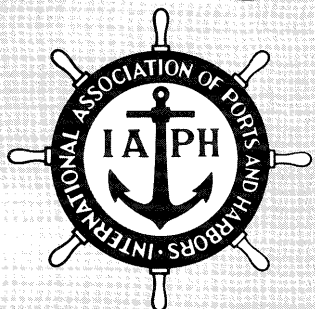


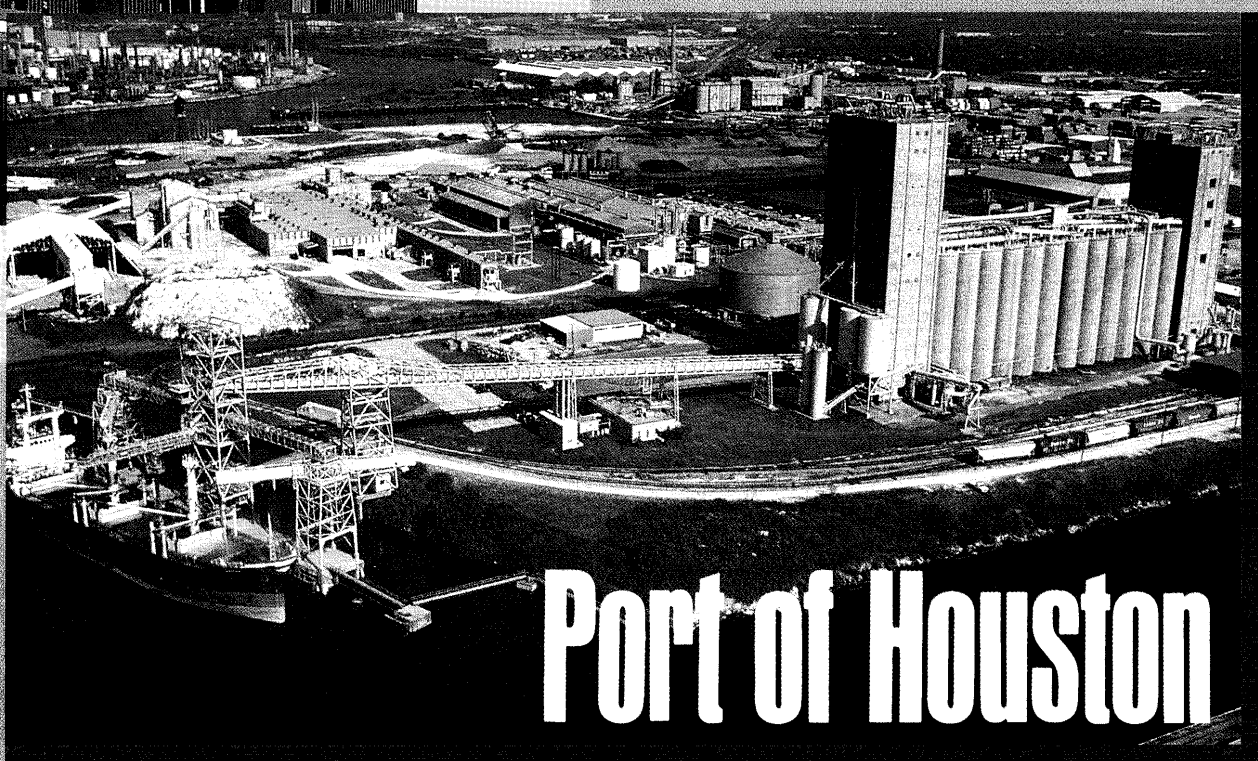
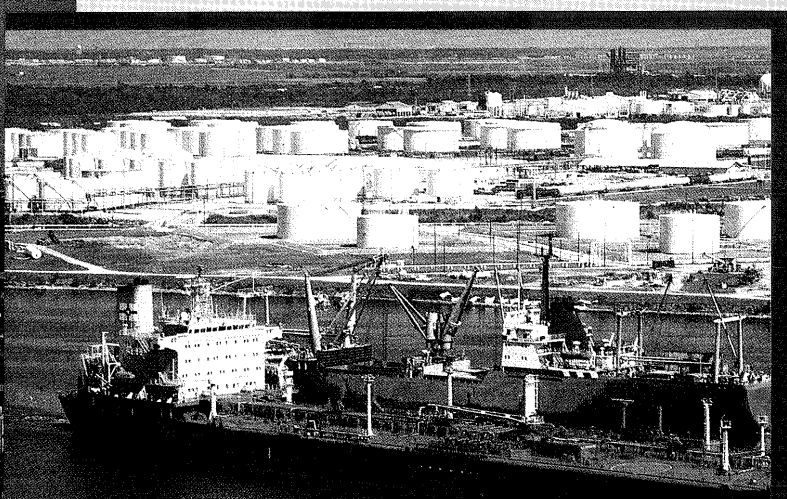
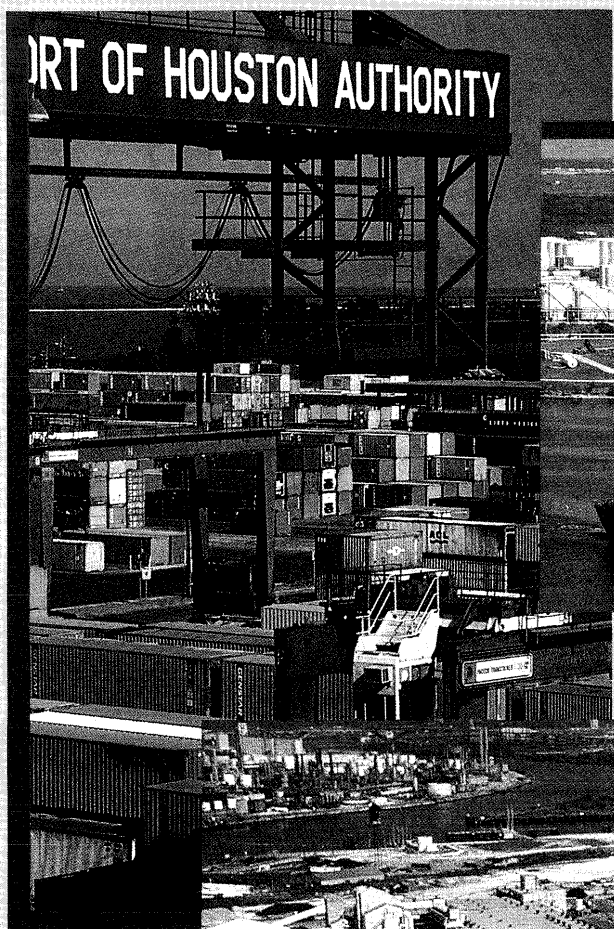
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December 10
1993 Vol.38 No.



Harbors



Port of Houston



The International West Coast Port

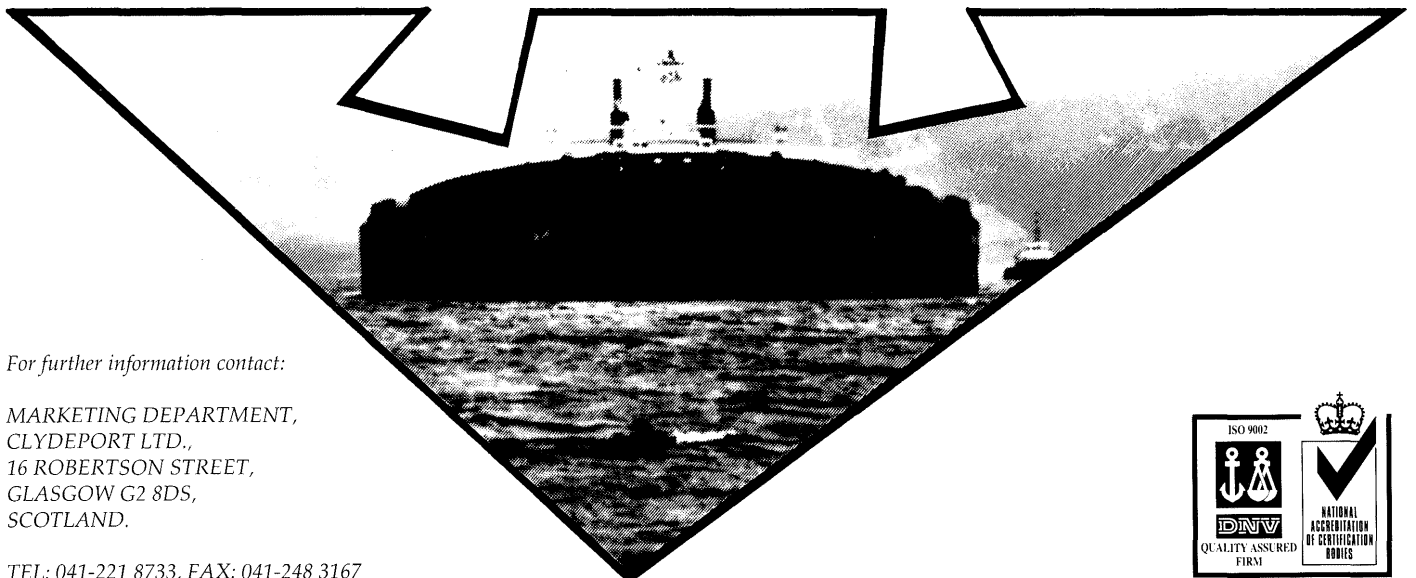


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IAPH ANNOUNCEMENTS AND NEWS

1993 Tonnage Survey:

Asian Members' Share to Increase

The IAPH Secretariat in Tokyo has recently prepared an interim report on the results of the biennial tonnage survey of all Regular Members which was conducted in July this year. The purpose of the survey is to collect updated tonnage figures which will form the basis for the coming two years' dues assessment.

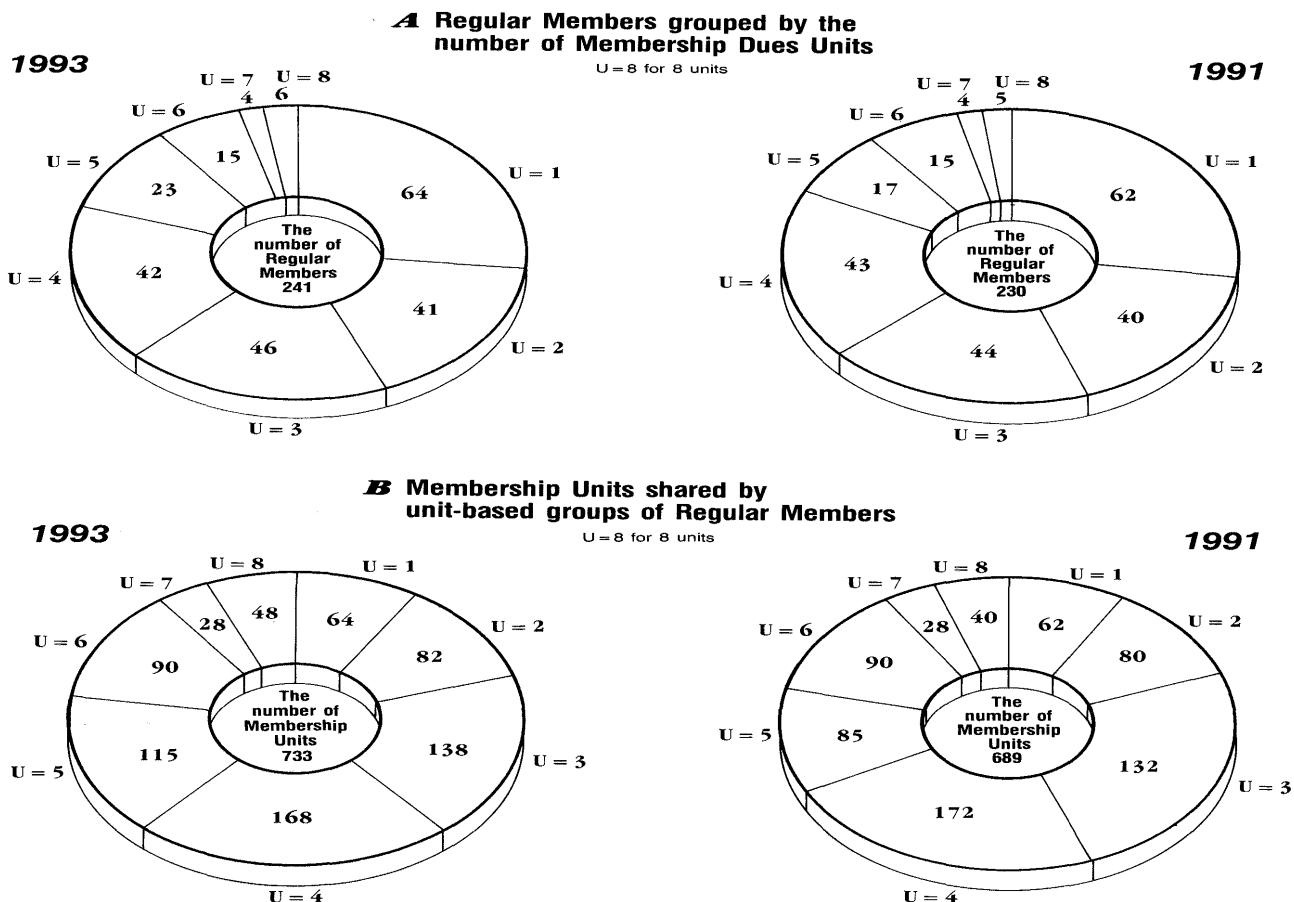
As of October 25, 1993, 163 out of the 241 Regular Members, accounting for 67.63%, had returned their updated information concerning the tonnage figures and confirming the number of dues units to be subscribed by them for the next two years. The situation of the response by regions is tabulated as follows.

Region	No. of members	Replied		Not replied	
		No	%	No	%
Africa/Europe	79	50	63.29	29	36.71
America	43	23	53.49	20	46.51
Asia	119	90	75.63	29	24.37
Total	241	163	67.63	78	32.37

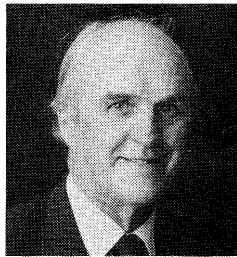
The following graphs show the comparison between the results of the 1991 and 1993 surveys of (A) the number of Regular Members as classified according to the number of dues units and (B) the Membership Dues Share classified according to the number of Membership Units.

According to Mr. Onso, our chief accountant, the group of 8-unit members which comprised the Ports of Kobe, Rotterdam and Yokohama three years ago has now increased to include three more ports, namely Hong Kong, Nagoya and Singapore.

Mr. Onso also comments that the increase in the dues units for the next two years is mainly from members in the Asian Region, while the other two Regions have recorded a decrease in the number of units.



IMO MEETINGS



Report by A. J. Smith IAPH Liaison Officer with IMO

The 69th Session of IMO's Legal Committee was held in London, UK, from 27 September to 1 October 1993 under the chairmanship of Mr. A. H. E. Popp (Canada).

Those present included representatives from 45 Member States, 1 Associate Member and 26 inter-governmental and non-governmental organisations, including IAPH.

The substance of Committee discussions usually lends itself to a process of extended deliberation over several sessions. IAPH Members will therefore have been made familiar with Agenda topics from earlier reports. The current situation as respects these topics is provided below.

1 Draft International Convention Liability and Compensation for Damage in connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS)

Having been invited by IMO's Council to set a clear target for the conclusion of work on the draft HNS Convention, the Committee agreed to look to the holding of a Diplomatic Conference early in 1996. That timescale, it is hoped, will obviate the need for regional agreements and unilateral national solutions of problems which are giving rise to some concern.

The Committee has recognised that time is short within which to deal realistically with a range of complex issues. It was felt appropriate therefore, provisionally, to concentrate effort on a two tier system in one convention (covering damage caused also by packaged goods) but with the mechanism for collection of contributions for funding purposes, to bulk carriage only. Such a system, covering both shipowner and cargo interests, is believed to provide sufficient funds to allow adequate compensation for damage caused by HNS cargo.

Specific questions of a technical nature arising from the Committee's decision were then considered. These related to the prospective contribution system to be adopted whether on a pre or post collection basis; whether to define HNS substances by reference to existing lists or by a specific free-standing list; whether to link the HNS Convention to the liability regimes of other Conventions.

Discussion of these matters will continue at the two meetings to be held in 1994.

2 Revision of the 1976 Convention on Limitation of Liability for Maritime Claims (LLMC)

The Committee is generally agreed on the need to update

limits of liability to provide against a 17 year erosion of their 1976 values, and also to introduce a simplified amendment procedure. A target date for concluding the work will be set at the next session with a strong opinion that it should coincide with the work on the draft HNS Convention in 1996.

If that were to be the case, the scope of revision could well be restricted to limits of liability and amendment procedures only. Proposals for future discussion were invited from participants.

3 Arrest of Ships

The representative of the United Nations Conference on Trade and Development (UNCTAD) informed the Committee that following the successful conclusion of the 1993 Convention on Maritime Liens and Mortgages, consideration would be given to the possible revision of the Arrest Convention 1952, by a Joint International Group of Experts (JIGE). The first meeting of the Group would be held in Geneva from 5 to 9 December, 1994. Basic documentation would be developed by the Comité Maritime International (CMI). Preliminary interest was shown by the Committee in a joint effort with UNCTAD to assess the nature and amount of work involved.

4 Wreck Removal and Related Issues

There are acknowledged gaps in existing international law on wreck removal. It is generally agreed, moreover, that there should be uniformity in the regulation of wreck removal activities particularly with regard to compensation and procedures.

Perceived wisdom indicates therefore, that a new treaty should be developed to cover areas normally used by international navigation where wreck removal is essential to secure safety of navigation and protection of the marine environment.

The subject will continue to be included in the Committee's work programme for the biennium but it will not be dealt with until other priority items have been concluded.

The 70th session of the Committee will be held from 21 to 25 March 1994 and the 71st session from 10 to 14 October 1994.

Printing of Sydney Confab Proceedings Near Completion

Printing of the proceedings of the 18th World Ports Conference held in Sydney in April this year will be completed in early November 1993. The compilation work has been taken care of by the Head Office secretariat staff, based on the verbatim records, tapes and photographs supplied by our hosts.

Throughout the period following the April Conference, the Head Office staff has been able to obtain the full support

of the Organizing Committee members in Sydney, who have always been willing to respond to the frequent requests for assistance from Tokyo.

In particular, we would like to record our thanks for the valuable assistance afforded us by Mr. John Hayes and Mr. Jeoff Smith in supplying the necessary materials and documents on a timely basis for use in the proceedings.

It is expected that a copy of the 105-page publication recording the Sydney Conference will be sent to each IAPH member from Tokyo in early November.

The IPD Fund: Contribution Report

We regret we must report that there has been no progress in the fund-raising campaign since last announcement. The contributions so far made by our members, whose names are listed in the box below, totalled little over US\$29,000, which represents nearly 40% of the targeted amount of US\$70,000. All members' continued support of the project is ardently requested.

