up in 1989 with the Grand-Couronne port zone for containers and general cargo on the one hand and food and agro-industrial products on the other hand, and the Rouen-Quevilly Forest Products terminal.

Port investments are accompanied by considerable private sums committed by the partners of the port and especially industrialists established in its different industrial zones. Taking the chemical-petrochemical sector as an example, in just four years investments have totalled over 1,500 million Francs putting Rouen firmly among the most sought-after sites in Europe. (Rouen Port)

Holland's 1st Private Port Authority Created

Holland's first private sector port authority was created in early April when Transport Minister Neelie Smit-Kroes signed the act of transfer which created Zeehaven IJmuiden NV. Formerly the Dutch State Fishing Port at IJmuiden (Staatsvissershavenbedrijf), the set-up is owned by about 150 port companies and local and regional authorities.

Head of the new limited liability company is Mr. Leo Jansen, who has years of experience in the fishing industry, while Mr. Ernst Kip is in charge of day-to-day operations.

Zeehaven IJmuiden NV is the result of years of negotiations between the government and the private sector fishing industry. Capitalized at F15 million, the port authority has already begun an investment programme to improve the infrastructure. The port basins have already been deepened and the entrance is being widened to accommodate larger vessels.

Aside from fishing vessels, IJmuiden also handles offshore supply vessels, and a daily ro-ro service to the East Coast of the U.K. is due to start up soon.

(Haven Amsterdam)

Rotterdam: Added Value of Port Operations

A study conducted by the Rotterdam Municipal Port Management reveals that the added value of the port operations in Rotterdam amounted to about 12 thousand million guilders in 1987. This added value is the value that is added to the goods handled in the port; in other words, the difference between the input and the output of the port companies. This value is a yardstick of the region's contribution to the national income.

Almost half of the added value in 1987 - 5.5 thousand million guilders - was generated by oil refining and the chemical industry. The stevedoring companies contributed 1.6 thousand million guilders, and oceangoing shipping 1.1 thousand million. The remainder of the added value came from hinterland transport (0.7 thousand million guilders), the storage and distribution companies (0.2), intermediaries (0.7), shipbuilding and repairs (0.5) and other sectors (1.6).

(Port of Rotterdam Magazine)

Smit Fire Team Saves Cocoa Bean Cargo

A team of fire fighters and scientific experts from Rotterdam-based Smit* Fire and Loss Prevention (SFLP) has successfully extinguished a burning stockpile of 23,000 tonnes of cocoa beans in a warehouse situated in the city's Eemhaven district.

The huge stockpile first caught fire on May 31. The blaze was brought under control by the Rotterdam Fire Service. However, the cargo owners commissioned SFLP to monitor temperatures round-the-clock, deal with developing "hot spots" and minimize the loss in this valuable shipment believed to be worth some £25 million.

SFLP's Aad van Wijngen says: "This was a very big fire, large enough to prompt the Rotterdam Fire Department to put their Major Alert Response Plan into action. It appears the blaze started during a welding operation. The fire brigade soon had the situation under control, but the spread of damage due to deep-seated smoldering was, in some ways, far more difficult to deal with."

One problem was the sheer size of the stockpile of cocoa beans. It consisted of 65 kg bags stacked 12 m high over an area measuring 100 m square.

The SFLP team slowly gained the upper hand, despite outbreaks in the deepest hot spots. Access ways were excavated and a network of tempermonitors ature was positioned throughout the stockpile, in order to provide early warning of further smoldering.

The team's patience was rewarded on June 26 when the stockpile was declared totally safe and free of smoldering.

Mr. Aad van Wijngen adds: "With such high value cargoes, a great deal can be done to minimize the cargo owner's loss. In this case, our first days on site were very difficult. Conditions



View of fire-damaged stockpile of cocoa beans in a Rotterdam warehouse.

were extremely poor and oxygen values very low in the 12-m-deep clearways excavated through the stockpile. However, tenacity is very important in this business and we saved the cargo at the end of the day."

* SMIT INTERNATIONAL is an Associate Member of IAPH.



SFLP expert carries out a detailed examination of fire-damaged cocoa beans.

Lisbon to Proceed with **Structural Changes**

Having been ruled by the same law during 40 years, the Port of Lisbon Authority is now proceeding to deep structural changes in its management policy so as to achieve a better performance in the port services.

New decree-laws have been published in order to allow the Portuguese ports to establish a new model, a new philosophy, in short, a new management.

It is the turning over of a page in a model that, due to the inadequate and stifling legislation, end up without efficiency, competitiveness and credibility.

The new Personnel Statute, with a whole set of deep and significant changes, made it possible to increase the port operations performance.

Now that some of the essential tasks to put into practice the Personnel Statute are done, such as the Services reorganization, everything points to new institutional potentials in 1989.

A new organization chart was then designed, with modern characteristics, giving the functional matrices more dynamism and efficiency. An up-todate, competitive and enterprising port is now emerging on the Western natural quay of Europe.

Gothenburg: Port-linked Cargo Terminal Planned

Plans for an independent cargo terminal complex close to the Gothenburg container harbour have been announced by the Port of Gothenburg and the Swedish construction and real estate company Z-Bygg.

The terminal, called Terminal 2000, will be located outside the port area but linked to the Skandia container harbour by an exclusive truck road.