Contributions to the Special Fund For the Term of 1992 to 1994 (As of Nov. 10, 1993)

Contributors Paid:	Amount (US\$)
ABP (Associated British Ports), U.K.	3,000
Akatsuka, Dr. Yuzo, Univ. of Saitma, Japan	230
Akiyama, Mr. Toru, IAPH Secretary General Emeritus, Japan	1,000
Barcelona, Puerto Autonomo de, Spain	1,000
Cameroon National Ports Authority, Cameroon	480
Cayman Islands, Port Authority of, the Cayman Islands	250
Clydeport Ltd., U.K.	1,000
Constanta Port Administration, Romania	250
Copenhagen Authority, Port of, Denmark	1,000
Cotonou, Port Autonome de, Benin	100
Cyprus Ports Authority, Cyprus	1,000
Delfzijl/leemshaven, Port Authority of, the Netherlands	350
de Vos, Dr. Fred, IAPH Life Supporting Member, Canada	150
Dubai Ports Authority, U.A.E.	500
Dundee Port Authority, U.K.	250
Fiji, Ports Authority of, Fiji	100
Fraser River Harbour Commission, Canada	250
Gambia Ports Authority, the Gambia	250
Ghana Ports and Harbors Authority, Ghana	250
Halifax, Port of, Canada	250
Hiroshima Prefecture, Japan	523
Japan Academic Society for Port Affairs, the, Japan	267
Japan Cargo Handling Mechanization Association, Japan	259
Japan Port and Harbor Association, the, Japan	493
Japanese Shipowners' Association, the, Japan	516
Klang Port Authority, Malaysia	200

Korea Container Terminal Authority, Korea	100
KSC (Kuwait Oil Company), Kuwait	1,000
Marine Department, Hong Kong	500
Maritime Services Board of New South Wales, Australia	367
Mauritius Marine Authority, Mauritius	200
Montreal, Port of, Canada	500
Nagoya Container Berth Co., Ltd., Japan	518
Nagoya Port Authority, Japan	3,564
New York & New Jersey, Port Authority of, U.S.A.	1,000
Niigata, Port of, (Niigata Prefecture), Japan	860
Okubo, Mr. Kiichi, Japan	274
Pacific Consultants International, Japan	243
Penta Ocean Construction Co., Ltd., Japan	500
Point Lisas Industrial Port Development Co. Ltd., Trinidad	100
*Primer Concurso Internacional de Memorias Portuarias: Carlos Armero Sisto, Anuario de Puertos: Buenos Aires, Argentina	300
Public Port Corporation I, Indonesia	180
Quebec, Port of, Canada	250
Shipping Guides Limited, U.K.	500
South Carolina State Ports Authority, U.S.A.	1,000
Tauranga, Port of, New Zealand	500
Toyama Prefecture, Japan	254
UPACCIM (French Ports Association), France	1,905
Vancouver, Port of, Canada	500
Total:	US\$29,033

**1st International Contest of Port Annual Reports sponsored
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Armero Sisto)*

Port of Barcelona Delegation in Tokyo

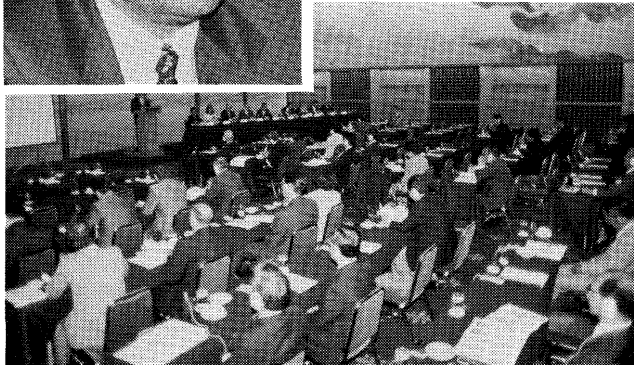
On the evening of 14 October 1993, the Secretary General of IAPH Mr. Hiroshi Kusaka and his two senior staff members were the guests at a reception hosted by Mr. Josep Munné, Chairman of the Port of Barcelona, at a Tokyo hotel. Mr. Munné was visiting Tokyo, as head of a nine-member delegation from the Port of Barcelona.

Preceding the reception, a seminar was organized by the Barcelona delegation, attended by some 150 people from Japanese companies which are users or intending users of the Port of Barcelona from shipping, trading and auto manufacturing businesses. Mr. Takeshi Suzuki, the Port's Representative in Tokyo acted as moderator at the seminar.

The delegation members made presentations on traffic movements during the past ten years which have recorded a remarkable growth, and the latest developments which have been taking place at the Port of Barcelona. It is said to be the Mediterranean's most important port for traffic from the Far East. The presentations included the Port's strategies for further reducing costs and improving the quality of services. They also covered various ongoing projects such as the remodeling of the old port, the International Container



Mr. Munné leads the seminar



Terminal (TCB), the Zona de Actividades Logísticas (ZAL) — Logistic Activities Center (LAC) and a specialized car terminal. These projects will enable the Port to further strengthen its position as a distribution center for Southern Europe and a port for the entry of traffic from the Far East.

The other members of the delegation were: **Mr. Adrian Piera**, President, **Spain-Japan Business Cooperation Committee**; **Mr. Francesc Sanuy**, Advisor to the President, **Spain-Japan Business Cooperation Committee**; and from the **Port of Barcelona**, **Mr. Santiago Bassols**, Advisor to the Chairman (and Managing Director, Centro Intermodal de Logística, S.A.), **Mr. José Luis Rodríguez**, Commercial and Marketing Director, **Ms. Sylvia Rausch**, Intermodal Marketing Manager, Centro Intermodal de Logística, S.A., **Ms. Isabel Genis**, Manager, Chairman's Office, **Mr. Carlos Larrañaga**, Managing Director, Terminal Contenedores de Barcelona, S.A. (TCB) and **Mr. Jacinto Seguí**, Managing Director, Autoterminal, S.A.



Mr. Kusaka, IAPH Secretary General, greeting the Barcelona delegation

Visitors to Head Office

On October 6, **Mr. Louis J. Perez**, (seated right) Director, Marketing & Trade Development, **Canaveral Port Authority**, Florida, USA, visited the Head Office to exchange views on trade development. Mr. Perez was visiting Tokyo for the purpose of promoting the citrus trade in Japan and other countries in the region. Port Canaveral is one of the



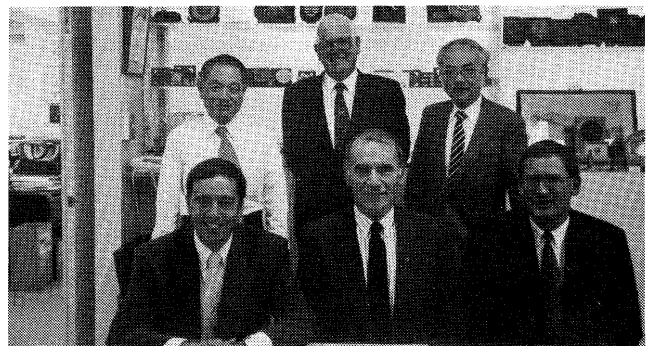
biggest citrus exporting ports in the USA.

On October 8, **Mr. Michael L. Sclar**, Senior Consultant, **DRI/McGraw-Hill** (Lexington, Mass., USA), visited the Head Office during his business trip to the region, where he met with Mr. R. Kondoh to exchange views on items of mutual concern and to demonstrate the DRI/McGraw-Hill trade database mounted on a laptop computer. Mr. Sclar, a member of IAPH's Sea Trade Committee, was visiting the region to promote his trade information services among various public and private institutions devoted to research work for analysing world trade and shipping.

On October 13, **Mr. David Turner**, Chief, Transport and Communications Division, **United Nations (UN-ESCAP, Bangkok)**, met with Mr. R. Kondoh of IAPH and Mr. S. Suzuki, an MoT official who had worked at ESCAP till 1992, to exchange views on items of mutual concern. Mr. Turner was visiting Tokyo to attend an ESCAP meeting devoted to the enhancement of international co-operation among the countries in the region.

On October 14, **Mr. Ed. Kiedaisch**, Technical Manager, **Trellex Morse, Keokuk, Iowa, USA**, a fender system manufacturer, accompanied by **Mr. A. Imoto, Tokyo Boeki K.K.**, a local agency for Trellex Morse, Associate Members of IAPH, together with **Mr. K. Kikuchi, Yokohama Rubber K.K.**, and **Mr. S. Taguchi, Marix K.K.**, a provider of computer controlled mooring lines system, visited the head office to exchange views on the newly introduced fender monitoring system. Mr. Kiedaisch was visiting Japan to research the technical aspects of fender systems employed in various oil and gas unloading terminals.

On October 25, **Mr. Fraser G. McKenzie**, Chairman, **Mr. John M. Halling**, CE, **Mr. L.C. Ryan**, Director, and **Mr. J.I. Mayson**, Operations Manager, **Port of Tauranga Limited, NZ**, taking part in a trade development mission to Tokyo, Nagoya and Fukuoka, visited the Head Office to meet with Mr. R. Kondoh and other staff members.



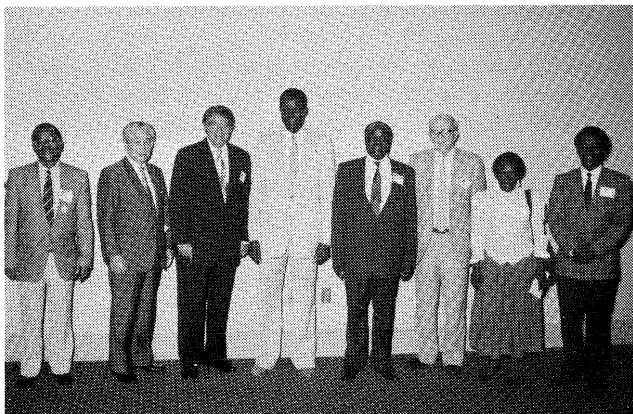
Seated from left: Halling, McKenzie and Mayson; standing, Onso (IAPH Chief Accountant), Ryan and Kondoh (IAPH Deputy Secretary General)

Obituary

Mr. John S. Kyandih, Commercial Manager, Kenya Ports Authority

On October 19, IAPH Head Office learned from Mr. Alex Kabuga, Marketing & Public Relations Manager, Kenya Ports Authority of the death of Mr. John S. Kyandih. In his letter, sent to Tokyo by fax, the PR officer says that Mr. Kyandih, one of the KPA's longest-serving and most dedicated officers, passed away last month after a short illness.

The Secretary General Mr. Kusaka, jointly with the other secretariat members, has sent a letter of condolence to the bereaved family and has expressed the deep appre-



Mr. Khandih (extreme left) in 1989.

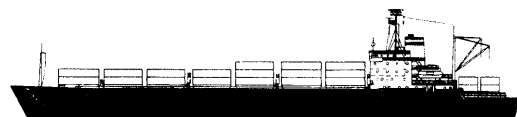
ciation of IAPH members for the contribution Mr. Kyandih made towards the work of IAPH. Over a long period Mr. Kyandih represented the KPA, played an active role in IAPH affairs and was a regular participant at IAPH gatherings. Mr. Khandih (extreme left) is pictured with the Kenya Ports delegation members and the IAPH Officers during the Miami Conference in 1989, which turned out to be the last IAPH Conference that Mr. Kyandih was able to attend.

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OPEN FORUM

ESCAP Port Activities in the Region



By David L Turner

Chief

Transport and Communications Division
Economic and Social Commission for Asia and
the Pacific

*(Contributed to the Asia-Pacific Ports
Symposium held in Kobe on September 6, 1993)*

1. ESCAP

1.1 History and Organization

The Economic and Social Commission for Asia and the Pacific (ESCAP) was established in 1947 as the Economic Commission for Asia and the Far East (ECAFE).

The change from "ECAFE" to "ESCAP" in 1974 highlighted the Commission's responsibilities in the field of social development as well as its broader geographical scope to include the countries and territories of the Pacific.

Its mandate was further broadened in 1977 by the General Assembly which recognized ESCAP and other regional commissions as the main general economic and social development centres within the United Nations system for their respective regions and as executing agencies for inter-country development projects in their own right.

Today ESCAP is the largest of the five regional commissions.

It covers the area from Iran in the West across the Indian-sub continent and ASEAN to China, Japan and Tahiti (French Polynesia) in the East, from Mongolia in the North it extends to Australia and New Zealand in the South; it comprises 48 members and 10 associate members representing 58 per cent of the global population.

ESCAP constitutes a unique forum for Governments in the Asia-Pacific region, in addition to its role as a "think-tank" and catalyst for major regional ventures such as the Asian Development Bank and the Asian Highway network.

The role of ESCAP as an intergovernmental forum assumes particular significance in the absence of any other institutional arrangement for the region-wide, high-level political assembly of Governments. At a ministerial-level, the Commission provides an opportunity for Governments to meet every year to review and discuss economic and social issues in order to promote and strengthen regional cooperation — a basic mandate and major concern of the Commission.

To meet the evolving needs of the region and with a view to enhancing ESCAP's effectiveness to respond to the increasingly complex development problems, the Commission recently adopted a thematic approach to its programming and established a corresponding subsidiary structure, in the areas of:

- (a) regional economic cooperation;
- (b) poverty alleviation through economic growth and social development; and
- (c) environment and sustainable development.

The Transport and Communications Division is one of two Divisions which still service their own special legislative Committees as well as contributing to the work of the thematic committees.

1.2 ESCAP Regional Economy

By comparison with the stagnating world economy which shrank by a negative -0.4 per cent in 1991, developing countries of the ESCAP region showed strong resilience and recorded an impressive 6.1 per cent. The story was repeated in 1992 when the combined GDP of developing ESCAP economies grew at an estimated rate of 6.9 per cent compared to 0.4 per cent growth in the world economy. In the immediate future the same trend is projected to continue with the developing ESCAP region likely to grow by 7.0 per cent in 1993 and 1994 compared to world economic growth projections of 2.0 and 3.2 per cent respectively. While world economic growth is likely to be subdued and fragile, the economies of Asia and Pacific region are likely to maintain a much better growth tempo through effective exploitation of global, sub-regional and intra-regional complementarities and cooperation. Development of several "growth triangles" where surplus capital from relatively developed Asian countries complemented surplus skilled labour of neighbouring countries increased production at competitive prices.

Examples of successful growth triangles are Singapore/Malaysia State of Johor/Riau (Batam) Island of Indonesia and Hong Kong/Taiwan province/Southern China. It is expected that activities in the existing growth triangles will be strengthened in future and new growth triangles including Thailand, Myanmar, Laos and Yunnan Province in China will emerge as a result of enhanced intra regional cooperation and transport linkages.

Also due to sustained high growth in several NISs and ASEAN countries from the mid-eighties, dynamics of internal demand gathered momentum and helped to keep growth rates high. The developed countries of ESCAP

region, on the other hand, were more susceptible to worldwide recession.

While the economies of both Australia and New Zealand went through economic downturn in the year 1991, Japan's economy grew by a substantial 4.5 per cent due to increase in both internal demand and exports. However, Japan's economic growth slowed down considerably in 1992 to an estimated 1.8 per cent due to a deceleration in consumer spending in response to asset price deflation. Economic growth for Japan has been projected to be 2.3 per cent in 1993 and 3.0 per cent in 1994.

The combined GDP growth rate of the new industrializing economies, consisting of Hong Kong, Republic of Korea, Singapore and Taiwan province of China, has been estimated at 6.2 per cent in 1992, increasing to 6.8 per cent in 1993 and 7.2 per cent in 1994.

Even with the poor performance of the Philippines, the prospects of ASEAN-4 countries consisting of Indonesia, Malaysia, the Philippines and Thailand are equally bright and comparable with the more experienced NIEs. The composite GDP growth rate of ASEAN-4 countries has been estimated at 6.3 per cent in 1992 and projected at 6.9 per cent of 1993 and 7.3 per cent for 1994. Though foreign direct investment especially from Japan is expected to plateau or even decrease in coming years, internal demand both for consumption and foreign investment inflow from NIEs may act as engines of growth and keep the economies buoyant in future years.

On the external front, both the NIEs and the ASEAN-4 countries are expected to exploit all avenues of trade and strengthen regional cooperation efforts. They are also likely to benefit from the imminent recovery of the United States through its attitude towards Asian trading partners. Composite growth of export of the two groups for 1992 is estimated to be 14.1 per cent for NIEs and 12.6 per cent for ASEAN-4. Assuming continuation of the current trade regime, these rates are expected to remain strong in 1993 and 1994 with slight variations.

After a deliberate attempt to slow down the economy to curb inflation during 1990-1991, China is poised for high GDP growth estimated to be 12.0 per cent in 1992, decreasing slightly to 9.0 per cent by 1994. The decrease in growth rate is likely to be in response to the measures which may be taken to check inflation projected to be 7.2 per cent in 1993 compared with 3.2 per cent in 1991. High growth of China gives a fillip to both its exports and imports which are projected to be in the range of 15-17 per cent per annum for export and over 19 per cent per annum for imports in the period of 1992-1994.

Countries belonging to the South Asian region followed relatively inward looking policies in the past and were unable to exploit their full growth potential. Now market oriented economic reforms and liberalization policies are being carried out with zeal in most of the South Asian countries. The GDP growth rate of South Asia consisting of Bangladesh, India, Nepal, Pakistan and Sri Lanka has been estimated at 4.7 per cent in 1992 and projected to increase to 5.1 per cent in 1994.

One major emphasis of the economic reform programmes of South Asian countries is to encourage foreign trade. Exports are actively promoted not only to improve growth performance and the balance of payments situation, but also to acquire better technologies and provide access to crucial intermediate imports. The export growth rate of South Asia is estimated at 9.1 for 1992 and projected

at 14.6 per cent in 1993 and 17.2 per cent in 1994.

The economies of the Pacific island countries performed well in 1991 registering a growth of 6.3 per cent, compared with negative growth achieved in 1990. This improvement was largely due to the Papua New Guinea economy, which showed a dramatic turnaround, mostly due to mineral related activities. The composite GDP growth of Pacific Island countries is estimated at 4.8 per cent in 1992, which is lower than 1991. Growth rates of Pacific Island countries are projected at the high rate 7.8 per cent in 1993 and 8.7 per cent in 1994. After a relative slowdown in 1992 exports of Pacific Island countries are projected to increase by 21.5 per cent in 1993 and 22.8 per cent in 1994.

Overall the persisting competitiveness of the region's developing economies and the implementation of export led growth strategies has enhanced the share of the developing ESCAP region in world trade. During 1985-1991, the value of the region's total trade more than doubled, from US\$756 billion to US\$1,687 billion, thereby increasing its share of world trade from 40 per cent in 1985 to 47 per cent in 1991.

Of even greater significance is the fact that, during the same period, trade amongst only the developing countries of the ESCAP region more than trebled, from US\$60 million, which is 3.2 per cent of world trade, to US\$188 billion, which is 5.3 per cent of world trade.

1.3 Problems and Issues

With the significant growth projected in the region's economy, much of which will be driven by increased international trade, the transport sector as a whole and ports in particular are likely to be faced with fresh challenges in the coming years.