According to plans, the terminal complex will be financed and erected by a special company that will also provide base functions like maintenance, security, data and tele systems, et al. Companies involved in forwarding, haulage, and storage will be invited to lease facilities in the terminal complex and to operate under their respective company identities.

The benefits of the terminal complex are several. Many independent cargo terminals at Gothenburg need more space, and the 300,000-square-metre capacity of Terminal 2000 could be a solution here. Also, these terminals are widely scattered over the city, which leads to a lot of irrational lorry traffic, especially since containers and trailers are often stuffed or stripped at two or three different terminals. This is a very important factor at Gothenburg; a government investigation has called for a more rational distribution of cargo terminals there, since the present situation leads to heavy air pollution.

The Port of Gothenburg AB will have no shares in the terminal company, but by contract the Port will have an influence on the project. The strategy behind the Port's involvement in the terminal is that a complex like this is bound to attract more cargo to the port; this would lead to more frequent sailings; and more frequent sailings will give Gothenburg an advantage in the feeder traffic sector to match the one it enjoys in the field of direct-calling ocean liners.

Despite its name, Terminal 2000 is planned to start operations in 1991. So far, agreements have been signed and plans have been passed by the local authorities.

Agreement Reached on Cardiff Development

Cardiff Bay Development Corporation and ABP announced that, following detailed negotiations, the basis of a joint development agreement has been established for the development of about 160 acres of land owned by ABP within Cardiff Bay.

The Corporation, established in 1987, is charged with the regeneration of a large area of South Cardiff and Penarth. By creating the opportunities for a mixed development of quality it should be possible to create some 30,000 new jobs over the next 10 years or so.



Gothenburg, Copenhagen Linked by Hovercraft

The Super Swede, seen here taxiing out of the Port of Gothenburg, is a new catamaran hovercraft that is now linking Gothenburg with Copenhagen. The voyage takes about three hours. The passenger-only vessel can take 310 passengers; a twin vessel will be commissioned in August or September this year.

A prime objective of their strategy is to re-unite the fine City Centre of Cardiff with its waterfront, now semiderelict: much of that waterfront is owned by Associated British Ports and accounts for a substantial part of the land which is subject to this important development agreement.

ABP will retain the ownership of the land but will contribute to infrastructure costs and share part of the eventual development profits with the Corporation. The discussions between the Cardiff Bay Development Corporation and Associated British Ports have taken place in the context of complex relationships between development opportunities and the operational requirements of the working docks at Cardiff.

The land to be developed will be released by ABP from operational uses, but ABP's adjoining Roath and Queen Alexandra Docks will remain fully operational.

The Development Corporation and the local Authorities, as well as ABP itself, see the retention of these operational docks as important, not only for their commercial and employment contribution to the area, but also because the movement and presence of shipping contributes much to the sense of vitality in an area that has been largely neglected for so long, but where the prospects for new investment and development are now so exciting.

Commenting on the proposed joint. development agreement, Sir Keith Stuart, Chairman of Associated British Ports Holdings, said, "ABP, as a major ports and property company, very much welcomes the opportunities which are now opened up at Cardiff for the progressive development of our land holdings, within the context of a mutually acceptable agreement between the Development Corporation and ABP. The ABP Group is amongst the foremost waterfront developers in the country and through our subsidiary Grosvenor Square Properties we will be able to respond positively to the opportunities created within Cardiff Bay. With the proposed Cardiff barrage offering the prospect of a most exciting environment, I have no doubt that the joint commitment and skills of the Cardiff Bay Development Corporation and ABP can achieve a transformation of the Cardiff waterfront area."

Asia/Oceania

Port of Brisbane in Profile

A Total Port

No other port in Australia handles a great diversity of cargo in the volumes now being processed by the Port of Brisbane.

Which is not surprising ... Brisbane (Queensland) is the natural geographic outlet for one of the world's richest and most productive agricultural regions — an area covering many thousands of square kilometres, and extending into the adjoining state of New South Wales.

Depending on seasonal conditions, large quantities of grain (up to 2.5 million tonnes) and meat (about 250,000 t.) flow through Brisbane. Coal also has become a very significant export item and, given favourable marketing conditions, is expected to be

Cement Importation Facility for Southampton

Blue Circle Industries (BCI) has reached agreement with Associated British Ports to establish a new deepwater, bulk cement importation facility at the port of Southampton.

Work was completed in May on purpose-built storage and distribution facilities at Berth 108, capable of handling up to one million tonnes of imported cement annually. Regular shipments of 30,000 tonnes will be self-discharged, helping BCI serve an increasing demand for cement in the south of England.

"The port is ideally placed for our business and capable of handling large volumes and large ships," said Mr. John Summerbell, BCI's General Manager (Southern Region).

Port Manger, Mr. Andrew Kent, stated: "We look forward to a long and successful association with BCI. Southampton's physical advantages particularly suit such bulk trades and we are keen to expand the port's business further in this field." measured in excess of 3 million tonnes in the near future.

Since the establishment of the original settlement in 1824, and the free settlement in 1848, the city has developed on both sides of the river.

The bay-port concept (as opposed to the original river-port) was first envisaged in a strategic plan that evolved in the early 1970's. The plan grew from a need to overcome operational problems (related to growth and expansion needs, dredging, navigational costs and transport congestion).

With the impetus encouraged by the newly improved port conditions, Brisbane's trade growth has soared by about 58% since 1982/83. It now sits at 14.2 million mass tonnes, having climbed substantially over five consecutive years of record tonnages.

The port's post-war trade patterns have changed considerably. The growth of the Japanese economy provided a big market for Australian minerals. Further, the British entry into the European Economic Community in 1973 led to a substantial reduction in rural exports to the more traditional markets. Exports to Britain declined from 15% (of trade) in 1973 to less than 1% by 1988. Japan has grown from being one of Brisbane's smaller trading partners to a country that is responsible for more than 40% of the cargo tonnages (excluding oil products) moving through the port.

Rich coal deposits in the Ipswich district (near Brisbane), are the source for more than 2 million t. of coal a year, exported mainly to Japan. Most of it reaches the Fisherman Islands' bulk export terminal by rail but a substantial quantity is barged 80 km. downstream (via the Bremer and Brisbane rivers).

River trade in such things as coal, sand and gravel amounts to about 2.8 million m.t. a year. Thus, the port's total cargo movement for the year 1987/88 totalled 17,053,900 m.t. Expectations are that this figure will exceed 18 million m.t. for the 1988/89 trading year.

Corporate Goals

The Port of Brisbane Authority began to function as an independent body on December 6, 1976.

The Authority operates according to the terms and conditions set out under its enabling legislation, THE PORT OF BRISBANE AUTHORITY

ACT 1976-1987.

The customer of the Port of Brisbane Authority is "the port user" — a definition which covers a multitude of activities, professions and industries, all of which require widely differing functions and services from the Authority and its staff.

Thus, the Authority's overriding corporate and professional mission is to ensure that the port has reliable and economic facilities which are worked to peak efficiency.

Main objectives: Basic to its decisions in relation to port development is the need to create and encourage a trading and operational climate that will enable shipowners, stevedores, consignees and consignors to maximise cargo throughput, thereby creating employment, and to achieve profitability for their various business enterprises.

Towards these ends, the Authority acknowledges that its main responsibilities are to: --

• encourage the use of the port to its maximum capacity for the economic benefit of the port and its hinterland, and the people so served;

• market and promote the economic, geographic, and other advantages of Brisbane as a port;

• provide adequate harbour facilities and develop new installations, as and when necessary, ensuring that all facilities are adequately managed and maintained.

Other duties: The Authority's control also extends to the following list of duties: —

• regulate and manage port traffic, lands and services in the Authority's area of influence, which includes Moreton Bay (from Caloundra Head to Beenleigh, latitude 27 41s) and the waterways flowing into the bay;

• guide the operation of, and provide management for, small boat harbours;

• the leasing of Crown land (both above and below high water) where such (dry) land is contiguous to the waterfront;

• permit the construction of private jetties/wharves and grant formal tenure thereon;

control and clean up oil pollution of the river, the bay and all tidal creeks;
Manage and control some public

jetties, and certain mooring areas.

(The Port of Brisbane)

New Berth Completed At West Swanson Dock

The construction of a new berth at West Swanson Dock, one of the Port's major overseas container terminals, has been successfully completed.

The completion of berth No.4 at Conaust Ltd.'s terminal will enable the facility to handle the significant trade growth expected in the next decade.

The project, which comprised the construction of a 180-metre-long wharf extension and associated dredging, was completed on schedule and at a cost of \$8.75 million, about \$1.75 million under the forecasted budget.

The PMA initiated the project in December 1987 after Conaust Ltd., the cargo and materials handling division of P & O Australia Ltd., approached the Authority seeking a 180-metre extension to the existing berthing facilities at West Swanson Dock.

In March 1988, the PMA agreed to finance and construct the wharf extension and to carry out the necessary dredging. Construction work was carried out by both PMA and contract labour and dredging was completed by using the PMA Floating Plant, including the Bucket Dredge *AS Mayne* which was recommissioned for the project.

Manager of the West Swanson Dock project, Mr. Ross Donelly, said: "The construction of the berth falls in line with the PMA's berth rationalisation program which is aimed at utilising berths more efficiently so as to reduce maintenance and operating costs."

PMA's Acting General Manager, Mr. Des Powell, said: "The spirit of cooperation that has existed throughout the course of this project must be acknowledged.

"The successful completion of this project on time and within budget demonstrates the ability of the PMA to react quickly to market forces by providing appropriate new facilities in order to maintain Melbourne's position as Australia's major port.

"It illustrates the Authority's capacity to coordinate projects of this nature with a high standard of technical excellence.

"This project also demonstrates a willingness to participate in joint activities with private enterprise which will benefit the economic growth of Victoria." (Panorama)

Port of Melbourne: Beach Renourishment

Ever increasing numbers of Victorians, together with interstate and overseas visitors, enjoy the benefits offered by the beaches of Port Phillip Bay.

The recreational resource offered by these bayside areas is continually threatened by the natural effects of wind and waves, requiring human intervention to restore and preserve beaches for future generations.

Traditional methods of protecting cliffs and foreshores from erosion by the elements was to build sea walls and associated groins to reduce the destructive action of waves and slow the movement of sand. However, the subsequent slowing of cliff erosion led to a reduced natural supply of sand, and beaches steadily diminished.

The Port of Melbourne Authority, with funding from the State Government, now manages a Beach Renourishment Program which successfully reconstructs these beaches for the community at large.