Technologies such as containerization and new approaches to speeding transport processes like electronic data interchange are accepted by regional member countries as vital elements to the future port scene. However, there is still much to be done to increase proficiency in port planning, management, operations and maintenance as well as evolving adequate strategic and policy formulation skills.

2. The Transport and Communications Decade for Asia and the Pacific

2.1 Background

In December 1984, the General Assembly of the United Nations resolved to launch a Transport and Communications Decade for Asia and the Pacific, 1985 to 1994 to help countries of the region meet the growing demands of the sector and to help keep pace with economic development needs.

In defining the guiding theme for the Decade, emphasis was placed on ways of raising the productivity of resources in the sector, and the productivity of new investment, by concentrating on improvements in organization, analysis and management rather than on establishing the need for additional investment in infrastructure and equipment. The Decade was to focus on improvements in planning and inter-modal co-ordination; on rationalization of administrative procedures and regulations and other ways of lifting non-physical barriers to allow the full utilization of infrastructure; and on the introduction of new technologies, both technical and managerial, to permit cost-effective operations and savings in capital and energy.

Decade activities were to be carried out at national level within the framework of national action programmes which were to be drawn up. For activities at regional level, a regional action programme was to be formulated by

ESCAP, as lead agency, in consultation with other United Nations agencies and organizations active in the region.

In 1990 a mid-term review of the Decade was undertaken which recommended the continuation of the Decade to its end (but deferring the start of the second half to 1992). It also recommended major changes in approach and organization. Specifically, it recommended that in its second half, the Decade should focus on regional activities; that the regional action programme for the second quinquennium should focus on a limited number of issues common to the transport and communications sectors so that the selected activities would support a coherent programme, and that it should be prepared jointly by all the United Nations organizations and special agencies with activities related to transport and communications in the region.

The review also recommended that ESCAP remain the lead agency for the Decade but required the ESCAP Transport and Communications Division to organize itself so as to assure adequate co-ordination in the programme.

Subsequently, the recommendations of the mid-term review received broad endorsement from the ESCAP Commission, Senior Government Officials and United Nations agencies. A Regional Action Programme for the second half of the Decade was prepared from the proposals of the different agencies. Its themes were Institutional Development, Transport and Communications Operations, and Human Resources Development.

The resulting programme was endorsed by the Ministers responsible for Transport and Communications (at the 2nd session of their meeting, June 3-5, 1992).

2.2 Decade Objectives

The Regional Action Programme for Phase II of the Decade aims at three strategic themes:

- Theme 1: Institutional development;
within which an updated regulatory regime, streamlined procedural systems and improved planning capabilities will provide the foundation for increased efficiency, the potential for improved logistics, integration between modes and means to further the commercialization of the transport and communications industry.
- Theme 2: Transport and communications operations;
within which upgrading of management and operations will be targeted through improved business practices with clearer objectives and appropriate involvement of the private sector, plus technology transfer.
- Theme 3: Human resources development;
within which activities will principally be undertaken in support of themes 1 and 2.

At the same time four issues have been given high priority by the Commission which require special attention. Issues 1 to 3 relate to themes 1 and 2, while activities planned under issue 4 relate mainly to theme 3. The issues are;

- Issue 1: Multimodal transport and logistics;
- Issue 2: Commercialization of transport and communications operations;
- Issue 3: Environment, health and safety in transport; and
- Issue 4: Urban transport.

3. Areas of ESCAP Port Activity

For several years now the secretariat has been implementing a programme, under the Transport and Communications Decade, designed to strengthen port capabilities and prepare them for the growing responsibilities that managements are having to shoulder.

The programme has followed a standard 'step-wise' approach to project implementation which provides practical benefits to recipient countries while maximizing opportunities for regional cooperation. The approach includes:

- a) Survey and detailed problem identification;
- b) Development of a regional model solution;
- c) Implementation and validation;
- d) Regional training; and
- e) TCDC.

Through this process it has been possible to develop models, guidelines and even software programmes tailored to the countries needs, while at the same time providing a uniform framework, which encourages regional cooperation.

Within the programme, attention has been focused on addressing regional needs at the strategic, policy and management levels where the greatest impact can be created with the limited resources available. In addition, advisory services have been provided on port infrastructure developments and operations. The following paragraphs provide an overview of some of the activities and the logical 'building block' linkages between them.

3.1 Strategic Planning

At the request of the Commission a suite of Maritime Policy Planning Models (MPPM) has been designed to assist policy makers and planners in the maritime sector. The MPPM package contains a set of databases and computer models developed by the secretariat of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and a team of leading international maritime sector and computer software consultants and consultancy companies. The corporate consultancy organizations include:

- * The Overseas Coastal Area Development Institute, Japan;
- * Maritime Economic Research Centre, the Netherlands;
- * Transport Economic Institute, Norway;
- * Ocean Mackenzie, United Kingdom; and
- * Meyrick & Associates, Australia.

The databases include details of country-to-country trade flows by commodity group, and descriptions of existing container routes and services with details of ships by type.

They also include facilities for defining regional port infrastructure, equipment and capacities. The computer models provide the tools to forecast trade, origin and destination data, and to link these outputs to shipping and port demand. The models have the additional flexibility of handling user input options in terms of fleet deployment, ship type and port capacity/service levels.

All these features are contained in four modules encompassing trade, port assignment, shipping network and port capacity to provide a consistent framework for the shipping/port policy maker and planner of today. ESCAP adopted the philosophy that the international trade and shipping system was far too complex institutionally and

operationally to be reduced to a set of deterministic mathematical relationships. The (MPPM) suite of computer software was, therefore, deliberately and consciously developed with an open architecture that encourages user intervention at all stages of the modeling process.

The MPPM brings together a mass of trade, shipping and port data consolidated with economic research and operations models in a sophisticated, yet user-friendly, micro computer environment. The MPPM can be directly applied to the evaluation of future shipping requirements, national port plans, and to investigate the potential benefits of alternate maritime policy investment decisions. It does this by providing detailed, quantified and internally consistent forecasts of the maritime transport system's structure serving the ESCAP region at the end of the current decade.

The forecasts cover three areas:

- * the volume and direction of cargo flows;
- * the shape of the shipping network; and
- * the port facilities required to service the trade.

The fundamental strategy is to allow the modeller to input as much information as can be reliably obtained from exogenous sources, and to present these to the models in the form of an hypothesis. Using these conditions as constraints, the mathematical relationships embedded in the models are used to fill in the gaps; to ensure internal consistency; and to provide feedback on the credibility of the modeller's initial hypothesis and suggest directions in which it should be revised.

The MPPM project is an ambitious one demanding considerable resources. Several donor countries have, however, recognized the potential investment savings that can be made through 'healthy' regional development of the maritime sector which can be made possible through the provision of adequate planning tools. In a unique environment Australia, Japan, the Netherlands, Norway, the United Kingdom and the United Nations Development Programme have joined together to fund the various elements of the Regional Maritime Strategy Study, the umbrella project of MPPM.

Already the Maritime Policy Planning Models (MPPM) have been used to evaluate shipping and port demands within the ESCAP region. The key module used in the analysis has been the Liner Shipping Network Model, with inputs of forecast port-to-port container flows (excluding transshipment), which are derived from the Trade and Port Assignment modules.

Within the applications completed container throughput projections have been made for the year 2000 including transshipment traffic which is generated by the model. For the ASEAN region a throughput in excess of 24 million TEUs and for South Asia the projected throughput was over 4 million TEUs.

In addition to throughput projections, investment estimates have been made based on 'typical' container berth costs, rather than detailed engineering investigations. They should, therefore, be regarded as an indicative estimate rather than precise costings. Nevertheless, they provide a good working guide to the likely magnitude of investment that will be required in container berths over the next eight years.

We have estimated that to provide the container port infrastructure required to meet the needs of the ASEAN container trades for the year 2000 will require an investment of approximately US\$2.3 billion in the construction of new

berths alone. For South-Asia and Iran an investment of in excess of US\$1.1 billion, will be required for the construction of new container berths and the upgrading of existing facilities.

Importantly, we have also estimated that realisable productivity improvements could reduce the capital investment required to cater for the ASEAN and South Asian subregion's trade by US\$300 and US\$250 million respectively over the next decade.

The costs, while still only being approximate, provide governments and ports with an indication as to the level of funding that needs to be earmarked. Importantly the estimates can also be the start point of policy debate on the potential for supplementing public funds with resources from the private sector.

In addition to the modules described above, two port capacity models have been developed within the project, to assist ports to evaluate berth demands at a more detailed level. The models use either queuing theory or simulation methods have already been utilized in eight ports around the region.

Training on the MPPM suite of software and its application have been held at both regional and country level and as a result ESCAP is now initiating a study on the North Asian sub-region in collaboration with the Korea Maritime Institute. The study will follow the same lines as the ASEAN and South Asian studies focusing attention on a base case scenario and alternate scenarios aimed at evaluating strategic maritime policy options.

3.2 Project Evaluation

ESCAP has been active in developing computer software models to assist in the process of planning and financial/economic evaluation of projects identified through the MPPM and national planning initiatives. The objective has been to strengthen national capabilities, rather than relying on outside expertise and consultancy services to undertake the vast majority of the investment and project planning process. The approach has been to provide tools to undertake pre-feasibility/feasibility studies and more effectively control the work of consultants. The models consist of user friendly software packages and manuals which provide a continuous logic from cargo projections to physical requirements, including infrastructure, equipment procurement and replacement, operating costs and revenues through the life of the project and ultimately to financial and economic feasibility analysis. Written in a simple spread sheet style the models provide the benefit of speedily recalculating the impact of alternate operating configurations and optional financing arrangements. Included in each of the modules are sets of preliminary planning factors which include budgetary costs and typical productivities that can be applied in initial project screening and evaluation without having to enter into the expense of pre-feasibility studies.

Specially designed modules are available for evaluation of container terminals, bulk handling facilities, inland container depots (ICD) and new rail line developments. Each of the modules is self-contained and provides the essential framework for a multi-disciplinary team to undertake the planning, engineering, financial and economic components of project implementation.

With the massive growth of containerization and demand for new investment in this area it is not surprising that the greatest demand for implementation assistance from the secretariat has been for the container terminal and ICD

modules. These modules have been validated and implemented in five regional countries where multi-million dollar projects are being planned and implemented. The container terminal module has the flexibility to evaluate facilities with or without gantry cranes, thereby responding to the needs of both the large and small ports of the region. The inland container depot module has the benefit of a transport cost comparison element which allows planners to evaluate the potential cost of alternate modes of transport being used to move containers/cargo overland and thereby provide indications of possible modal split.

Extensive training activities have already been undertaken both through regional/country level workshops supplemented by on-the-job training based on actual projects being implemented in individual countries. Multi-disciplinary teams of planners have already begun to use the models to more effectively plan transport facilities in the region leading to greater economic efficiency in the transport and trade sector.

3.3 Port Management

To assist new and existing ports enhance productivity and improve the allocation of resources ESCAP developed the PORTMIS model. It is based on the formulation and quantification of management objectives to which information can be tailored. The PORTMIS model was first developed in 1981, following a survey of regional ports to identify specific problems and, at the same time, identify good practices that could be incorporated in the model management system.

The PORTMIS system embodies commercial management principles directly oriented to the port environment and the dominant government policy of the region. The objective being to create a management information system which encourages efficiency, pinpoints operational bottlenecks, stimulates the efficient use of existing facilities and assists investment decisions through the integration of operational and financial information.

A PORTMIS audio visual training package has also been developed which includes introductory video programmes, overhead projection materials and a workbook developed in collaboration with the UNDP/UNCTAD TRAINMAR programme. The package is now being distributed to regional ports for in-house delivery, ESCAP assistance is being made available for the first presentation of the materials in each country. The PORTMIS model approach to improved management has now been adopted by a significant number of countries. However, much remains to be done both at the regional level and national level, particularly in the least developed countries which have been slow to adopt modern management principles.

3.4 Environmental Management

While expansion of port facilities can make a significant contribution to economic development, it may also create adverse impacts on the surrounding environment. Port development and operations should, therefore be planned with careful consideration of their environmental impacts. To contribute to the global initiatives to sustain the environment, ESCAP undertook a study of environmentally sound port development.

The resulting guidebook, which was published for regional distribution by ESCAP and distribution to the rest of the world by IMO, provides port planners with practical information on environmental impact assessment (EIA) of

port development. It includes a checklist of potential adverse effects of port development and operation, mitigating actions, methods of prediction, information on environmental indicators and regulations on their permissible levels. A seminar on the subject was organized and attended by recognized experts.

3.5 Port Tariffs

The model port tariff was initiated to further explore the benefits of greater uniformity in port management systems and create the opportunity for more cost effective systems development through a regional approach. The project deals with tariff structure and the standardization of definitions of service rather than the pricing of individual services which is seen as an internal port policy issue. Importantly the financial and cost information generated by the PORTMIS system is fundamental to these pricing issues. Several of the ports that have already adopted PORTMIS have, therefore, been well placed to adopt the model tariff structure.

The tariff project was first proposed for ESCAP implementation by the ASEAN Port Authorities (APAA) as an approach to standardizing tariff nomenclature while creating a better understanding of how revenues should be used to recover asset investments. APAA members remained closely involved in the development work, as have a large number of ports in the region through participation in three Expert Group Meetings. These Meetings were convened to consider and refine the model as it went through the development process from regional survey, model drafting to validation and implementation in regional ports. The model has subsequently been adopted at a meeting of Chief Executives of Port Authorities as "the basis for future port tariff development in the ESCAP region" as well as by APAA and the Association of Australian Port and Marine Authorities. Currently the model is being implemented by 13 ports in Australia, India, Malaysia, New Zealand, Sri Lanka and Thailand.

Training activities on the model tariff have been undertaken in various locations around the region, the most recent ones in collaboration with UNCTAD.

3.6 Computerization

Nearly all of the ESCAP port projects involve the application of computer technology as a means to increasing the improving the utility of outputs. In addition a computer project has been initiated to assist member countries develop long term computer plans; provide the opportunity for exchange of software as well as technology transfer; and to act as a vehicle for the computerization of PORTMIS through the development of software packages. Within this project, in collaboration with the Port Authority of Thailand (PAT), the secretariat has developed a computerized asset register. The asset package provides a predefined library of reports for asset management and depreciation calculations or user specified output and analysis using filters provided. The system includes the option of historic or current cost accounting.

Another software package known as PORTCAM has been developed with the Ports Authority of Fiji to assist in the administration and management of small ports. The software stores and analyzes data related to ships, cargo, and operations. From this data it can issue bills for each user of the port facility while also offering the production of detailed trade and performance statistics. The system

is already operating in many of the Pacific Island ports.

A special study has also been undertaken on the potential usage of electronic data transfer between ports and the usage of EDI (Electronic Data Interchange) in transport and trade facilitation. The report of the study, which has been designed to create a greater EDI awareness in the region, provides the latest information on EDI developments and standards as well as role models for potential country implementation. A series of country level training workshops, based on the study report, have now been held in eight locations around the region.

4. Future Work Programme in Ports

As of the second phase of the Transport and Communications Decade for Asia and the Pacific gathers pace, several new and exciting ESCAP projects are planned to keep pace with the changing regional needs. Increasing regional awareness of environmental issues, the potentials for commercialization and the need for long term strategic planning in the maritime industry are all leading to review and reformulation of government policies. The future work programme of ESCAP within the ports sector has been designed to reflect the attention to these issues being given by the secretariat.

The new projects include:

- * Advancement of the MPPM with upgrading of databases and software to encompass the needs of inter-island traffic both in the Pacific and archipelagic countries. Sub-regional and country level studies are also planned in collaboration with regional institutes including the Korea Maritime Institute. Advisory services and on-the-job training on the financial/economic planning models will also be provided all under an umbrella of port capacity planning.
- * Commercialization of port and port related activities will be facilitated through the development of guidelines. This work will build on earlier activities on port related legislation and will provide an analytical review of the contractual basis for the commercialization of ports and waterways. Special attention will be given to the analysis of risks attending such arrangements, the distribution of benefits and the conditions under which different kinds of contract or systems are appropriate. In the second phase of the project advisory services will be provided on the implementation of commercialization strategies.
- * Transport of hazardous cargoes is increasing rapidly in line with the industrialization of the region's developing countries yet the transport industry is not well geared to the safety requirements and procedures. To assist the region minimize the threat to man and the environment caused by the transport and storage of hazardous cargoes the project will focus on the development of training materials for regional distribution and guidelines for contingency planning which is presently weak. The approach to creating a safer environment will be through upgrading of skills in the handling and transportation of hazardous cargoes, strengthening relevant regulations, national legislation, and the development and implementation of appropriate contingency plans. The project will be implemented in collaboration with IMO and ILO.

5. conclusions

All regional countries are considering approaches to enhance transport efficiency to better service trade. Each of the ESCAP port projects has been designed to create greater economic progress through the strengthening of port development policy and management. It does this through enhancing efficiency and thereby upgrading port capacity to cost effectively support the region's trade and growing economy.

With the continued support of donor countries such as Japan it is hoped that ESCAP can continue to serve the region in assisting in the process of economic development.

Sceptical About Big Bang Approach To Econ. Reform

(Reproduced from UNCTAD Press Release: TAD/INF/2350)

Market-oriented reforms have continued unabated in developing countries and the former socialist countries of Eastern Europe. Where they were undertaken gently and in time, they produced rapid and sustainable growth, as in East and South-East Asia. They did not do so when administered as a shock treatment, as in most former socialist countries of Central and Eastern Europe. This is one of the major themes of the UNCTAD Trade and Development Report, 1993 (TDR).

Growth in the developing world as a whole continued in 1992 and is expected to remain strong in 1993, despite continued recession in the North. But it shows considerable discrepancy among regions and countries though all adhered to the market philosophy. "East and South-East Asia represents the brightest spot on the international economic landscape", with 6% growth in 1992 and 1993, and "is on the way to becoming a growth pole for the world economy at large". Per capita incomes in some countries of the region now surpass those of many developed countries, while they continue to decline in almost all of sub-Saharan Africa.

The industrializing East: the most promising growth pole

The TDR expects Asia as a region to continue to outperform the rest of the world during the remainder of the decade and to bypass North America and Western Europe as the world's largest market by the year 2000.

In the successful countries of East and South-East Asia growth has been driven by trade and investment and has benefited from strong government support to private business and to exports. "Some of the most outstanding performers have industrialized using a panoply of controls and subsidized credit in favour of activities picked by the government as having a potential for rapid productivity gains, including heavy industries". Such intervention has shifted in the light of successes and needs, but has been carried out in an orderly fashion without creating "policy shocks". "Almost no highly indebted country in the region suffered the disruptive withdrawal of lending characteristic of other developing

regions, and growth was not interrupted by a vicious circle of macroeconomic disorder, sagging investment and economic retrogression". This contrasts with the macroeconomic disorder in which heavily indebted countries in Latin America were entangled as explained in last year's TDR.

The TDR 93 reports an interesting finding from kite charts comparing development "styles". The kites for Japan, the Republic of Korea and Taiwan Province of China "show high dynamics, high international competitiveness, low inequality, and relatively austere consumption, whereas those for the United States, Argentina and Mexico" show lower dynamism, lower international competitiveness in manufacturing, higher inequality, and exuberant consumption.

The countries of East and South-East Asia have provided each other with fast-growing markets for manufactures as well as primary commodities. The pattern of specialization has been changing rapidly, with the more industrialized economies moving out of simple manufactures into more sophisticated lines of production, and the less industrialized ones taking their place. "The relocation of industries (...) has received strong impetus from direct investments by enterprises within the region, pushed by rising labour costs and currency revaluations at home and pulled by welcoming policies in the host countries. The persistence of the growth-cum-integration dynamic over a period of years has made the countries increasingly interdependent and the region more self-reliant in both trade and finance."

What makes China's experience unique

China has broadly followed the model of its industrializing neighbours. Its economic reforms since 1978 "must by any reasonable standards be regarded as a success". Economic growth doubled in 1992 to about 13%. The reform process has been gradual and "devoid of shock treatment". It was not based on a comprehensive blueprint. Rather, the dynamics of the initial reform measures generated forces which led to further reform, making for a continuous process. In this way, China is taking advantage of the complementarities between central planning and the market, and between State-owned enterprises and the market-oriented small-scale sector, supplanting the one by the other.

The Chinese experience puts into question mainstream economic thinking about the feasibility of a gradual reform of a planned economy, the TDR points out. While a great deal of marketization has so far been accomplished, this has been possible without any formal privatization of State-owned enterprises. China has been able to introduce new organizational forms such as town and village enterprises behaving according to the rules of the market; they have become the most dynamic sector of the Chinese economy. Price controls have been reduced gradually and a dual price system has been introduced, which in conventional theory is regarded as leading to inefficiency. This approach also spared China the need to implement stabilization programmes, thus avoiding the current traumatic experience of many of the transition economies. The absence of free markets in China has not hindered efficient resource allocation. Moreover, fast growth has been attained without complete integration in the world economy.

However, the development of adequate macroeconomic instruments of control is essential to maintain stability. "With the lessening of central control over finance and investment, the economy has been overheating. Expenditure will need to be curtailed, and the sooner that is done, the less painful it will be".

Eastern Europe in a "twilight zone"

Unlike China, who opted for partial and gradual economic change, the formerly socialist countries of Central and Eastern Europe have tried "big bang" reform through abrupt liberalization, deregulation and privatization. Here, "the euphoria that greeted the collapse of communism has given way to pessimism". Since the beginning of the transition process, output has declined on average by about one third; it is expected to fall even further in many of the former Soviet republics. The situation in Russia is approaching hyperinflation, and unemployment is likely to increase sharply.

Many of the former socialist countries now find themselves in "a twilight zone where there is neither plan nor market", the TDR notes. The economic and social situation is now shaped by the most negative elements of the two systems. Overriding importance has been given to dismantling the old system, while avoiding new forms of government intervention. However, such intervention is needed to give shape to the new market system and cushion the transition.

While shock therapy can prove effective for fighting hyperinflation, the TDR points out that "shocks are not a reliable recipe for introducing the new thinking, behaviour and norms required. A market economy consists not simply of a predominance of private ownership and a minimum of government control, combined with appropriate laws; it is also a complex multitude of organizations, traditions and understandings that have usually evolved organically over time".

To enable this process to evolve smoothly, it may well be necessary "to widen the reform agenda to encompass a complete overhaul of the economic administration, so as to permit the Government to play a more active role in advancing transition and reviving growth".

In Russia, a return to stability depends on establishing control over money and credit, and on fiscal discipline. This includes ending the practices which allow enterprises to escape the financial discipline of the market, such as borrowing from banks under their control. Furthermore, price controls are needed to combat inflation and to prevent monopolistic price abuses.

Rapid privatization alone will not restore growth. It does not ensure adequate corporate governance, nor does the domestic private sector so far have the necessary financial and technological means. Drawing on the experience of many newly industrialized countries, governments should intervene to promote private enterprises and private capital accumulation, rather than simply transferring ownership. Greater effort should be directed to put enterprises which cannot be privatized on a commercial footing.

Latin America needs to translate capital inflows into growth, led by investment and exports

"The most striking feature in Latin America's changing fortunes has been the huge swing in the annual net transfer of resources, amounting to US\$50 billion from 1988/89 to 1991/92". Capital inflows have been a key factor in the recent improvement of the macroeconomic situation of the region, which in 1992 grew at roughly 5% (excluding Brazil). Brazil, whose much-needed fiscal adjustment remains largely unaccomplished, continues to suffer from a severe crisis.

Radical and speedy policy changes in most countries have prepared the ground for the swing in net transfers, and dismantling of restrictions on trade and capital flows have made the region more market-oriented than even the

Asian success stories. "The pendulum has swung so far that whereas in the past protection in Latin America was often excessive (...) it is now almost non-existent".

The TDR notes, however, that the recent capital inflow has included "large-scale repatriation of flight capital, a source which is not inexhaustible, and movements in response to privatization, which are probably one-off". More important, much of the inflow has been due to a bandwagon effect, as explained in TAD/INF/2351. There is a risk, the TDR warns, that the level of inflows, which have served to bring down inflation, to cover a huge current account deterioration and to improve fiscal performance, will not be sustained. The "various gains could be lost if the inflow were to slow down sharply or collapse".

Another reason for concern is the fact that "recent growth in Latin America has been generally driven by consumption rather than investment", while private savings and investment have been low. "Public sector investment in infrastructure has been especially weak, with adverse consequences for the private sector in the longer term".

The TDR is also concerned about "the lack of dynamism of exports, especially manufactures". Real currency appreciation due to capital inflows has brought a loss of competitiveness. But industrial policy has also been weak: export success requires "not only 'getting prices right' but also active government support and (...) well-targeted protection of domestic producers", says the TDR, pointing to the Asian experience.

A decade of adjustment did not reverse poverty in Africa

Nowhere else have structural adjustment programmes (SAPs) been applied more intensively and more frequently

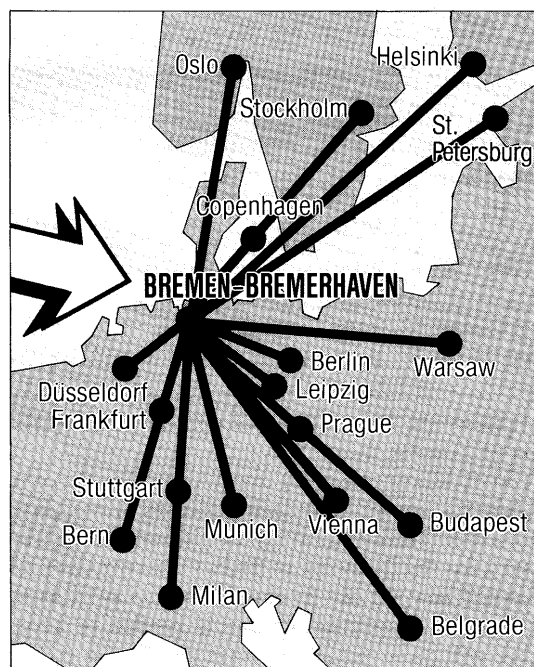
than in sub-Saharan Africa since the beginning of the decade, and still economic performance in the region continues to be the worst among developing countries. Per capital incomes continued to decline in absolute terms and today are still below the 1970 level. "On current trends it would take 70 years to double them", even in countries which have been undertaking intensive adjustment measures.

Africa economies critically depend on factors that are largely beyond the control of their governments: commodity prices, external financial resources and weather. The external environment has continued to deteriorate. The TDR foresees that "even under an optimistic scenario regarding commodity prices, their prospects for the remainder of the current decade are rather bleak". Not only has aid been insufficient, but it has increasingly been used "to induce policy change to the neglect of its more important role, which is to finance growth and investment".

In a comprehensive analysis of SAPs, the TDR points to a number of strong points but concludes that they have not succeeded in reversing poverty in Africa. The main reason, according to the TDR, was the paucity of external funding. As a result, SAPs have obliged governments to cut public investment, while higher investment is needed for industrialization and diversification. Furthermore, "severe shortage of foreign exchange has resulted in too much pressure being put on the exchange rate instrument, with severe repercussions on activity and prices". The TDR welcomes the emphasis put on agricultural development. Export promotion is also considered essential, but "by relying on devaluations and other purely market-based mechanisms, (SAPs) have improved incentives not to manufactured exports but to traditional ones (...)" and have therefore failed

(Continued on Page 16)

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International Maritime Information

WORLD PORT NEWS

International Shipping Law Conference

The Third International Shipping Law Conference on Carriage of Goods by Sea and Maritime Liability will be held in Kuala Lumpur: 31st January 1994 and 1st February 1994 and in Singapore: 3rd February 1994 and 4th February 1994.

Organized by: Shingapore National Shippers' Council
 Managed by: Professional Resources Agency (Pte) Ltd.
 Apply to: Megah Singopranote, Conference Director.
 Professional Resources Agency (Pte) Ltd.
 47 Hill Street, #07- 05/07
 Chinese Chamber of Commerce Building, Singapore 0617
 Tel: 65-337-2441, Fax: 65-466-3215

List of Topics & Invited Speakers

1. Limitation of liability for carriers — The Hague/Hague-Visby and the Hamburg Rules
 Speaker: Judge Anthony Diamond QC (UK)
2. Whom to sue as carrier in bills of lading/charterparty contracts — The identity of potential Defendant in cargo claims
 Speaker: Mr. David Chong, Senior Lecturer, National University of Singapore (Singapore)
3. Fraudulent shipping documents - Buyers' rights and remedies
 Speaker: Mr. Nagarajah Muttiah (Malaysia)
4. Damage to cargo (dry & wet) — A cargo surveyor's perspective
 Kuala Lumpur Speaker: Capt. Ramlan Ramli (Malaysia) Singapore Speaker:

Capt. J.V. Paloccaran (Singapore)

5. Lien on cargo clauses for unpaid freight — Position of the owners/ charterers/sub-charterers/cargo owners

Speaker: Professor Robert P. Grime (UK)

6. The time factor in loading and discharge under voyage charterparties — Laytime, demurrage and despatch money

Speaker: Judge Anthony Diamond QC (UK)

7. Freight forwarders' rights and obligations in inland transport

Singapore Speaker: Mr. Stanley Lim (Singapore)

8. Arbitrating charterparty and shipping disputes in

Singapore — why Singapore and not London

Singapore Speaker: Mr. Lawrence Boo (Singapore)

Shipping and Commercial arbitrations in Malaysia Kuala Lumpur Speaker: Ms. P.G. Lim (Malaysia)

9. Marine Cargo Insurance — All risks and other insurable perils — Institute Cargo Clauses A, B, and C

Speaker: Mr. Peter S.K. Koh (Singapore)

10. Recovery under marine cargo policies for short delivery/damage to cargo
 Speaker: Professor Robert P. Grime (UK)

11. Admiralty practice and jurisdiction in Singapore and Hong Kong

Singapore Speaker: Justice M. Karthigesu, Court of Appeal (Singapore)

12. Admiralty practice and jurisdiction in Malaysia and Singapore

Kuala Lumpur Speaker: Mr. K. Anatham (Malaysia)

13. P&I Clubs' liability for cargo claims
 Speaker: Mr. IAM Ferguson (Hong

Kong)

14. Liability problems in container transportation

Speaker: Dr. James Wong (Australia)

15. Transshipment and Through/Combined Bills of Lading — Position of the carriers/warehousemen/cargo owners

Speaker: Mr. Michael Wood (UK)

16. Stevedores and Third parties' liabilities: The Himalaya Clause

Speaker: Dr. James Wong (Australia)

17. The effect of shipment and shipping documents on the passing of title and risk in the carriage of goods by sea

Speaker: Professor John F. Wilson (UK)

18. The extent of the buyers (or consignees') right to reject goods and/or document under international trade

19. Principles of shipping conferences and shippers' protection

Speaker: To be nominated by SNSC

20. Damage to cargo during loading/discharge and warehousing — The position of the port authority

Speaker: A representative from PSA

21. Maritime liens — A comparative analysis between North American and common law countries

Speaker: Mr. J.R. Cunningham QC (Canada)

22. Resolution of Shipping/Commercial Disputes in China

Speaker: Mr. Huang Ya Quan (China)

New Publications

Lloyd's Ports of the World 1994

Published by Lloyd's of London Press; Editor Brian A Pinchin;
 ISBN 1-85044-543-5
 ISSN 0266-6197

Sceptical About—

(Continued from Page 15)

to promote diversification and industrialization. At the same time, "no effort has been made to avoid overproduction of primary commodities".

While recognizing also that the private sector should play a greater role, the TDR considers it essential not only to privatize but also to reform public enterprises, particularly "in countries at a very low level of development, where

market failures are widespread and growth must be accelerated by all possible means".

The TDR sees a compelling case for reducing the official debt of African countries, including arrears to multilateral institutions (see TAD/INF/2352). An integrated approach is necessary for the financing of SAPs "whereby debt relief initiatives and new aid can be coordinated so as to provide the net transfer of external resources needed to support adjustment efforts — something that requires a coherent position on the side of donor/creditor governments".

(iv) + 921 pp. Price £130.

With more than 20,000 additions or updates, almost half of *Lloyd's Ports of the World 1994*, the twelfth edition to be published by Lloyd's of London press, is completely new.

Apart from the inclusion of new ports worldwide, a major change in the new edition is the replacement of the Commonwealth of Independent States heading with separate headings for Azerbaydzhan, Georgia, Russia and Ukraine, all in the Europe section.

All the changes made throughout 1993 to the Norwegian telephone system have also been incorporated in the new edition.

Lloyd's Ports of the World catalogues details of facilities and contacts at nearly 2,800 ports around the world, making it a comprehensive reference for anyone needing port information, whether the precise dimensions of berths in the Elf Union terminal at Brunsbittel, or the fax number of the Port Authority at Varkaus.

The hardback directory is divided into continental sections, with ports listed alphabetically within each section. The extensive information on contacts and facilities at each port is complemented with details of approach and anchorage, hazards and tides. Also given is the port position plus number of the UK Admiralty Chart on which it is to be found and the Admiralty Pilot in which it is described.

A final section on International Free Trade Zones details some 300 zones worldwide.

Lloyd's Ports of the World 1994 is available, price £130. Including surface mail postage, from Lloyd's of London Press Ltd, Sheepen Place, Colchester, Essex CO3 3LP, England.

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Fax +44 206 772118

Lloyd's Nautical Year Book 1994

Published by Lloyd's of London Press; Editor Paul Cuny;

ISBN 1-85044-538-9

ISSN 0952-5394

412 pp. Price £37.50.

The 1994 edition of *Lloyd's Nautical Year Book*, the annual maritime reference book renowned for its yearly reviews of the shipping industry as well as for the scope of its assemblage of

astonishing facts, has been published by Lloyd's of London Press.

Whether involved in shipping, or simply interested in the subject, the reader can find answers to questions of every kind from the commonplace to the obscure. Not only to such questions as who are the loss adjusters in Hong Kong, or who are E.C.M.E. but where you can catch Yellow Fever or the maximum wave height in a force 10.

These are among the multitude of answers to legal, insurance and nautical questions which can be found in the factually informative sections of the year book. These include a glossary of terms, dictionary of abbreviations, conversion tables and sea distance tables, directories of nautical colleges and schools, Lloyd's insurance brokers, Lloyd's agents, P&I clubs, loss adjusters, maritime solicitors and other sources of information.

Lloyd's Nautical Year Book 1994 is available, price £37.50 including surface mail postage, from Lloyd's of London Press Limited, Sheepen Place, Colchester, Essex CO3 3LP, England.

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Contracts for the Carriage of Goods by Land, Sea and Air

Editor-in-Chief: David Yates, MA (Oxon); Published by Lloyd's of London Press; 1 85044 481 1; Looseleaf; July 1993;

£150.00 to 30/9/93, £195.00 thereafter

c. 1,300 pp

Drafting and interpreting contracts for the carriage of goods can be a time consuming and difficult process. The worldwide expansion of containerisation, the growth of multimodal transport and the special problems of the oil trade have created new challenges for the drafters of carriage contracts. Now Lloyd's of London Press are publishing and innovative new looseleaf which will provide a single up-to-date reference source to assist all those involved with this complex area of the law.



The Americas

Joint Effort Restores River Banks, Marshes

Burnaby's Fraser River Foreshore Park area has been the site of a habitat restoration project in cooperation with the Department of Fisheries, the City of Burnaby, the Fraser River Estuary Management Program and the North Fraser Harbour Commission. It will involve a partnership with contributions of \$50,000 from the federal government's Green Plan, \$325,000 from the City of Burnaby and \$50,000 from the North Fraser Harbour Commission.

Other projects will take place along Annacis Island, along the Vancouver side of the Fraser River and at Tilbury slough. At Burnaby's Fraser River Foreshore Park the initial goal was to provide erosion protection for the banks of the Fraser River but the joint program provided the opportunity to perform additional habitat enhancement work by restoring marsh areas with original plant life.

The river bank has now been reinforced and in the spring planting will begin to restore original plant life to the area. The estuary is a vital habitat for fish, the marshes provide the first link in food production as well as a retiring area for juvenile salmon heading out to sea.

The projects involve removal of wood waste and other debris from the marsh and river bank areas that get pushed into the marshes by tidal action. The debris causes a loss of marsh habitat. The project will be completed in the Spring of 1994. (*The Working River*)

Port of Corpus Christi: Cargo to China Dam Site

The Port of Corpus Christi's 16-month-old general cargo dock saw its most extensive movement to date when 86 units of heavy earth moving equipment rolled across the dock. This shipment also marked the first roll-on/roll-off (ro/ro) movement over the dock and the first time a true ro/ro vessel has called the Port of Corpus

Christi.

The equipment was loaded aboard the M/V *Falstaff*, a Wallenius Lines vessel, within a six-hour period, and the vessel departed a little more than 12 hours after it first docked. The cargo is destined for the construction site of the world's largest hydroelectric plant at the Three Gorges on the Yangtze River in central China. Once in Shanghai, the equipment will move by barge up the Yangtze to the dam construction site, a journey of more than 1,000 miles that will take about two weeks.

The shipment of the used equipment is reported to be the largest-ever, off-highway earth moving equipment sale by a private firm. It is the first of four orchestrated by Corpus Christi-based Transworld Industries Ltd, which purchased the equipment for between \$62 million and \$65 million. The next shipment is expected to move in late October.

Transportation Vital to Saint John's Prosperity

James K. Irving, president of J.D. Irving Limited, delivered a strong message on the subject of transportation to 800 guests at a dinner marking National Transportation Week in Saint John during June.

Mr. Irving who is also the chairman and chief executive officer of Saint John Shipbuilding Ltd. told the audience that Saint John and New Brunswick will struggle to survive in the future if transportation links to the rest of the country are downgraded, downsized or abandoned. He said a long list of business and industries in Saint John depend on transportation.

"Transportation is absolutely vital to Saint John — transportation by air and rail, by sea and highway are all essential to the economic health of this community."

He challenged members of the audience to continue to fight to protect and preserve every transportation link which currently exists. "We must work to continue to build on the system which is now in place if Saint John is to continue its roles as a port and industrial centre."