The technique for beach renourishment begins with sand being dredged and transported to an eroded foreshore area. This process is carried out by dredgers using suction to collect sand from suitable deposits in the Bay. The sand is pumped onto the foreshore and aligned using earthmoving equipment to a scientifically-designed profile, ensuring maximum resistance to the effects of the elements.

Another important factor in minimizing erosion is the selection of correct grades and quantities of sand for each area.

The results are wide and sandy beaches with natural off-shore buffers to ensure they remain in place for many years. Several of the Bay's beaches have already benefited from the Beach Renourishment Program. These include beaches at Elwood, Geelong, Rosebud, Sandringham.

Blairgowrie, Brighton, Portarlington, Williamstown and Mentone. In total, 18 areas have received almost 20 kilometres of renourished beach at a cost of \$4.2 million. The ongoing program of Beach Renourishment is a valuable contribution to protecting the natural resource of Port Phillip Bay, ensuring its continued recreational use for decades to come.

Melbourne Set to Host 1991 Race to Osaka

Competitors are gearing up to compete in the "Yamaha Osaka Cup," the second Melbourne-to-Osaka Double-Handed Yacht Race, which will take place on Saturday, 23rd March 1991.

The yachts will sail from the Port of Melbourne to the Port of Osaka in Japan, a distance of 5,500 nautical miles. The race consists of two legs, the first within Port Phillip Bay, and the second leg from Portsea to Osaka. It is the only yacht race in the world that crosses the Pacific longitudinally.

The Port of Osaka has a "Sister Port Agreement" with the Port of Melbourne, to enhance the existing friendly relations and further contribute to the prosperity of both ports.

The race is planned by the City of Osaka, sponsored by Yamaha Motor Co., Ltd. and organised by the Nippon Ocean Racing Club with the cooperation of the Sandringham Yacht Club.

The objective of the race is to promote a challenging long-distance, shorthanded racing event that transverses the Pacific Ocean, and which provides a proving ground for true seamanship. It is also designed to encourage the development of suitable seaworthy yachts, with appropriate gear, supplies and techniques for short-handed crossing under sail.

The first race which took place in 1987 commemorated the 120th anniversary of the Port of Osaka and was a resounding success, attracting 64 starters from 7 nations. The gruelling course took its toll and eventually 46 yachts passed the finish line. The yacht "SDC Nakiri Daio" crossed the line first in a time of 31 days, 19 hours and six minutes.

Councillor Trevor Huggard, Chairman of the Melbourne Committee, said, "We are very pleased to be associated with the yacht race, and with Osaka which is our sister city."

"I was involved with the first race when I was the Lord Mayor of Melbourne, and as I am a keen yachtsman it's very gratifying to play a continuing role in such an exciting event," he said.

Mayor of Osaka, Mr. Masaya Nishio, said, "It is my firm belief that race will not only promote friendship and goodwill between Melbourne and Osaka, but will also contribute to the advancement of sailing techniques and mutual understanding among yachtsmen and citizens."

He said, "I would like to extend an invitation to yachting enthusiasts from around the world to participate in the Yamaha Osaka Cup." (Panorama)

NSW Meat Direct to Japan from Sydney

A second shipping line has opened the huge Japanese chilled meat market to NSW producers by providing a direct service from Sydney to Japan.

The Ministers for Transport and Agriculture, Mr. Bruce Baird and Mr. Ian Armstrong announced that as a result of talks between the Maritime Services Board and Parkes and Forbes councils, the Bridge Line had agreed to schedule three direct shipments of chilled meat from Sydney to Japan each month.

Previously, Bridge Line ships made Sydney one of their first Australian calls and proceeded to other ports, such as Brisbane, before sailing to Japan.

This eliminated NSW ports from the chilled meat trade the Japanese purchasing authority set a limit of 35-40 days between slaughter and consumption.

Abattoirs that did supply this trade were forced to ship exports through ports such as Brisbane - incurring an additional land transport cost of \$1,500 per container.

The ministers said Bridge Line ships had the capacity to carry up to 150 containers of chilled meat on each 13-day voyage.

"This service opens an enormous trade opportunity for the NSW meat industry," the ministers said.

"New and updated export abattoirs at Macksville, Forbes, Narranderra and Goulburn will be able to serve one of the biggest markets in the world via NSW ports."

MSB Raises Fees for Boating in NSW

The Maritime Services Board announced increased fees for recreational and commercial boating in NSW.

The increases cover boat registration, licences, public moorings, maior aquatic events, surveys and examinations.

The General Manager, Mr. Les MacDonald, said these were the first increases since 1987 and had been set to begin the process of recovering costs and reflecting true market values of the services provided.

Mr. MacDonald said proposals to increase fees had been supported by Dr. Stewart Joy in his review of the MSB.

Details of the increases are:

Boat Registration Fees: to rise by \$5 to \$38 in line with the 20 per cent rise in the CPI since the last increase. All mechanically-propelled vessels capable of 10 knots or more, sailing craft nine meters or longer PLUS all vessels occupying moorings or wet berths must be registered.

Revenue from registration charges is used to provide improved facilities for the boating public.

Mooring Occupation Licences: In keeping with recommendations of Dr. Joy and the Leach Committee, these fees are to rise to more accurately reflect current market values. In his report last year, Dr. Joy said market forces could allow increases of up to fivefold beyond current levels for Sydney area moorings. The Leach Committee Majority in both majority and minority reports recommended increased charges.