Mr. Irving praised the efforts being put forward to find new business for the Port of Saint John and he commended labour and management of the

port for the productivity strides which have been accomplished in recent years.

He cited his own shipping company's success in seeking new business and the contribution Kent Line makes to port business.

While the Port of Saint John is gaining world-wide recognition as a major forest products terminal, transportation links to its markets must be maintained and improved for the port to prosper.

"Saint John is the industrial engine that pumps life into the economy of much of this province. Saint John is the engine and the industrial heart — and all arteries must be kept open."

Mr. Irving said both New Brunswick and Saint John must face the reality of a fast-changing transportation system and an ever-changing transportation map. He noted the biggest challenge will be to remain on Canada's and North America's main transportation map.

One way of remaining on the map, he suggested, was to maintain the strength of the city's industrial base.

"Industry and transportation are two vital links in an economic chain. They are inseparable. We must have a strong industrial base to justify a fully integrated transportation system. In Saint John we have the industrial base and we must make sure no one takes away or diminishes our transportation system."

He told members of the audience that being successful today means changing with the times and adjusting to a new type of competition in a global economy.

Mr. Irving, whose companies are heavily involved in all aspects of transportation, cited CP Rail's proposal to abandon all of its railway line east of Sherbrooke, Quebec and the long timetable for the completion of a new Trans-Canada Highway (TCH) through New Brunswick, as two serious threats to a healthy transportation system for Saint John and the province.

(Port Progress)

GPA Unveils Automated Dispatch System

In an effort to further improve intermodal productivity, GPA has launched a computer-driven system that automatically notifies trucking

companies when a container has been released by the steamship line.

The system greatly reduces the time and the possibility of mistakes associated with relaying that information by phone. With this latest advance, containers will arrive at their ultimate destinations faster.

The new technology, FaxGate, produced by Teubner & Associates, is a hardware and software application that takes container information from GPA's mainframe computer, converts it into a format suitable for facsimile transmission and automatically faxes it to the trucking company.

Previously, this information was processed manually in the GPA's Containerport office. Once there, a dispatcher called trucking companies to alert them to the availability of outbound containers.

The process was cumbersome, according to Containerport Manager Steve Black, who worked with GPA's Information Services Department to implement the new system. "It was not uncommon to fail to make connections with the trucking company representative on the first call or to waste precious minutes waiting on busy signals or return phone calls," Mr. Black said. "In addition, faxing the dispatch information is more accurate in relaying and recording the proper container number."

Currently about 50 of the trucking companies providing service to the Port of Savannah are on the system.

GPA Adding Enhanced Cranes to Service

In a move that will dramatically increase productivity, the Georgia Ports Authority (GPA) has signed a contract with Kone Crane Corporation of Hyvinkaa, Finland for the delivery of four new container cranes designed to handle the new generation of container ships now calling the Port of Savannah.

The new cranes, which will cost \$21.2 million, will be fabricated in Helsinki and shipped by barge fully assembled to GPA's Garden City terminal. The first two should be on the docks and in operation within 15 months.

The new cranes offer a narrower base than earlier models, allowing more cranes to work a single vessel, which

speeds up the loading and unloading of a vessel.

At the same time, Savannah 1, the first of two container cranes scheduled for a massive renovation program, returned to service in August at GPA's Garden City facilities.

The upgrade program boosted the height of the crane by 20 feet and extended the boom outreach by a similar amount. In addition, the crane was equipped with a new electronic drive system to improve efficiency. A second container crane is now undergoing a similar upgrade.

The work is being performed under contract by Kocks Crane and Marine.

The life expectancy of the remodeled units will compare with that of a new crane.

Port of Houston Improvements Proposed

Harris County residents are being asked to make an investment that will mean expansion and improvements for the Port of Houston. The country's voters will decide in a Nov. 2 general election whether to approve the sale of \$150 million in general obligation bonds to fund port improvements.

The proposed improvements, which would be implemented over a five-year period, include expansion of some Port of Houston Authority facilities, rail acquisition and development, modernization of facilities, environmental improvements and equipment acquisition.

"In this competitive world market, it is imperative that providers of goods and services be able to deliver a product in the most cost- and time-efficient manner possible," says Tom Kornegay, executive director of the Port of Houston Authority. "Efficient, state-of-the-art facilities that can accommodate all types of cargo are the key to competitiveness in today's market. The proposed port improvements would help ensure that competitiveness in the decades to come."

Barbours Cut Projects

If the bond issue passes, \$90.3 million of the funds will be used for improvements at the Port Authority's Fentress Bracewell Barbours Cut Container

Terminal.

"This terminal is our fastest-growing facility," says Mr. Kornegay. "The steady growth that we have witnessed since the mid-70's is the primary reason for expanding the facility and for rehabilitating other sections of this much-used container terminal."

Barbours Cut Terminal opened in 1977. By the end of the facility's first full year of operation in 1978, the terminal handled 183,680 20-foot equivalent units (TEUs), or 1.6 million tons of cargo. Business climbed to more than 217,200 TEUs, or 2.3 million tons, in 1982 and 391,800 TEUs, or 3.6 million tons, in 1992.

The current bond proposal would allocate funds for development of a sixth berth at Barbours Cut Terminal and redevelopment of Berth 3; both projects will help the Port Authority better accommodate the needs of shippers and maximize the use of the terminal. Also slated are development of a pre-clearance station to expedite truck traffic, more than \$34 million for rail acquisition and development at Barbours Cut Terminal, equipment acquisitions, and rehabilitation and modernization projects, such as work on the wharf fender systems.

Other Facilities

Planned improvements to other PHA facilities — such as the Turning Basin Terminal, Bulk Materials Handling Plant and public grain elevators — account for \$27.9 million. Projects at these facilities, some of which are the Port Authority's oldest operations, include mostly rail work, modernization and rehabilitation.

Improvements to these facilities are critical because Houston is not a "niche port," Mr. Kornegay says. Rather than focusing on a single type of cargo, the Port of Houston handles a broad variety of cargo such as bulk commodities, general cargo, steel, breakbulk cargo, project cargo, heavy-lift pieces, and — of course — containers.

Rail Improvements

Rail improvements and acquisitions at various PHA facilities constitute almost a third, or \$46.4 million, of the \$150 million bond proposal.

"As intermodalism continues to be a growing force in the industry," Mr. Kornegay says, "providing shippers with various transportation options has

become increasingly important to a port's ability to compete and expedite cargo movement."

Environmental Projects

Environmental projects are another focus of the proposed port improvements, accounting for \$31.7 million. These projects will include management of the Port Authority's dredge material disposal areas, storm sewer and drainage improvements at PHA lease properties and other work.

The last time general port improvements appeared on the election ballot was in 1987, when voters approved the sale of \$100 million in port-related bonds; those bonds have since been issued. Mr. Kornegay says he believes voters will recognize the upcoming bond issue as an opportunity to invest in the port and in the economic well-being of the community.

Economic Impact

"The purpose of all the proposed port improvements is to enable us to offer shippers more options and increase the efficiency of cargo movement through Houston," says Mr. Kornegay. "But the community as a whole benefits because the port is an economic catalyst that creates jobs, attracts new business and generates revenues."

It has been estimated that port activity contributes \$3 billion each year to the regional economy and generates 29,000 direct jobs and 110,000 indirect jobs. The port improvements on next month's ballot would generate more than 6,400 one-time direct and indirect jobs associated with the construction of new port facilities; this would represent a \$378 million impact on the area economy. *(Port of Houston)*

Long Beach: Operating Revenues All-time High

Port of Long Beach fiscal year 92-93 figures show a modest 1.1% rise in container movements and an all-time high in operating revenues. 1,857,000 TEUs of containers passed through the Port last year, while operating revenues scored an all-time high of \$114,927,000, an increase of 2.8% over the previous year's \$111,838,000. Overall cargo tonnage dipped 3.6% to 72,440,594 metric revenue tons (MRTs) from fiscal

year 91-92's 75,145,751 MRTs.

Not surprisingly, the top five trading partners in terms of cargo tonnage were Japan, Hong Kong, South Korea, China and Taiwan. Rounding the top ten list were Thailand, Mexico, Indonesia, Singapore and The Netherlands. Bulk petroleum, electric machinery, plastic products, clothing and machinery led the inbound commodities. On the export side, petroleum coke, bulk petroleum, chemicals, wastepaper and coal topped the outbound commodities list.

Port of New Orleans: Builds for the Future

When complete, it will feature two miles of continuous modern wharves and state-of-the-art facilities. A full array of multi-purpose and ocean-going container ships will be able to discharge cargo quickly, take on new cargo and sail for the next port of call without delay.

Truckers will be able to reduce turnaround times to an absolute minimum thanks to newly paved marshalling yard that will eliminate tie-ups and congestion. And increased shedded area will allow stevedores to operate at maximum potential, moving cargo and preparing shipments efficiently as possible.

These assets give the Port a much greater competitive advantage that importers and exporters will find hard to resist. That competitive port is the near-future vision of the Port of New Orleans, with the first phase of the Nashville Avenue Terminal soon to open.

Nashville Avenue Terminal Complex is the centerpiece of the \$200 million capital improvements program, now in its third year, that will keep the Port of New Orleans among the most efficient and competitive ports in the world for decades to come. The program includes constructing new wharves, widening aprons, increasing shedded areas, improving marshalling yards, raising flood protection barriers to eliminate the possibility of flooding and roadway construction.

The Nashville Avenue "B" Wharf is the hub of the river terminals and the model of the terminal of the future. It's a multi-use facility with container

crane rail and approximately 150,000 square feet of shedded area. The new Nashville Avenue Wharf offers shippers the highest-quality facility accommodating project cargo, containers and an assortment of breakbulk cargoes. Two ship berths were added with the recently completed work, and three more will be open by the end of 1995.

When that work is finished, the Port Authority will boast two miles of continuous wharves from Henry Clay downriver to Milan Street.

The new 3,170-foot wharf features the new shedded area, and all-weather railcar loading and unloading site, and the expansion of the apron from 49 to 100 feet, allowing for a more efficient transfer of cargo.

The 295-foot wide wharf also accommodates quick movements of freight with two railroad tracks on the water side, rail service to the rear apron and improved road access to the storage area, which will prevent congestion on the dock.

Even the marshalling yard itself has been improved, expanded to a total 13 acres, and paved with interlocking bricks. The paver blocks are suited to withstand the weight of the containers as well as the front end loader. The use of interlocking bricks has eliminated the need for patch repairs, ensuring a smooth surface for years to come.

The capital improvement projects at the Port aren't limited to the Nashville Avenue Terminal. Napoleon Avenue Wharf is also being extended and more shed area is being built. An open wharf is being constructed in front of the Milan Street Wharf to provide additional berthing for ocean vessels downstream of Napoleon Avenue. The construction will extend the wharf out into the river where the natural depth of the water will eliminate the need for frequent dredging. Other projects include replacing the front apron of Napoleon Avenue Wharf C to increase the load capacity to 850 psf, improving roadways and access, upgrading signage and enhancing landscaping.

The Tchoupitoulas Corridor Project, being undertaken by the Port Authority and the city of New Orleans, will speed cargo movements through the city and easily accommodate all additional cargo that results from the wharf improvements. The project will give truckers a roadway dedicated to the movement of freight, separate from the

city traffic.

Accommodating freight has been the Port Authority's top priority, but not its only concern. As New Orleans' tourism trade continues to grow, an increasing number of cruise ships are calling the Port. The Port had a 54.3-percent increase in oceangoing cruise passenger calls from 1991 to 1992 and 48.1 increase from 1992 to 1993. To meet the demands of cruise traffic, the Port opened the Julia Street Cruise Passenger Terminal early in 1993 to the praise of tourism and travel officials throughout the city. The terminal features 8,000 square feet of passenger boarding area, 10,000 square feet of baggage, including Customs and Immigration areas, a 123-car parking lot and a covered walkway to the ship's gangway.

Other projects also come under the wide umbrella of capital improvements. Work is in progress to put a flood control system in place at the France Road Container Terminal, a Strategic Rail Plan has been implemented, and work on new Port Authority headquarters is expected to begin soon.

The long list of projects adds up to more efficient ship calls, quicker turnaround times and cost-effective cargo movements for shippers. And that adds up to a more competitive port for decades to come.

(Annual Directory 1993 - 1994)

Activity Sets Records At NC Charlotte Terminal

Customers using a special service offered by the North Carolina State Ports Authority helped set a record at the North Carolina State Ports Authority's Charlotte Intermodal Terminal during the recently completed fiscal year.

A record number of "Sprint Truck" moves was recorded at the Charlotte Intermodal Terminal for Fiscal Year 1993. A "move" represents a one-way trip, and nearly 6,000 Sprint Truck moves were made in fiscal Year 1993.

This is a 26 percent increase over the previous fiscal year, and represents the largest number of moves since the Charlotte Intermodal Terminal began its Sprint Truck Service in January 1984.

The Sprint Truck Service is offered

between the Charlotte Intermodal Terminal and the North Carolina State Ports Authority's seaport terminal at Wilmington. It provides a low, guaranteed tariff rate with no back haul charge, eliminates the cost of "bobtail" trips, and provides matched moves between the two North Carolina State Ports Authority facilities.

"The staff at our Charlotte Intermodal Terminal works closely with shippers and trucking companies to coordinate the movement of containers to and from the Wilmington Terminal," said James J. Scott, Jr., executive director, North Carolina State Ports Authority.

"By arranging to have a container moved on each leg of the trip between the seaport and the intermodal terminal we are able to save shippers a significant amount of money," Mr. Scott continued. "With this method an importer and exporter can share the round trip motor carrier rate."

"Both of our inland terminals provide a faster and less expensive system for shippers and receivers in western North Carolina, and areas of South Carolina, Virginia, Tennessee and the Mid West to move their containerized cargoes," Mr. Scott added.

The Charlotte Intermodal Terminal began operations in January 1984 at 5400 Hovis Road. It was the first inland terminal of this type in the nation. Other services offered at the Charlotte Intermodal Terminal include receiving, storage, stacking and interchanges.

The North Carolina State Ports Authority also owns and operates an intermodal terminal in Greensboro.

Forest Products Center's Construction Under Way

Construction of the 108,000 sq.ft. Forest Products Center at the Wilmington Terminal is progressing smoothly. At this point, foundation work is complete, the foundation wall is up and roof panels are being installed.

The building should be ready to house woodpulp and other forest products in early 1994.

Woodpulp is the leading export product out of Wilmington and accounts for 40% of the total export tonnage. "Forest product exports are on the rise and the North Carolina Ports

are responding to their customers' needs for additional, modern storage facilities," said Robert G. Jacobi, NC State Ports Authority Director of Business Development.

NC Ports Plan for 2nd Season of Chilean Fruit

With the start of the 1993-94 Chilean fruit season only weeks away, the second year of receiving the imported fruit at the Perishables Handling and Chill Facility at the North Carolina State Ports Authority's Wilmington Terminal promises increased volumes and even wider distribution than last year.

"Unifrutti of America will return to Wilmington with shipments of Chilean fruit beginning in January 1994 to serve the growing Southern and Midwest markets," announced P.A. Thomas, chairman of the North Carolina State Ports Authority Board of Directors.

Unifrutti of America, Inc., one of the major importing companies involved in the Chilean fruit trade, began bringing grapes and stone fruit from Chile through the Port of Wilmington in January 1993. Unifrutti is a supplier for several supermarket chains in North Carolina and the surrounding region.

"We were very happy with our experience during the first year of operations at Wilmington," said Andreas P. Economou, General Manager of Unifrutti of America, "and we are looking forward to our second year at the North Carolina port."

"We know for certain that the fruit operation at Wilmington provides us high quality service, and we can achieve quicker delivery into the South and Midwest while at the same time realizing cost savings on inland transportation," Mr. Economou said.

In announcing Unifrutti's return to Wilmington, Mr. Thomas said, "The North Carolina State Ports Authority is delighted to welcome Unifrutti of America back to Wilmington, and we pledge to continue the excellent level of service provided during the last Chilean fruit season at our Perishables Handling and Chill Facility."

The volume of fruit to be brought into Wilmington during the upcoming season is still under consideration, according to Mr. Economou.

Meanwhile, additional Chilean fruit

importers are looking at shipping through Wilmington to meet the increased demands of their customers in the South and Midwest.

"We believe more importers are realizing the benefits of using Wilmington to service this growing market," Mr. Thomas said.

"With this in mind, the North Carolina State Ports Authority currently is planning the next phase of expansion for the Perishables Handling and Chill Facility."

The 1992-1993 Chilean fruit season was the first year of operation for the facility which includes a 3,000 pallet capacity warehouse for perishable commodities to be inspected, fumigated and moved directly from ship to truck and a racked cooler warehouse capable of chilled storage for 1,500 pallets of fruit.

In addition to Chilean fruit, the Wilmington Terminal also is prepared to handle fruit from other areas such as South Africa, the Caribbean, the Mediterranean, Central and South Africa, Australia and New Zealand.

Seattle Ranks No. 1 Among US Cities

Scores of urban experts across the country ranked Seattle first in a survey on how well the 42 largest metropolitan areas in the U.S. are positioned for the 21st century. The survey was based on respondents' perceptions of the Seattle area, among others, and how well it compares. It was conducted by *Business First* in Buffalo, N.Y., a newspaper owned by American City Business Journals.

In combined results from eight categories, Seattle garnered 440 points to top Portland, Oregon (431) and Atlanta, Georgia (399) for the highest spot.

"Seattle is on the cutting edge with new ideas and technologies," said Alton Roane, director of development services for the city of Eustis, a suburb of Orlando, Florida. Roane, one of the urban experts polled for the survey, has never been to Seattle, according to a report in the *Puget Sound Business Journal*, which published the poll results conducted by its parent company.

Added Daniel Lauber of River Forest, Ill., "Seattle is an all-around

well-governed, well-planned and well-developed city that pays a little more attention to its neighborhoods than others do."

In the overall rankings, Detroit finished last with 154 points, just below Miami (218) and Los Angeles (219). *Business First* randomly selected a sample of 100 urban planning, design and architecture experts from across the country to participate in the survey. The experts were picked from mailing lists supplied by the National Association of Counties and the American Planning Association. The survey, which covered entire metropolitan areas, not just central cities, was designed to determine how each metropolitan area is perceived by urban experts.

Seattle ranked high in such categories as strong economy (2nd to Atlanta), best managed (3rd) and best schools (4th) because of its glowing reputation and accolades in the urban planning trade press, planning experts said. They liked Seattle's progressive, proactive approach to planning, the city's outreach to neighborhoods and its lack of politics in the planning process.

(Tradelines)

Seattle Passenger Total Ahead of 1992 Record

Continued strong domestic traffic and Europe's sparkle for the international traveler brought the August passenger total for Seattle-Tacoma International Airport to within 2.4 percent of the all-time record and kept the tally for the first eight months of 1993 slightly ahead of last year's record pace.

A total of 2,225,265 domestic and international passengers used Sea-Tac in August compared to 2,279,744 recorded a year earlier. The passenger count for the eight months through August totaled 12,509,751, or 1.3 percent more than for the same period of 1992.

Total air cargo jumped 4.9 over the first eight months of last year to 245,968 metric tons. Cargo volume in August was 31,636 metric tons, edging out the 1992 figure by 0.3 percent.

Local travel and visitor industry experts credited strong tourism through August and moderate fare cuts by airlines for the continued high level of traffic through Sea-Tac. Bargain air

fares sharpened Europe's attraction for travelers and helped international traffic totals climb back to about 90 percent of last year's level.

Sea-Tac, which is owned and operated by the Port of Seattle, handles about \$6 billion in two-way trade each year. Sea-Tac, its airline customers and concessionaires currently employ 17,000 people at the airport and indirectly support another 20,000 off-site jobs directly related to airport aviation and support activities. Sea-Tac partially supports another 50,000 visitor industry jobs.

Tacoma: Dredge Project To Benefit Environment

The Port of Tacoma has launched an \$18.1 million dredging project aimed at combining environmental cleanup with other large-scale Port improvements.

With more than 2.8 million cubic yards of material due to be moved, it is the largest Port of Tacoma dredging since the Blair Waterway was completed in 1965.

But the project is being recognized more for its environmental accomplishments than for its overall scale. It will become the first federal Superfund project to be implemented in Commencement Bay since the Environmental Protection Agency (EPA) approved a cleanup strategy for the area in 1989.

This dredge-and-fill work is part of a broader Sitcum Waterway cleanup project, which received final federal approval October 8 after more than three years of planning and review. To date, the Port has spent about \$5 million on testing, design work and planning for the project.

The environmental work and dredging activity is authorized under a consent decree entered into by the Port and the EPA.

"We have always felt that our best environmental work can be accomplished as a component of our other development plans," said Port Commission President Jack Fabulich. "This project proves that protecting the environment can go hand-in-hand with economic development."

EPA officials have hailed the project as a "modal for similar situations na-

tionwide."

"When it comes to commercial expansion and environmental protection, the Port is proving that it is not necessary to sacrifice one for the other," said Gerald A. Emison, EPA's acting Northwest regional administrator in Seattle.

"Not only will the Port be expanding its facilities, the project has been designed to enable the federal government, two tribal governments and the state of Washington to achieve their goals of cleaning up the environment and restoring natural resources," said Mr. Emison.

The dredge-and-fill project will seal contaminated sediments in a filled portion of the Port's Milwaukee Waterway. The process will accomplish cleanup of metals such as lead, copper and zinc that have settled in underwater sediments as a result of past industrial activity.

The material will be moved from the Sitcum and Blair Waterways to the Milwaukee Waterway. The Sitcum Waterway sediments require cleanup as part of an EPA Superfund site. The Blair Waterway material is being dredged to accomplish environmental cleanup of a portion of the sediments and to deepen a prime navigational channel.

The dredging of the Blair Waterway also fulfills a requirements of the Pu-yallup Indian Land Claims Settlement of 1989.

Port of Tacoma Commissioners authorized award of the dredge-and-fill contract on October 5. On October 11, the Port awarded the contract to its low bidder, Manson Engineering and Construction Company of Seattle. Work will be completed by October 1994.

The Port's agreement with EPA involves a variety of other environmental and development components, including:

- A Port payment of \$12 million for use by federal, state and tribal trustees to restore natural resources damaged by past industrial uses.

- A 9.5-acre area to be set aside as wetlands habitat for fish and wildlife.

- Construction of a 21-acre marine habitat area on the outer Milwaukee Waterway.

- A 24-acre expansion of an existing marine terminal facility on the filled portion of the Milwaukee Waterway.

Paving the expanded facility also serves as the final cap on a disposal site for contaminated sediments.

- Deepening the Sitcum Waterway from a minimum 40 feet to a minimum 45 feet.

- Deepening the Blair Waterway to a minimum 45 feet. This deeper channel will benefit the Port's maritime industry and the Puyallup Indian Tribe, which holds lands adjacent to the waterway.

The dredging project also is integrated with the Port's long-range plans for expanded shipping facilities on the Blair Waterway. The deeper channel will provide today's larger ships with better access to the Upper Blair Waterway.

These improvements will begin with the dredging project in October. The first step will involve construction of a containment berm in the Milwaukee Waterway. Sediments from the Blair and Sitcum waterways will be dredged using clamshell and hydraulic methods and placed behind this berm. A 10,000-foot, above-ground pipeline will be used to pump hydraulically dredged sediments from the Blair Waterway to

the Milwaukee Waterway.

The first of the dredging equipment will be used on the Blair Waterway.

The dredge-and-fill project is designed to ensure the isolation of contaminated sediments. Monitoring will be conducted during and after construction to prevent marine life from being exposed to contaminated sediments.

"This sets up protections to help assure that once the sediments are buried, they will no longer threaten marine life," said EPA's Emison.

In addition, the mouth of the Milwaukee Waterway will become a restored tidelands area for marine life and birds.

"The beauty of this project is the mixed benefit for both the environment and the Port industry," said Mr. Fabulich.

"Like our other recent mitigation projects, this habitat area will show that marine life can flourish in areas adjacent to productive maritime facilities," said John Terpstra, executive director of the Port of Tacoma.

During the 1980s, the Port spent

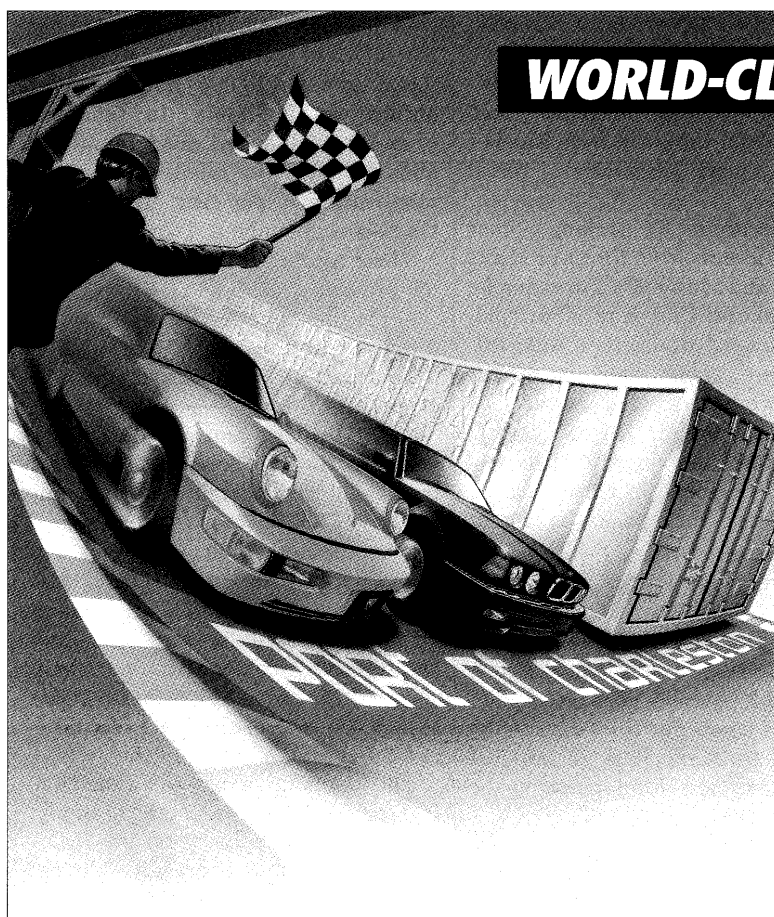
more than \$5 million on two other mitigation projects in the immediate Port area. A nine-acre manmade wetland area called Gog-le-Hi-te and an underwater marine habitat known as Slip 5 are both supporting healthy marine life in close proximity to Port facilities.

Business Opportunities For Russian Far East

A joint Russian-American trade conference recently opened new doors to free enterprise and international trade in the Russian Far East.

The jointly sponsored trade development conference, held in Vladivostok September 20-22, was the first of its type since Russia began its movement toward economic reforms. The Port of Vladivostok and the Far East Shipping Company (FESCO), in cooperation with the seven-member Puget Sound Ports Group of Washington State, hosted the conference.

More than 100 American and 140



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Russian business people and public officials attended the conference, called "Gateways to Emerging Markets." They discussed improvements in the transportation, banking, legal and communications systems that will help create business opportunities in Russia's resource-rich Far Eastern regions.

"The business and trade experts in our two delegations traded notes on technology," said Commissioner Don Hopkins of the Port of Everett. "We provided our expertise in business management, and our Russian counterparts provided ideas about the enormous assets and capabilities of their country."

"Our Port is a gateway for a new influx of capital investment," said Mikhail Robkanov, president of the Port of Vladivostok. "We want to make American and Russian people more comfortable with each other, and that was accomplished with this conference."

"The welcome we received was truly world-class, and we are grateful to the many people who made this possible," said Washington State Senator Marilyn Rasmussen.

In addition to the scheduled program, participants established numerous business contacts and held individual meetings to develop sales and create new ventures. A number of Russian companies submitted proposals for consideration by various American firms.

Several organizations announced new business developments and information during the conference. Some examples include:

- Washington Senator Rasmussen announced state government plans to open a trade office in Vladivostok to assist companies doing business in the Russian Far East.

- Sea-Land Service announced plans to open a second Russian Far East office in Vladivostok in October 1993. Already Sea-Land provides ocean cargo delivery via the Port of Vostochnny by rail to six Russian cities and by truck throughout the coastal Primorsky Region. The company also is planning to begin a new refrigerated container service to Primorsky destinations beginning in November.

- The Far Eastern Bank of Fisheries, Dalrybbank, has established wire transfer and other general corre-

spondent banking services through 18 foreign banks, five of which are American. For example, U.S. Bank has established correspondent relationships, and Key Bank will begin similar relationships with Russian banks.

- Bosnick Roofing, Inc. of Tacoma, Washington established plans to sell roof construction equipment and materials to Vladital, a joint-venture company providing extensive roof construction and repair work for the Port of Vladivostok. Vladital will be able to reduce the cost of its projects in the city of Vladivostok by purchasing the equipment from suppliers in Washington State.

- Alaska Cargo Transport recently delivered \$6 million of cargo to the Russian Far East in a single tug and barge operation, according to Rusty Devereaux, director of Russian projects for Alaska Cargo Transport.

- Marine Resources Company, a pioneer in joint-venture American-Russian fishing operations, has completed work on 20 medium-sized Russian fishing trawlers. The company also is expanding into the timber business and the Russian food processing industry.

- Primorlesprom, the major Russian-owned forest products company in the Primorsky Region, will open a new 20,000 cubic-meter-capacity sawmill in October. The mill will produce lumber and pulp products from Russia's 9 million square kilometers of forest land.

Primorlesprom is seeking other project proposals from forest products producers and consumers. For example, Contact Lumber Company of Portland, Oregon opened discussions with Primorlesprom about shipping wood molding products to U.S. markets.

- FESCO, one of Russia's largest shipping lines, announced that its vessels have attracted increasing cargo volumes since they began calling at Pacific Northwest ports. FESCO ships have called at the Port of Tacoma on a monthly basis since resuming U.S. service in December 1992.

- The Port of Seattle announced it had signed a "friendly port agreement" with the Russian Port of Vostochnny, according to Mark Reis, director of trade and business development at the Port of Seattle.

- Roy Peterson, the U.S. Department of Commerce official in Vladivostok,

noted that the U.S. Congress is expected within the next two months to approve the U.S. foreign assistance program. This could include a new \$300 million Russian Enterprise Fund and a \$40 million Russian Far East Enterprise Fund, both outlined during the recent presidential summit in Vancouver, British Columbia.

Africa/Europe

Finnish Ports Move Into EDI Time

The Portnet Project, which was launched in 1992, is a vast undertaking. Finland's most important port administrations and stevedoring houses, several organizations and enterprises in port business as well as government authorities participate in the investigations. EDI-Management Oy is responsible for over all organization.

The Portnet Project is a means of developing the timetables of the ships, statistics, information on dangerous cargo (IMO) and lorries, trailers and containers. On these tasks in port traffic the different parties to foreign trade spend about 120,000 hours a year during working-hours. In time the work-load will be cut down by several million marks, in relative terms approximately 75 per cent, the share of the ports being about a fourth.

These are the results expected from the project:

- the timetables of the ships will be given in real time
- departures and arrivals will be given in EDI form
- IMO will be centralized
- long-distance lorry and container traffic will be rendered more efficient.

The VTKK Group Ltd has solved the computerization problems of Portnet. Electronic timetables and IMO registers are part of VTKK Information Service Ltd's data services. Both functions are operated from terminals. There will be free access to the timetable system, but use of the IMO register is restricted of certain authorities.

The shipping agents give timetable, statistics and IMO data electronically. The service net turns them into EDI-FACT form when necessary. The net

is the same as the one used for the harbours' EDIFACT invoices. The first piloting is due for this autumn. Portnet will be introduced next year.

(Info: Port of Helsinki)

Another Contract Signed By PAH with S. Korea

The Port of Le Havre Authority has just signed its 17th contract of engineering cooperation with South Korea, for the study of a caisson-tunnel to make it possible to carry out maintenance operations "in a dry position" on the great lock of the port of Incheon.

For more than twenty years now, the Port of Le Havre has been developing commercial, technical and friendly relations with South Korean Port Authorities (K.M.P.A.) and more especially with the port of Incheon, as the managers of this port are following with great interest the solutions being developed for the Lock François I in Le Havre, asking the engineers of the Port of Le Havre to adapt them to their great lock of the port of Incheon.

After entrusting P.A.H. with various studies of improvement and extension in length of their great lock from 1972 to 1987, the Authorities of the port of Incheon has just asked Le Havre's engineers to adapt the project of caisson-tunnel which had been carried out for the maintenance of the lock François I to their own structures.

It is relevant to mention that the completion of a caisson-tunnel like that used for the lock François I was a world "premiere". The lock François I designed to accommodate 250,000dwt ships was the biggest in Europe until a very recent time. This is a lock equipped with gates of the wheelbarrow type at each end (or "head"). The maintenance of such a structure by divers would present quite aleatory safety conditions owing to the depth (-15m) and the operating requirements of the lock.

A caisson-tunnel was thus built in the port of Le Havre to be able to maintain this lock "in a dry position". The structure is made up of four elements with an upside down "U" shape which, placed and assembled to the bottom of the lock, covers the whole length of the rolling rails of the gates, from one side-wall to the other. The

essential constraints to take into account for the completion of this structure were: the pressure due to the depth (-15m), watertightness data and the need for having enough height to work in good conditions while keeping the lock in operation.

Environmental Auditing For Port of Helsinki

Accounting and audits normally pertain to finances and administration. Nowadays, however, the general public and the media are calling more and more for "green reports on operations", an "ecological balance", or whatever name you choose for a breakdown of the environmental effects of a firm's activities.

The Port of Helsinki has prepared an environmental auditing for the Port of Helsinki. It provides information on the establishment itself, the ships, and the tenants of the harbour. This assessment of environmental consequences is subject to continuous follow-up and a yearly inspection. Help for the planning of the future port extension to Vuosaari area comes as a spin-off effect.

Bremerhaven: Sea-Land's 2 Millionth Container

In the words of Bremen's senator for ports, Uwe Beckmeyer, handling the two-millionth Sea-Land container at the Bremerhaven Container Terminal marked a "milestone in the long partnership between the American shipping line Sea-Land Service, Inc. and the Ports of Bremen/Bremerhaven."

The two-millionth container was an export container loaded with auto electronics. It was on its way from the Robert Bosch Company in Stuttgart to America. This historic event was celebrated together with representatives of the companies involved. Bosch and the Stuttgart forwarder Panalpina, along with Sea-Land, the container freight agency Network, and the terminal operator BLG Bremer Lagerhaus-Gesellschaft, participated in this event.

John van der Merwe, Sea-Land's Atlantic Division Vice President and

General Manager, emphasized the importance of the Bremerhaven Container Terminal for the shipping line's worldwide transportation and service network. Since Sea-Land began transatlantic container shipping in May 1966, this famous container pioneer has regularly called at the Ports of Bremen/Bremerhaven. According to van der Merwe, what Sea-Land particularly values about Bremerhaven is the excellent experience they have had during the last 27 years of working together. For instance, "The level of quality and motivation is exemplary at BLG." In the past 27 years, slight delays occurred only once, and that was a result of extremely cold weather with ice and snow. "In comparison to other locations, that is something extraordinary."

On May 6, 1966, Sea-Land, Inc. called at Bremen for the first time with the full container ship "Fairland." The Bremen government and the port business recognized very early that the standardized containers had a great potential for development in overseas transportation. Despite the many skeptical opinions back then, they quickly invested in handling facilities and technology for containers. Therefore Bremen was the first German port at which a full container ship called. Two years later the high rate of growth led to the decision to build a completely new terminal right on the open sea in Bremerhaven. This location offers optimal handling conditions for this fast transportation system and saves long estuary sailing in the Weser River. The Bremerhaven Container Terminal is now one of the largest and most efficient facilities of its kind in the world. Its cargo volume reached around 1.3 million container units last year.

Emanuel Schiffer, responsible for operating BLG's container terminals in Bremen and Bremerhaven, emphasizes, "The advantages that the container pioneer Sea-Land appreciates about Bremerhaven apply for other shipping lines too." According to Schiffer, Bremerhaven's competitive position is based on quality and service, as well as the advantageous geographic location on the North Sea. Continuing growth in container handling in Bremerhaven has made it necessary to extend the terminal again. It will accommodate berths for two more large container ships and incorporate an

additional 800,000 square meters (almost 200 acres) of handling and storage space. Preliminary construction work has already begun. When the extension is completed, the Bremerhaven Container Terminal will include over 2.4 million square meters (over 590 acres) of handling and storage space and have a total length of almost three kilometers (over 1.8 miles).

The American Sea-Land line is still one of the most important container partners of the Ports of Bremen/Bremerhaven. In view of the dynamic growth in container transport worldwide, it probably will not be too long until the three-millionth Sea-Land container arrives in Bremerhaven. At least, this optimistic view was the unanimous opinion at the two-million celebration in Bremerhaven.

Coffee from Bremen to Berlin Overnight by Rail

Jacobs Coffee is switching to the railway. From now on the company is using trains to transport all its green coffee from Bremen to its roasting plant in Berlin. That will relieve the streets of 7,200 truck trips annually.

The Jacobs Coffee Logistics Train

makes this possible. This is a special transportation system developed by the coffee company in Bremen and realised in co-operation with the German Railways, BLG the Ports of Bremen/Bremerhaven, and the logistics firm Weser International Commodities (WIC).

"With this train we have managed to combine environmental and economic concerns in a rational way," remarked Gerd Berssenbrügge, who is the General Manager responsible for Jacob Suchard's coffee business.

In comparison to truck transport, the Logistics Train will reduce primary energy consumption by over 60 percent and lower CO₂ emissions by a third. Carbon monoxide and nitrous oxide pollution will also be decreased by around 90 percent. Berssenbrügge adds, "The environment will profit further, since this idea is economically sensible and thus will be a model for others to follow."