The existing two category fee system - one fee to cover Sydney and Pittwater and another to cover the remainder of the State – would continue. The annual rental of a mooring for a 10metre vessel on Sydney harbour or Pittwater would be \$300, compared to \$150 previously.

The annual rental for a vessel moored on other waterways would be \$160, compared to \$80.

A charing system for moorings leased to commercial operators and clubs would also be simplified. Increases of a similar magnitude would apply to these moorings.

Commercial Vessel Fees: Significant increases in commercial vessel survey fees will also be introduced. Survey fees remained static between 1901 and 1987 when they were set at levels providing only 10 per cent of recovery of the cost of service. The new fees will lift cost recovery to 20 per cent. A review of the Commercial Vessel Survey requirements has commenced and this will result in significant cost savings

for vessel surveys.

Examination Fees: the MSB issues certificates of compentency for various marine occupations. A flat fee for written or oral examinations would replace the existing 'per test' system. However, the individual exam system would remain available for interstate or oversas applicants requiring certification in only one subject.

Fiji Set to Attract Transshipment Cargo

In an effort to increase cargo throughout at its ports the Ports Authority of Fiji with the assistance of the overseas shipping lines is embarking on a drive to attract more transshipment cargo to Fiji's ports.

Whilst a certain amount of transshipment cargo consigned to other Pacific Island Ports have been handled at Suva and Lautoka in the past, the Authority's marketing strategies indicate that with more attractive tariff rates, efficient cargo handling and safe and secure operations, importers in Pacific Islands will be encouraged to ship their cargo through Fiji's ports.

As an inducement, transshipment cargo will be exempted from all charges except for stevedoring and only part of port charges.

PAF hopes that the expected increase in cargo tonnage will enhance job opportunities for the Authority and Shipping Agents' casual employees.

The rebates granted on transshipment cargo if the first carrier brings in the inducement volume or more than required minimum volume to qualify for the concession.

- The concession:
- (1) Wharfage
- (2) Security of Cargo Free 50%
- (3) Port Charges
- (4) Handling-Removal Free
- (5) Cargo Storage Free (for period specified in PAF Tariff)
- The minimum volume are:-
- (1) Containerise 25 TEUs

100 freight tonnes (2) Conventional The Transshipment Cargo:

Means cargo entered on a ship's manifest as consigned to enter another port and which are unloaded and reshipped without leaving the control of Customs while in a port in Fiji.

(WAVU)

Free

Iran Planning Free Port to Rival Dubai

Iran is reported to be planning to turn its southern port of Chabahar into a free port that will challenge Dubai.

The move is aimed at saving foreign exchange for Iran by cutting out middlemen in Dubai, the main regional export centre for Iranian goods.

Chabahar lies on the coast of the Gulf of Oman, about 130 kilometres west of the Pakistan border.

The Islamic Republic News Agency said the Iranian cabinet gave the goahead to the plan, and that the harbour and roads had been upgraded to make it one of the country's major ports.

Iran hopes to turn Chabahar into a type of giant supermarket, to boost revenue currently going to Dubai. The government plans to set up facilities similar to Dubai's, retaining the value-added profit of storage, packing and loading. (*Gray Mackenzie News*)

Development of Indian Ports

Recommendations of ASSOCHAM's Seminar

(Reproduced from 'Indian Shipping,' Journal of Indian National Shipowners' Association)

A National Seminar on Shipping, Ports and Containerisation organised in New Delhi recently by the Associated Chambers of Commerce and Industry of India (ASSOCHAM) emphasized the urgent need for strengthening the country's shipping and port infrastructure in view of the challenges of the coming years in the sphere of country's foreign trade, particularly those of stepping up exports at a much more rapid pace than hitherto.

It was a more or less unanimous view that the development as well as the operational efficiency of our ports has left much to be desired.

The development had suffered primarily because of resources constraints. Excess workforce, low productivity, obsolete equipment, among other factors, contributed to operational deficiencies, particularly in so far as containerisation was concerned.

Consequently, costs had been escalating. If our shipping infrastructure is to be made competitive, efficient and viable, it is imperative that our ports are improved on a par with their foreign competitors.

The Seminar in its four sessions deliberated on topics which include: Modernisation and Development of Ports in India – Current and Future Priorities; Containerisation and Intermodalism in the Indian Context; Legislation affecting shipping and ports in India and need for reappraisal and Port Labour Productivity and costs in Indian Ports. The Seminar was inaugurated by Shri Rajesh Pilot and presided over by Shri Viren J. Shah, Alternate president of ASSOCHAM.

Following are the recommendations (extracts) that emerged on specific issues discussed at the Seminar.

Modernisation and Development of Ports

Autonomy

The present situation in which our major ports are treated as a subordinate wing of the Ministry of Surface Transport, should be corrected through grant of full autonomy to the port managements in regard to fixing of tariff rates, both relating to vessels and cargoes. At the same time, Port managements should be made fully accountable for their decisions.

Capacity of Ports

It was noted that our ports suffer from capacity utilisation problems. The capacities at most ports have been stretched to the limit. In programming capacity expansions for the future, a 25 percent or so cushion should be kept in view over and above the traffic projections.

Privatisation

In view of the resource constraint, induction, and even concerted promotion, of private enterprise in selected areas of port operations is urgently called for to develop ports infrastructure. No delay should be there in the induction of private capital and initiative in specific areas of port operations, particularly in the supply and use of private equipment for the handling of containers. The authorities of the major ports should immediately undertake exercises for identifying areas where private participation will not only be beneficial to the trade but also result in containing capital investment by them. In consultation with user interests, specific proposals should be drawn up to achieve this within a period of six months.

Draft

The draft situation in our ports should be reviewed from the point of view of the traffic trends likely to emerge in the next 20 years. Modern dredging equipment should be purchased or hired to see that the major ports meet the draft requirements of international shipping.

Containerisation and Intermodalism

Intermodal Traffic

The seminar was of the unanimous view that containerisation covers intermodalism in transport. This issue could not be tackled effectively without catering to the requirements of intermodal traffic. While dealing with the intermodal traffic, market forces, which are as remorseless as the tides, must not be ignored. The following recommendations were made on this subject.

Intermodal Corporation

There is an imperative need for setting up an Intermodal Transport Corporation of India. Representation on such a body ought to be there not only for the government and governmental agencies like the railways, air transport, customs authorities, etc., but also for road transporters and inland waterway operators as well as the different user interests like the shipping lines, shipping agents, forwarders and so on.

Legislation Concerning Shipping and Ports

Reappraisal of Laws

The need for a fresh look at the legislation affecting not only shipping and ports but also other modes of transportation was felt. It was emphasized that in respect of shipping, ports and containerisation, all statutes, e.g., the Merchant Shipping Act, Indian Ports Act, 1908, Major Port Act, 1963, Bills of Lading Act, 1956, and Carriage by Sea Act, 1926, should be reappraised on an emergency basis. The Indian Railways Act, Motor Vehicles Act as well as the Customs Act, too, require reappraisal in the context of promotion of containerisation.

Consultation

No legislation with respect to the Reappraisal of Laws should be introduced unless trade, experts and professionals are consulted.

Special Committee for Study

All user interests, including government and governmental agencies, should get together, hold workshops and appoint technical committees and submit to the government their recommendations along with the drafts of the proposed statutes or amendments, as well as the reasons thereof. ASSOCHAM, it was stated, could take the initiative in this regard, say, within six months, following submission of the seminar's recommendations.

New Legislation

Government should earnestly and urgently consider these recommendations and bring in new legislation without delay.

Labour Productivity and

Costs in Indian Ports

Excessive Costs

The seminar noted with concern that the costs of handling containerised cargoes at our ports are excessive in comparison with the international ports. This has a dampening effect on the price structure of our export cargoes and also the landed costs of imports. Corrective steps thereof should be undertaken on a war footing. The recommendations made in this regard were as follows:

Linkage with Productivity

The government should come out with a policy statement that operational costs in the ports sector should be directly related to productivity and that cost escalations at ports should not be effected unless corresponding increase in productivity are ensured.

Norms for Containerisation

Fixation of productivity norms and manning scales for handling and stuffing/destuffing of containers should be left to the individual port managements on the basis of sharing of productivity gains as per the guidelines of the national Productivity Council. Government sanction in this regard should be dispensed with. The fact that there is great scope for rationalising workforce for container operations was underscored. Emphasis was laid on introducing modern technology at the ports as this has become absolutely necessary. ASSOCHAM, it was stated, would be pleased to be involved in any exercise to achieve this objective. It would extend its full cooperation in the matter.

THIS IS PORT KLANG

- The Gateway To Malaysia -

Port Operator: Klang Port Authority, a statutory corporation reporting to the Ministry of Transport. The port's container terminal is privatised and run by Kelang Container Terminal (KCT) in which the port authority has a 49 percent stake.

Loacation: On the west coast of Peninsular Malaysia, about 40 km from the federal capital, Kuala Lumpur. Port Klang is Malaysia's biggest port in terms of tonnage. Its hinterland includes the Klang Valley (the country's most populous and highly industrialised area), the southern state of Negeri Sembilan, parts of the east coast state of Pahang and Trengganu and the southern part of the central state of Perak.

Facilities: The port has two gateways – North Port and South Port.

South Port, the original port commissioned in 1901, handles largely domestic trade and bulk liquid cargo. The port has a total wharf length of 1,078m divided into 8 berths — two berths for bulk liquid cargo, four for coastal and one each for bulk liquid/general cargo and bulk dry/bulk liquid cargo.

North Port handles the bulk of the port's trade. Located here are the container, bulk liquid and bulk dry terminals. There are two timber terminals run by private companies. North Port covers an area of 248 ha and has a total wharf length of 3,944m divided into 11 berths for breakbulk cargo, two for liquid bulk, two for dry bulk, and three for containers. **Major Commodities:** Exports timber and plywood, rubber, palm oil. Imports — petroleum, fertilizer, machinery, paper, iron and steel.

(Port Klang)

Rajang Port Authority in Profile

The Rajang Port Authority was established on 1st November, 1970 under Section 3 of the Port Authority Ordinance 1961.

The Authority so established is a corporate body consisting of an Executive Chairman and not more than eight other members appointed by the Ministry of Infrastructure & Development, of whom not more than half shall hold office in the Government.

The Authority shall exercise control and coordinate all the activities of the Ports within its jurisdiction. The limits of the Port extend from Kapit in the Seventh Division to the Rajang River under the Sixth Division.