In the Ports of Bremen/Bremerhaven, the Port Operating Company BLG loads the containers directly onto the Jacobs Coffee Logistics Train. Then they go non-stop by rail right to the Jacobs roasting plant in Berlin. These trains, which are around 500 meters long and carry 50 containers full of green coffee, travel overnight from

Bremen to Berlin on an average of four times per week. Within 24 to 48 hours, the exact amounts of coffee ordered by the roasting plant can be put together in a shipment, loaded into containers, and sent to Berlin.

"Before we could start with the train there were a number of difficult logistical problems to be solved, so that it would always be possible to get the right kinds and volumes of coffee to the plant," explained Peter von Enden, who is responsible for green coffee purchasing and quality control at Jacobs Suchard.

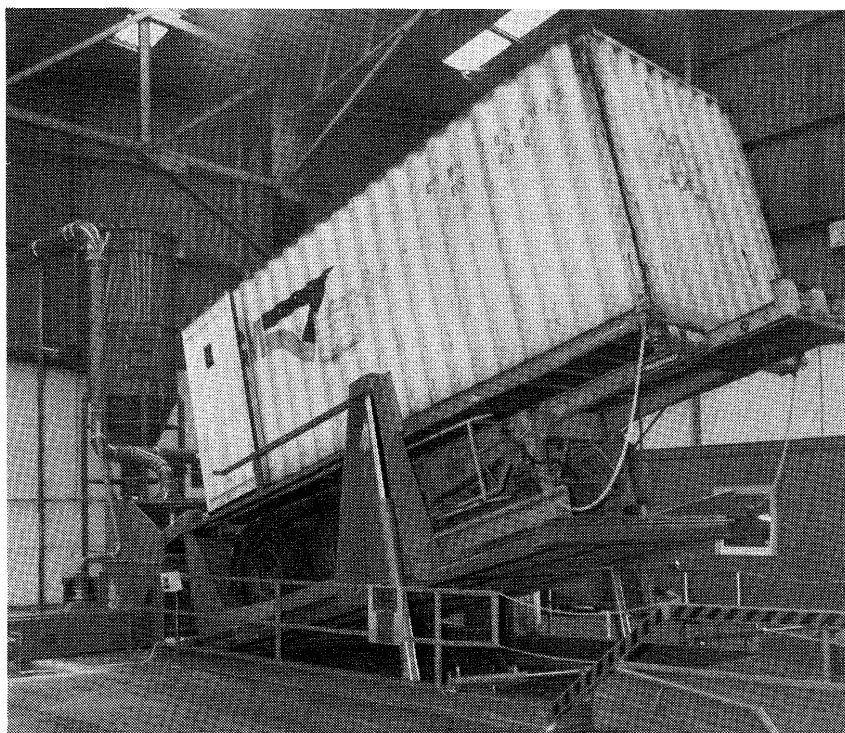
Dr. Dieter Naumann, Member of the Board of BLG Bremer Lagerhaus-Gesellschaft responsible for the field of special transports and general cargo, sees a number of reasons for Bremen's success as "High Quality Port" for coffee handling in Germany. BLG's manager stated: "Special storage facilities in the Bremen Food Port, high-performance transshipment, first-class connections to the hinterland by rail, truck and inland waterways, and a very wide range of services offered in the port itself and its immediate vicinity — these factors have further strengthened our position as European coffee port."

A Century of Pneumatic Grain Discharging

1893 marked the dawn of the modern age in grain handling. A century ago, the Chief Engineer (and later Director) of the Millwall Docks in London, Frederick Elliot Duckham (1841 - 1918) revolutionized the handling of loose grain in the Port of London by successfully installing a pneumatic discharging plant for granular bulk cargoes which he had developed with the engineer F.S. Tuckett.

Such was the significance of Duckham's invention that the pneumatic discharging technology installed in land-based or floating elevators was long referred to as the Duckham Principle.

Prior to Duckham's revolutionary invention, longshoremen had been forced to unload grain ships with baskets and shovels, a slow and, by current standards, totally unsatisfactory process. It took a whole week, six so-called



Handling equipment for green coffee coming in containers (bulk) in the Bremen Food Port



Floating elevators Kuddle and Herbert dip their suction pipes into the hold of MS Flag Diamond and then transfer the grain to two inland-waterway vessels

gangs of seven men, to unload a 5,000 t ship. Nowadays, the whole operation takes but a few hours.

But even now the process is not fully automated. Men need to steer the grain elevators' suction nozzles to ensure they remain completely submerged in the grain. Then in the final stages of the discharging process, shovel excavators are employed to "brush up" what remains.

Floating excavators are needed when part or all of an ocean-going ship's cargo has to be transferred to coastal or inland-waterway vessels. The floating cranes tie up alongside the ocean-going ship, dip their "trunks" into its holds and expel the grain, oilseed or fodder they have sucked up into the smaller vessels moored next to them.

When the discharging process has to be speeded up and environmental aspects taken into account, the energy-guzzling suction equipment is frequently replaced nowadays by mechanical dischargers. But the latter have not completely done away with the pneumatic discharging equipment.

The advantage of pneumatic dischargers is the flexibility with which they ensure a constantly high discharge rate. Their nozzles can move around in the hold to suck up the grain whereas mechanical dischargers have to have the grain shovelled towards them as the hold empties.

Grain elevators operate like a vac-

uum cleaner. The cargo is sucked out of the ship's hold through huge flexible pipes in the same way as a vacuum cleaner sucks up dirt. Besides the problem of designing a powerful suction pump (nowadays an induced draught fan) to create the necessary vacuum, the main technical difficulties Duckham faced were the design of a suction-pipe nozzle to achieve the highest possible discharge rate, and the question of how to get the grain out of the vacuum-suction pipe again.

Between 1888 and 1889 Duckham and Tuckett succeeded in solving the critical intake problem by inventing an effective suction nozzle, and the outlet problem by means of an automatic, twin-celled tilting valve. These two revolutionary inventions ensured a constant flow of grain in the current of air. Duckham had both problemsolvers patented. Another of his inventions was a flexible vacuum pipe with which to suck up grain from every part of the hold.

The pneumatic discharging equipment Duckham then developed for ship-to-ship handling at London's Millwall Docks was installed on a 52-metre long pontoon instead of on land so that it could be used anywhere in the London Docks. The whole plant was built by East Ferry Road Engineering Works Ltd. in Millwall, whose managing director Tuckett was later to become. And thus the world's first

floating pneumatic grain elevator, the Mark Lane No. 1, was put to work in 1893. Equipped with three pipes mounted in three wooden towers and two pumps attached to a steam engine, this elevator is said to have achieved a maximum discharge rate of 100 t/h.

In the Port of Hamburg the first three Duckham elevators were put into operation by the Hamburg-Amerika Linie between 1897 and 1901. The aim was to reduce the lay time for their large cargo and passenger vessels arriving from America laden with grain. These elevators were built by Duckham's continental licensee, G. Luther AG in Braunschweig, a precursor of the present-day Braunschweig firm, Bühler GmbH.

In the Port of Hamburg the transformation of grain handling from a manual to a pneumatic process took place in 1906-7 with the establishment of Getreideheber-Gesellschaft mbH, a firm that introduced the first five models of a new generation of floating pneumatic elevators developed by G. Luther AG in 1907.

Today, the Port of Hamburg operates 23 land-based and 3 floating pneumatic grain elevators with a capacity of 250-1,250 t/h, underlining Hamburg's reputation as a particularly fast cargo-handling port. In 1992 5.4 m t of suction cargoes were discharged in the Port of Hamburg (up from 5.3 m t in 1991).

In the first eight months of this year the Port of Hamburg handled 290,000 t of grain imports (76% up on 1992) and 547,000 t of exports (down 51.3%). In all, 3,363 m t of suction cargoes were handled, 12.3% less than in the first eight months of last year. Although oilseed imports rose by 14.1%, exports fell by over 40% due to the drop in aid shipments to the former countries of the Soviet Union.

**Address by Mr. Jim Cregan
on the Occasion of His
Re-Election as Chairman,
Cork Harbour Commissioners,
18 October, 1993**

Fellow Commissioners,

I wish to record my sincere appreciation of your decision to re-elect me

for a second term as Chairman of Cork Harbour Commissioners.

I am pleased to report that the past year has been a most successful one in the history of the Port of Cork. As you are aware, in 1992 the Port of Cork became Ireland's no. 1 port when total traffic throughput exceeded 7 million tonnes for the first time. While this figure was somewhat inflated due to the impact of the Dublin Port strike on our traffic, nevertheless it was a very significant achievement. Although with Dublin again operational we have understandably not been able to sustain traffic at the 1992 level and, in addition, bulk liquid throughput is reduced because of the major shutdown at Whitegate Oil Refinery earlier this year, the first nine months of this year have been quite satisfactory.

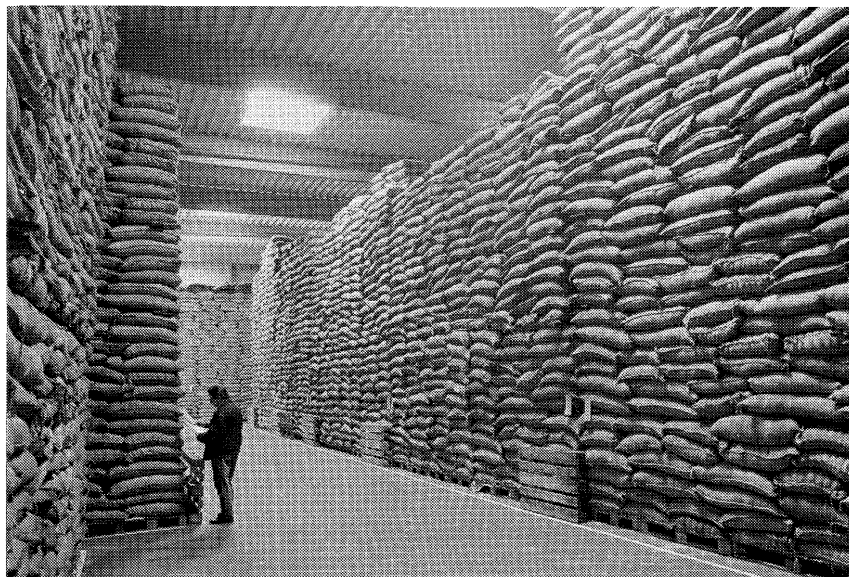
Our car ferry traffic has reached new levels and the increased commitment by all three ferry companies Swansea Cork Ferries, Brittany Ferries and Irish Ferries is an undoubted vote of confidence in the port. Container traffic has also held up very well and, while we may have lost some dry bulk cargoes to other ports in recent years. I am confident that the outcome of the negotiations on the third phase of docks rationalisation will lead to increased competitiveness for the Port of Cork. This will enable us to recover lost traffic and, furthermore, I would hope that it will enable us to increase our market share in this important sector in the years to come.

At present we are awaiting sanction from the Department of the Marine to enable us to proceed with the three projects which have already been agreed in principle under the E.C. Cohesion Fund. I refer of course to the purchase of a new tug and the major upgrading of both the Ringaskiddy Ferry Terminal and the Tivoli Container Terminal. The work at Ringaskiddy is essential to enable us to cater for two ro-ro vessels simultaneously while the planned extension to the Ferry Terminal will provide greater comforts for the ever increasing number of passengers using the Terminal. With a quickening trend towards deeper drafted vessels, it is essential that we undertake the proposed dredging of the approach channel to the Tivoli Container Terminal so that all container ships can access the Terminal at any stage of the tide.

Gentlemen, I thank you for the

courtesy and support shown to me over the past twelve months and I would also like to couple with that the wonderful co-operation I have received from our Chief Executive Pat Keenan

and his management team and staff. If re-elected I will do my utmost to continue to work on your behalf to ensure the continuing success of the Port of Cork.



View inside a warehouse. Jute bags full of cocoa beans are stacked right up to the ceiling of a warehouse in Hamburg's Speicherstadt. Here, a warehouseman is checking a "Hamburg pile"

Hamburg — the Leading German Cocoa Port

Cocoa is not only very popular with Germany's youngsters, it also goes down well with adults, too — in the sweet, seductive form of chocolates or even as a welcome warming drink in winter months. The Port of Hamburg, as Germany's leading cocoa-handling centre, ensures sufficient supplies of the raw material are always available.

In general trading last year 147,966 t of cocoa beans were imported via the Port of Hamburg into Germany direct or for storage (in the Free Port or bonded warehouses) — down from 158,881 t in 1991.

The International Cocoa Organization also has considerable quantities of so-called buffer stocks in Hamburg's warehouses. What's more, the Port of Hamburg plays a key role in transit trade. In 1992 transit traffic totalled 34,378 t. Unfortunately, there are no comparative statistics for the previous year because Hamburg's Statistical Office did not record transit trade in cocoa in 1991.

The most important recipient countries for cocoa passing through Hamburg as a transit cargo are the Czech Republic, Austria, Hungary, Poland,

Switzerland and the UK. The total volume of cocoa beans handled by the Port of Hamburg exceeded 180,000 t last year.

In 1992 Germany's imports of cocoa beans totalled 319,590 t (up from 302,926 t in 1991) and were worth DM 669,919,000. This was the highest total ever, beating the previous record (1991) by 5.5%. In value terms 1992's imports were also DM 14 m higher than the previous year. 1992's record total meant Germany increased its share of global imports of cocoa to 14.4%.

German imports of cocoa cake (1992: 3,863 t, 1991: 5,221 t) and cocoa butter (1992: 44,906 t, 1991: 54,450 t) fell sharply last year but imports of cocoa powder continued to rise (1992: 26,424 t, 1991: 25,056 t). In 1992 exports of cocoa butter were virtually unchanged from the previous year.

Although around two thirds of the cocoa landed in Hamburg arrives in bags conventionally stacked on pallets, nowadays specially designed, ventilated containers are playing an increasingly important role in stacking terms. But in contrast to coffee, cocoa is not yet transported loose in containers.

Ferry Traffic Soars to New Heights at Cork

The spectacular upsurge in car ferry traffic at the Port of Cork confirms that the port is on schedule for a record breaking performance in 1993. The introduction to new routes by Brittany Ferries and Irish Ferries to St. Malo and Cherbourg respectively has been largely instrumental in increasing passenger and accompanied car throughput for the period March - June 1993. Passenger traffic grew by 27% to 100,000 passengers while accompanied cars grew by 30% to 25,000 units.

Significantly, continental passenger throughput increased by 39% and cars by 32%. Meanwhile, Swansea Cork Ferris are enjoying a highly successful year and the increased capacity and superior facilities offered by their m.v. SUPERFERRY have enabled them to increase their share of the cross channel car ferry market.

Speaking to PORTLINES, Mr. Pat Keenan, chief executive of the Port of Cork said that he was very pleased with the increased commitments by Brittany Ferries, Irish Ferries and Swansee Cork Ferries to the port. "The very welcome response from holiday and freight customers in Ireland, Britain and on the continent is an acknowledgement of Cork's favourable location and quality facilities and vindicates the port's decision to invest approximately £5 million over the next 18 months upgrading the Ringaskiddy Ferry Terminal," he added. (Portlines)

Cork: Cargo Throughput Reaches Record Levels

Following a very successful year in 1992 when the Port of Cork was Ireland's leading port in terms of cargo throughput, non-oil traffic has reached a record level for the first six months of 1993. Throughput under this heading totalled 1.54 million tonnes, an increase of 16,000 tonnes over 1992. This is an excellent achievement particularly as the 1992 figures were somewhat artificially inflated due to the impact of the prolonged Dublin Port strike.

Container Traffic recorded highly satisfactory growth of 53% over 1991, a year largely unaffected by the Dublin strike. It is obvious that the choice of

container lines offering competitive freight rates together with the high level of service available at the easily accessible, rail-connected Tivoli Container Terminal are the principal reasons for this impressive increase.

In a difficult year for inward tourism, it is particularly satisfying to record a 27% increase in passenger throughput to 100,000 passengers for the period March - June while other significant increases occurred in imports of scrap steel, molasses and animal feedstuffs and exports of livestock, steel and barley. (Portlines)

Cork Launches Bid for 1997 Cutty Sark Race

In a major show of unanimity involving Cork's public and private sectors and in the presence of Mr. Gerry O'Sullivan T.D., Minister of State at the Department of the Marine, Cork launched its bid to be included in the Cutty Sark Tall Ships Race Itinerary in 1997.

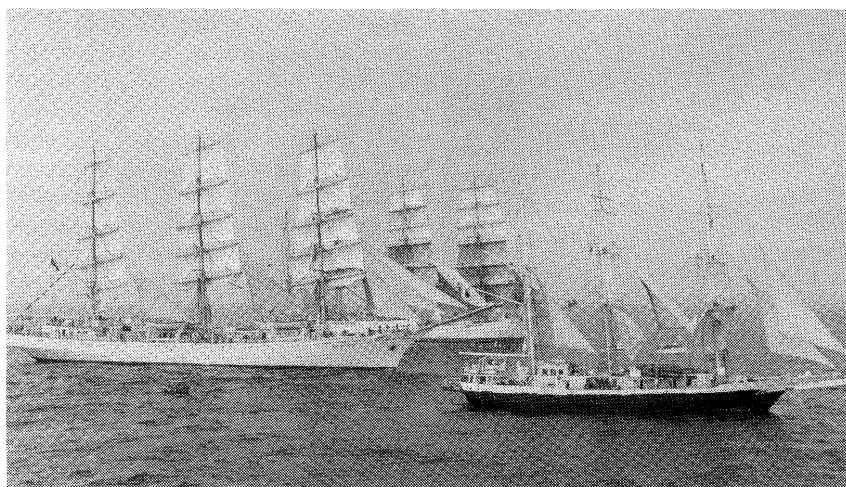
Speaking at a specially convened press conference at the headquarters of the Port of Cork, Mr. Ted Crosbie, who performed with such distinction as chairman of the committee which so successfully organised the 1991 event in Cork, announced that a formal application would be submitted to the Sail Training Association's International Advisory Meeting to be held in London on 12 November next.

Unquestionably Cork has all the credentials necessary to make an outstanding success of the event again. The natural amphitheatre of the spa-

cious deepwater Port of Cork offers spectators unrivalled views of the visiting vessels while the compact city quays situated within a few minutes walking distance of the city centre, allow the visiting crews to enjoy the intimacy and comradery which are such integral aspects of the Race. That the 1991 event was such a huge success was evidenced by the wonderfully positive response from the participating boats and crews — a response which is often recounted to this day to the crew of the Irish sail training vessel, ASGARD II, on her visits to many ports around the world.

During the never to be forgotten week in July 1991, 750,000 people were attracted to Cork — by far the greatest spectacle ever witnessed in the southern capital. The Eucharistic Congress of 1932 and the visit of Pope John Paul II to Ireland in 1979 were the only events to rival the 1991 Race in terms of spectator appeal since the foundation of the Irish Republic. The Race received extensive television coverage from R.T.E. and the Friday night audience propelled the even to No. 1 in the TAM ratings. The live transmission of the 14 mile Parade of Sail from Cork city to the harbour's entrance on the final Saturday afternoon attracted an audience of 400,000 viewers, an unprecedented figure for such an event.