Today, the Rajang Port Authority headquatered at Sibu has five centres: Sibu, Sarikei, Bintangor, Sg. Merah and Tanjung Manis.

Organization

The Chief Executive of Rajang Port Authority is the General Manager, who, assisted by the Deputy General Manager, advises the Authority on the formulation of policies and is responsible for the implementation of policies and the management of the Port. For the efficient discharge of the functions charged upon the Authority, seven departments have been created.

Functions

The Authority is charged under Section 9 (1) of the Port Authority Ordinance, 1961, with the following statutory functions:

- to maintain, or provide for the maintenance of adequate and efficient port services and facilities for all users of the Port;
- to coordinate the activities of the Port;
- to promote the improvement and development of the Port, and
- to execute such works as may be necessary for the performance of the

duties specified above

The Authority is further required under Section 9 (3) of the Ordinance to ensure that:

- its annual revenues are, taking one financial year with another, sufficient to meet the payment of all charges specified in Section 15;
- no person is given undue preference or is subject to any undue disadvantage as compared with any other person.

Legislations

Powers, functions, conditions of business and Port Charges of the Authority are contained in the following legislation, which are obtainable from the Authority upon request at a cost of \$1.00 per copy.

- The Rajang Port Authority By Laws 1971;
- The Rajang Port Authority (Conditions of Business) By Laws 1971;
- The Rajang Port Authority (Control of Entry and Security) 1971;
- The Rajang Port Authority (Rajang Cargo) Order 1971;
- The Rajang Port Authority (Dues, Rates and Charges) Regulations 1980 (Revised).

(Rajang Port Authority – A Port Profile)

Operating Procedures During Stormy Weather

- Philippine Ports Authority -

In order to promote the safety of port workers, users, vessels, port facilities, and other properties within the pier premises during typhoons or storms without unduly compromising productivity and efficiency, the following guidelines are hereby prescribed for the guidance and compliance of all concerned.

Section 1. General Precautionary Measures — The following precautionary measures relative to port operations should be undertaken during typhoons or storms:

a. Storm Signal No. 1 (winds of 30-54 knots is expected in the locality within the next 24 hours) —

(1) Operations at the anchorage may be suspended on a case basis.

(2) All vessels in the port, whether self-propelled or non-propelled, shall be attended to by a sufficient number

of crew. For non-propelled vessels, an adequate number of tugboats should, likewise, be at standby.

b. Storm Signal No. 2 (winds of 55 to 74 knots is expected in the locality within the next 24 hours) -

(1) The precaution provided for under Storm Signal No. 1 relative to the necessity of having tugboats and a sufficient number of crew at standby shall still be observed.

(2) All operations at the anchorage shall be suspended.

c. Storm Signal No. 3 (winds of 75 knots or over is expected in the locality within the next 12 hours) -

(1) All precautions for Storm Signal No. 1 and 2 shall be exercised.

(2) Loading/discharging of containers and other cargoes to/from vessels shall be suspended and the structures secured.

(3) All cargoes, and cargo handling equipment and accessories shall, if possible, be secured.

(4) The piers and slips shall be cleared of vessels of more than 1,000 GRT.

(5) Vessels of not more than 1,000 GRT may be allowed at the anchorage. Those which remain moored and secured at the piers or slips must take all necessary precautions, i.e., double or multiple mooring lines, sufficient officers and crew, standby engines, etc. Provided, however, that any damage caused to the pier shall be borne by the owners of these vessels.

d. Wave height regardless of storm signal:

Below 4 feet — no suspension of work 4-5 feet — suspension only at anchorage

Over 5 feet — suspension both at dockside and at anchorage $\$

Section 2. Standard Operating Procedures — The following procedures shall be undertaken by the local Port Management Office (PMO) during inclement weather.

a. Every four hours during the presence of typhoons or storms and similar weather disturbances within the Philippine Area of Responsibility (PAR), the Port Manager shall maintain contact or liaison with the Weather Bureau (PAGASA) in order to regularly monitor weather developments in his locality.

b. The PMO shall, at all times, maintain and complete the Daily Of-

ficial Weather Bulletin/Report, and shall record the hourly wind force and direction, and the wave length for the reference of all concerned.

c. Aside from the regular personnel on duty, the Port Manager and the Terminal Supervisor and/or the next ranking officers must report for duty for the duration of Storm Signal No. 2 or above.

d. Should the interest of the public so require, the Port manager and/or the Terminal Supervisor may redirect operations in their respective areas.

e. Immediately after the storm or typhoon, a damage survey shall be conducted by the Terminal Supervisor and a damage report shall be submitted to the Port Manager not later than 48 hours after the storm or typhoon has passed. The damage report shall state, among others, the details of damage, losses, injuries, or casualties, if any. The report shall also include the recommendations of the reporting officer and the cost estimates for repair or replacement of the losses or damages.

Section 3. Request for Suspension of Vessel Operations — If deemed necessary, the shipmaster/agent, on the arrastre/stevedoring contractor, may file a formal request for suspension of vessel operations with the local PMO. The Port Manager of his authorized representative shall act on the request in accordance with the guidelines set in Section 1 above.

The Suspension Order shall be accomplished in five copies and shall be distributed as follows:

Original – To be retained by PPA Second copy – Stevedoring Contractor

Third copy — Arrastre Contractor Fourth copy — Shipping Company/ Agent

Fifth copy — Lighterage Company/ Broker

Section 4. Standby Charges – Standby charges shall not be assessed as a result of the issuance of the Suspension Order provided the stevedores are allowed to disembark at the ship accommodation ladder. Failure, however, of the Master and/or agent to provide for the stevedores' safe disembarkation shall make them liable for the payment of standby charges.

Section 5. Effectivity. This Order shall take effect immediately.

(Dock News)

S'pore-Bremen Teleport Link Inaugurated

By Kang Soo Sin

Public Relations Department

The Teleport link between Singapore and Bremen was officially inaugurated on 23 Feb. 89. The occasion was a follow-up of the Letter of Intent signed on 1 Dec. 88 between MAP Services Pte Ltd., PSA's wholly owned subsidiary, and Datenbank Bremische Hafen GmbH (DBH) for the ports of Singapore and Bremen, respectively.

The signing ceremony on Feb. 23 was held simultaneously in Singapore and Bremerhaven by way of a video-conference where each party could witness the signing of the inauguration message by the other party.

The inauguration message was signed in Singapore by Mr. Ng Kiat Chong, Executive Director, PSA with Mr. Lee Chee Yeng, Director (Operations)/ (Information Systems) as witness, and Mr. Hans H. Pohl, Deputy Chairman, BLG with Mr. W. Lampe, Managing Director of DBH as witness, in Bremen.

In his speech, Mr. Ng said that the setting up of this Teleport link between Singapore and Bremen would strengthen and intensify trade and port relations between the two regions.

"This is part of PSA's efforts to promote Singapore as a global hub and a premier maritime centre. Through the Teleport, cargo and shipping information networks will be harnessed," he said.

Mr. Ng added: "Port users will benefit from this as essential and reliable information on transport and trade transactions such as loading plans, manifests and other cargo information are always available at hand well in advance of ships' arrival. This will enable port users to plan ahead and make timely decisions that result in substantial savings for them."

Mr. Lee Chee Yeng, in his statement, said that the Port of Singapore had always enjoyed a cordial relationship with the Port of Bremen. "Singapore is now linked to more than 30 major ports in the EEC. At the Port of Singapore, there are, on an average, 120 container shipping services every month either leaving Singapore for the EEC region or arriving at Singapore from the EEC region. A number of major

container shipping lines have recently announced plans to either introduce new services on the EEC-Far East routes or renew their fleets with larger and better ships. This will lead to even closer and better shipping ties between us," he said.

The Singapore-Bremen Teleport link is PSA's second electronic link between ports. The first one was established with Hong Kong. (PSA News)

PSA: New Computer, Self-Service Terminals

The Port of Singapore Authority signed two contracts worth about \$7.6 million. One contract was signed with National Advanced Systems (NAS) for the purchase of a new mainframe computer and a 60-gigabyte disk storage system costing some \$5.5 million. The other contract was signed with Philips (S) Pte Ltd. for the purchase of 80 Self-Service Terminals (SST) and 8 front-end processors costing \$2.1 million. The upgrading of computer systems and installation of SSTs are part of PSA's efforts to introduce advanced information technology in port operations.

More Computer Power

The new computer is a NAS AS/EX 50. The processor employs advanced high-density technology, with a processing power of about 23 million instructions per second. This is twice the power of one of the two existing computers it replaced. The new computer has 32 megabytes of main storage memory and 16 high-speed channels for exchange of data between the computer and the supporting equipment such as tape and disk storage systems. It also has я channel-to-channel adapter (CTCA) for faster exchange of data between IBM or IBM-compatible computers. The CTCA is typically used as a communication link in a multiple computer environment. All these advantages mean faster response and processing time, leading to better service to port users.

With the new computer, response time has improved significantly. Together with the new disk storage subsystem, the expanded computer capacity will support the increase in marine and container activities and new computer services such as TRA- DENET, PORTNET, yard allocation system and enhancement to existing computer systems.

(By Poh Yeow Kian, Computer Operations Department)

Self-Service Terminals

Port users will be able to achieve faster shipment and delivery of their cargo at the PSA gateways with the installation of SSTs.

At present, when port users ship or take delivery of their cargo, they have to present the proper documents to PSA staff who will capture the information into PSA's computer system and then approve the transaction.

With the SSTs, together with pre-operations processing through PORTNET (PSA's electronic data communication system), the need for physical movement of paper documents is eliminated.

The port user simply inserts his magnetic stripe PSA pass into the SST and keys in his Personal Identification Number (PIN).

The list of transactions available is displayed on screen which is similar to those installed in Automated Teller Machines.

The port user then selects his transactions and a slip recording the transactions is automatically printed by the SST.

A PSA employee endorses the document in the case of shipment of goods. In the case of delivery, the port user uses the printed slip as a permit to deliver his cargo from the port.

There will be sufficient SSTs in each godown and container freight station to serve port users. Faster service is expected compared to the present system. Transactions on the SSTs will be carried out in airconditioned comfort.

The SSTs are connected to PSA's main computer through the front-end processors (FEP). Altogether, 80 SSTs and 8 FFPs costing some \$2.1 million will be installed. Instructions displayed on the SSTs are in English and Chinese. Magnetic stripe PSA passes will be issued and training will be conducted for port users from Aug. to Oct. 89 prior to the implementation of the SSTs, which are expected to be operational by the end of the year.

(By Chow Syap Mee Public Relations & Marketing Department)

(PSA News)

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