Once again, all the organisations associated with the 1991 Cork Committee have pledged their full support and the experience and expertise gathered by the Committee in bringing to fruition a varied and challenging programme, will surely influence the Sail Training Association to visit the Port of Cork once more in 1997. The



1991 Event was run within its budget of £400,000, largely thanks to the hundreds of volunteers who gave their services so freely — a remarkable achievement in itself.

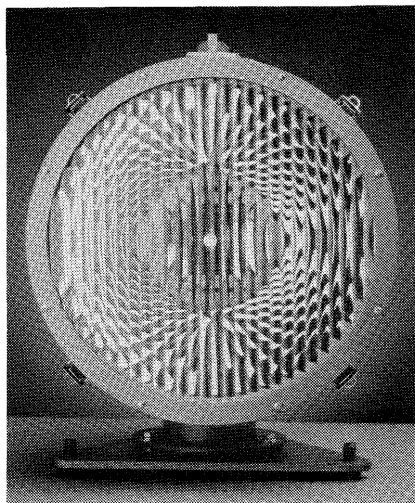
Tideland Range Lanterns For Port of Flushing

Tideland RL-355 range lanterns have been chosen by the Port Authority to guide ships into the commercial harbour at Flushing, the Netherlands' third largest port. The contract was won through Tideland Signal's Dutch agents NeSA (Nederland Survey Projecten en Apparatuur B.V.).

Tideland's RL-355 range lantern was developed under contract with the U.S. Coast Guard for a particular application and has subsequently become generally available. Its wide beam spread is achieved through the use of a high precision, parabolic glass mirror and spreader lens. The RL-355 is fitted with a four place flasher/lampchanger and has a daylight range of up to 7 nautical miles.

The Tideland lanterns are mounted on columns 150 metres apart to form a pair of leading lights. They are both equipped with red lenses and have been installed to replace obsolete equipment.

The port at Flushing operates under a joint agreement, formed by the government of the Netherlands, the province of Zeeland and the municipalities of Flushing and Borsele. In addition



A pair of Tideland's RL-355 range lanterns guide shipping into the commercial harbour at Flushing.

to its role as a port for seaborne traffic, Flushing is a major terminus for inland shipping via the River Scheldt, while the commercial harbour is used primarily by bulk carriers and container ships.

Rotterdam: Green Award, Quality Ships Certificate

As from 1 January 1994, Rotterdam Municipal Port Management intends to reduce port dues by 10% for SBT tankers, tankers with segregated ballast tanks.

On the same date, the Port Management aims for an independent organization to begin granting the Green Award. This is a quality certificate for ships which have made extra investments in the quality of the ship and crew. The Port Management will combine the Green Award with a maximum premium of 9% as of January 1995.

Both of these initiatives form part of the Port Management's endeavour to ensure that activities in the port take place safely and without harming the environment. The Port Management has submitted a proposal for 'SBT' and 'Green Award' to the Rotterdam Advisory Committee for the port. This proposal will be considered on Wednesday, 27th October.

SBT

In SBT tankers, the tanks for the ballast water are separate from the cargo tanks. This ensures that this water remains clean, which is to the advantage of both the port and the shipowner. The tanks, however, increase the ship's gross register tonnage: the basis of the level of seaport dues. Rotterdam Municipal Port Management now wishes to adjust this basis for SBT tankers, as a result of which lower port dues will be paid. The Port Management is hereby complying with the resolution of the International Maritime Organization (IMO). The basic principle is that environment-friendly conduct and safety are largely determined by the crew and management of the ship.

Green Award

At the beginning of this year, the Port Management launched the Green Award certification system. With re-

gard to its introduction, the City Council of Rotterdam attached the condition that a number of nautical service companies in the port must materially support the project. This support has now been given by the Ministry for Transport and Public Works, the pilots, the companies affiliated to the Europort Botlek Interests Organization and the Boatmen's Association "Eendracht". The Port Management wishes to combine the quality certificate with a premium of 3, 6 or 9 per cent. In the first instance oil tankers with a cargo capacity of more than 50,000 tons can be considered for the Green Award.

The Port Management is aiming to achieve internationalisation of the award. Other types of vessel will then also be considered for Green Award certification. Shipping companies can apply to the Green Award Organization for the certificate. It is valid for a period of three years.

Rotterdam

In 1992, approximately 293 million tons of cargo were transhipped in the port of Rotterdam. 35 per cent of this consisted of crude oil. Around 340 oil tankers with a cargo capacity of more than 50,000 tons called at Rotterdam a total of 720 times.

Improvement of Nautical Services in Rotterdam

The first Nautical Service Centre (NSC) in the port of Rotterdam was opened, Friday 8 October 1993. At the NSC all major Rotterdam nautical service organizations — pilotage, towage and the boatsmen — will carry out and coordinate their work from one operational location.

The construction of the NSC forms an integral part of the policy of the Port Management, aimed at promoting activity in the port and industrial areas of Rotterdam. The existence of the NSC will mean an improvement in the handling of international shipping traffic in the port and consequently the competitive position of mainport Rotterdam.

Rotterdam Municipal Port Management is already preparing a second NSC, directly located on the North Sea, on the Maasvlakte. It concerns a piece

of land which at the present time is still underwater.

Modernised Hull Fish Market, Largest in UK

Associated British Ports (ABP) has announced that the modernised Hull Fish Market, the largest fresh-fish auction market in England, has secured approval under the stringent hygiene requirements of recent EC and UK legislation. The market will be officially inaugurated on Thursday, 21 October by Lord MacKay of Ardbrecknish, Chairman of the Sea Fish Industry Authority.

Approval follows a £300,000 refurbishment scheme which was undertaken after extensive consultation with regulatory and advisory bodies and trade representatives. The auction market comprises a total of 6,550 sq metres of covered sales floors, with two sheds for directly landed and containerised fish and one shed for overland supplies. The scheme was partly financed by a Fisheries Act grant from the Ministry of Agriculture, Fisheries and Food which provided 20 per cent of the funding.

Hull's Port Manager, Mike Fell, expressed his satisfaction that a marked recovery of the port's traditional role in the fishing industry had enabled ABP to undertake this major scheme.

"It is particularly pleasing to note that Hull now has the largest throughput of any auction market in England. Fish continues to be an important component of the port's varied traffic and due to the efforts of all parties concerned, buyers and consumers can now be assured of a high quality product which meets the most stringent standards of the food industry," he said.

Harbour Service Patrol Launch Named Canvey

The latest Harbour Service Patrol Launch to join the Port of London Authority (PLA) fleet, was named *Canvey* on Tuesday 3rd August by Mrs Anne Edge, wife of PLA Board Member and Deputy Master of Trinity House, Captain Malcolm Edge. The naming



ceremony took place adjacent to the PLA's Holehaven Harbour Office on Canvey Island.

To be stationed at Holehaven, the launch will patrol the 16 miles of water under the PLA jurisdiction that surrounds Canvey Island. Operated by a crew of two, the launch will be used to maintain the safety of navigation in the Canvey area, especially during the

summer period when there is a high level of pleasure boating activity.

Other duties will include the supervision and overhaul of the PLA licensed moorings, clearance of obstructions and maintenance of signage. The launch will also enable the crew to develop liaison with local yacht clubs, boat-yards, local authorities and other statutory bodies within the area.

Asia/Oceania

Brisbane Port Authority To Operate Rail Terminal

The Board of the Port of Brisbane Authority has decided that the Authority will build and operate the Rail Intermodal Terminal at Fisherman Islands, rather than appoint any of the bidders who lodged expressions of interest for this project.

The Authority's Chairman, Mr Ian Brusasco said that the Board had devoted a great deal of time and discussion to the bids received but in the end decided that the Authority was best able to fulfil its mandate of developing a low-cost, trade maximising port by building and operating the facility itself.

Mr Brusasco said that the Authority proposed to work closely with the industry in the design, equipment and operating procedure for the Rail Intermodal Terminal and that the decision to continue with the operation of the facility would be reviewed in three years. The new terminal will replace existing arrangements whereby rail wagons are shunted into the existing

marine container terminals.

The current situation, coupled with the need to reposition wagons to suburban container parks in Brisbane means that rail wagon turnaround times of up to two days in Brisbane are common.

Under the new system, turnaround times of only four/six hours will be achieved. Mr Brusasco stated that the Authority had decided to fund the entire development of the terminal, including pavements, buildings, rail tracks and mobile plant.

The civil works project, not including the cost of mobile equipment, is expected to cost approximately \$4 million and be operational by late 1994.

Mr Brusasco said that the Authority has again deferred a decision on the operator for container park facilities at Fisherman Islands but expects to make a decision when the Board meets at the end of September.

The construction of the Rail Intermodal Terminal and the adjacent container parks, together with the construction of the standard gauge railway, are key elements in the port's Strategic Plan to 2005 and Beyond, which provides for the doubling of container trade to over 400,000 units by 2005. *(Brisbane Portrait)*

Y'hama Rubber: System For Monitoring Fenders

Yokohama Rubber Co., Ltd., a leading manufacturer of tires and other rubber products, has introduced a new kind of fixed type pneumatic rubber fender (A.B.F.-P; Air Block Fender with Panel) with an independent monitoring system.

The computerized fender monitoring system senses the air pressure inside the fender and displays the performance of the fender (deflection, inner pressure and reaction force) and actuates an alarm automatically if the inner air pressure rises above a limited level which indicates that fender has deflected over the allowable limit. The fender monitoring system is incorporated in the mooring load monitor which can alert jetty personnel to loosen one or more mooring hawsers for safety.

A spokesperson for Yokohama announced that the company would deliver the first units of its new type of air block fenders (2.8m h. x 2.8m dia., 4 sets) this October to the LNG jetty of Royal Dutch Shell Group in Brunei through I.T.H. Holland consortium. Plans call for the completion of installation work by the end of this year and the first tanker berthing at the beginning of next year.

The air block fender absorbs the movement of ships moored at the jetty and protect both the ship and the jetty from damage. Yokohama has amassed more than 30 years of experience in developing and producing pneumatic rubber fenders, which have superior technical features over solid rubber fenders in securing a ship at its moorings. The company's new type of fender with its computerized warning monitoring system is based on Yokohama's unique ABF-P configuration.

Naming Changed to Kuwait Ports Authority

Ports Public Authority, a governmental independent authority, was formed in accordance with an Amiri Decree issued in 1977. Since then, the authority has been managing and operating all the commercial ports in the State of Kuwait.

It has now become quite obvious to the Ports' Authority, that the name "Ports Public Authority" does not

highlight Kuwait's name as in some other world ports. Moreover, as Kuwaiti ports have become internationally known through participation as a sovereign body in International Maritime Conferences, it has now become necessary to project Kuwait's name internationally in a manner to avoid confusion and mix-up with other organizations.

Therefore, an Amiri Decree no. 40 was issued this year to change the name of the authority to "Kuwait Ports Authority".

Westgate Port Taranaki in profile

Taranaki is New Zealand's energy province, and Westgate Port Taranaki is the country's energy port. Ever since oil and natural gas was discovered in Taranaki, the port has played a vital part in development of these resources. At the start this involved the importing of equipment necessary for creation of production wells and downstream facilities, and today it also involves the exporting of millions of tonnes of petroleum products.

In fact it is fitting that Westgate Port Taranaki is at the centre of that oil was first discovered. Oil and gas seepages along the New Plymouth foreshore were well known to the pre-European Maori and early settlers.

Exploration for oil began in the 1860s with the drilling of shallow wells in the port region, and a small oil field was discovered — and up until its closure in 1972 it produced 216,000 barrels of oil.

But while for many years this activity served as a constant reminder of Taranaki's potential as an oil and natural gas-producing region, it was not until the late 1950s that this potential began to be fully realised.

It began with discovery of the Kapuni natural gas and condensate field during that decade. This was followed up with discovery of the giant offshore Maui gas and condensate field about ten years later. And then, slightly more than another decade later, the onshore McKee oil field was discovered. Since then there have been further discoveries both onshore and offshore, and the exploration process has been of im-

mense help in gaining a huge amount of knowledge about Taranaki as a hydrocarbon region.

In the middle of all this activity has been Westgate Port Taranaki, New Zealand's only west coast deep water port. And, while it has proved vital to the development of the Taranaki energy industry, the reverse has also been the case — whereas agriculture was the Port's trade base during the first half of this century, it is now energy.

"There's no doubting that the energy-based activities in the region have contributed substantially to the progress of our port", says Westgate's Marketing Manager David Sharman.

"Many of the major developmental decisions made by the port in recent times have been with the needs of the oil and petrochemical industries in mind. Development of our Newton King Tanker Terminal, dedication of berths to service the offshore energy industries, provision of heavy lift facilities, and most recently the reclamation of additional land within Port Taranaki have all been with the energy-based industries in mind."

(News from Westgate Port Taranaki)

Port Marketing Network Is Operational: PPA

"Marketnet", an information exchange program geared towards marketing and promoting Philippine ports abroad, became operational last October with an initial 18 members signifying their intention to join the network.

Members of "Marketnet" are the marketing and commercial officers of foreign embassies based in the Philippines, the commercial attaches or trade officers of the Department of Trade and Industry, and officers and staff of the PPA's Commercial Services department (CSD).

More applicants/members are expected in the coming months.

Benjamin B. Cecilio, manager of the CSD, has named two of his officers as the workhorses of the "Marketnet" program: Emma L. Susara, liaison officer, and Teresita C. Castro, assistant liaison officer.

"Marketnet" is a direct link between its members and serves as a conduit to receive and send out the most current

data about the Philippine ports and the ports of member-countries.

Information provided by "Marketnet" serves to enhance awareness of the investment potentials of the ports and thereby increases trade and commerce and new investments.

The foreign embassies get valuable inputs for business tie-ups of their nationals with their Philippine business counterparts. "Marketnet" provides a new network to facilitate the promotion of trade and commerce between their country and the Philippines.

On the other hand, Philippine commercial attaches and trade representatives based abroad gain first-hand information useful in promoting the Philippines as an attractive area for inward investments. (*Port Trends*)

PPA Forms Pool Of Reserve Pilots

In a precedent-setting move, the Philippine Ports Authority set up a pool of reserve pilots in all pilotage districts in the country.

Directed under PPA Memorandum Order No. 07-92, the pool of reserve pilots is conceived to safeguard the national security and the interests of the country's ports. With the pool on hand, the ports will be more responsive to eventualities like strikes by the regular pilots, inclement weather when pilots are unavailable, and in areas where pilots are lacking.

Qualified to join the pool are existing masters/ship captains commanding domestic vessels and other qualified master mariners. (*Port Trends*)

PPA Is Reviewing Zoning of Port Areas

The Philippine Ports Authority (PPA) is currently reviewing the zoning and subdivision plans submitted by majority of ports nationwide.

Zoning of the port delineates its commercial and operational areas, hence maximizes the use of the idle areas for business and industrial purposes.

PPA is rationalizing the grant of lease contracts and temporary occupancy permits to satisfy the facility and service requirements of the port users and to determine the appropriate lease rates

for lands, buildings and improvements.

The Commercial Services Department processes long term lease contracts (6-25 years) while port district offices/port management offices issue permits to occupy for a one year period to port users for the use of existing warehouses, transit sheds, open storage areas, and other port facilities.

Eleven ports have already submitted the complete requirements of the proposed subdivision plan consisting of the physical description of all the unused facilities in the base port together with a map indicating the location, size and area, the intended commercial use of the facilities, list of prospective users and lessees, period of lease and proposed lease rates as spelled out in PPA Memorandum Circular No. 38-39.

The zoning of port areas is a requirement of the approved real estate management policy (PPA MC 38-39) of the PPA. It is a service-oriented approach in managing the ports aimed at increasing the utilization of port areas for commercial ventures and investments. (*Port Trends*)

PSA Will Incorporate EBP in PORTNET

The Port of Singapore Authority (PSA) has awarded a S\$75,000 contract to Digital Equipment (S) Pte Ltd to develop a Bayplan software. The software will be needed by shipping lines/agents when PSA requires them to submit the bayplan of container vessels electronically from 1 April 1994 under the Electronic Bayplan (EBP). PSA had informed the shipping lines/agents of the EBP through the Singapore National Shipping Association (SNSA) and the PORTNET Review Committee since August 1992.

The EBP will reduce paper documentation and facilitate the exchange of ship planning information. Bayplans of container vessel are needed for stowage planning by PSA and shipping lines/agents. Currently, shipping lines/agents submit paper bayplans which take much time to prepare, submit and collect. The EBP will also reduce tedious transcription and data entry between the shipping lines/agents and PSA. With EBP, ship officers will no longer need to key in the data into a ship's computer for trim and stability

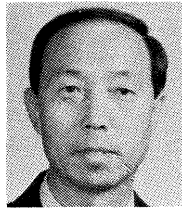
calculations as the EBP information can be transferred into a ship's computer. Data entry for Import Status will also be reduced by drawing information from the EBP. Shipping lines/agents who do not have the bayplan software (in accordance to UN/EDIFACT message "BAYPLIE" version 1.5 dated 05/93) may purchase a copy from PSA at S\$500 or at S\$1,000 for unlimited copies.

PSA will incorporate the EBP in PORTNET, its computer network with the maritime community, which has over 1,200 subscribers. Shipping lines/agents who have already computerised their bayplan system may start exchanging the EBP with PSA via PORTNET from 1 Nov 93. On-line facilities will also be implemented in PORTNET to allow listings on reefers, exception and dangerous goods and port-to-port summaries to be extracted.

In implementing the EBP, PSA has held discussions with the Singapore National Shipping Association (SNSA) and the PORTNET Review Committee comprising shipping lines/agents since August 1992. A seminar attended by over 200 participants from about 100 container lines was also conducted on 25 Nov 92. With the feedback obtained, PSA refined the EBP. Among the major refinements, PSA specially defined a format to allow bayplans to be submitted in a flat file format as an additional option to the EDIFACT format. Vessels calling form ASEAN ports are also granted a nearer closing time for arrival bayplan submission. Upon the request of the SNSA, PSA deferred the implementation of compulsory submission to 1 April 1994 to allow more time for the translation.

This award is part of PSA's thrust towards grater utilisation of Information Technology and Electronic Data Interchange (EDI). With reduced manual efforts, consistent and accurate shipping information, the EBP will help boost the Port's efficiency and speed up turn-around time for vessels. The EBP will facilitate bilateral exchange of vessel stowage information between PSA and the port users, among shipping lines/agents, tonnage centres, vessels, as well as with other ports. The dynamic application of Information Technology such as EDI will spearhead the next lap in Singapore's status as a Global Port, and guide the shipping industry towards the next century.

Port of Dalian: Today and Tomorrow



By Wang Diandong
Director
Dalian Port Authority

The Port of Dalian is situated on the southern tip of the Liaodong Peninsula with the Yellow Sea to its east and the Bohai Sea to its west. The hinterland to the north connects with northeast China's economic zone, and to the south the port faces the Shandong Peninsula across the sea. The port is the cargo and passenger transferring hub of the waterway connecting the Shandong Peninsula, East China and South China. It is the nearest point among the coastal ports of the Pan-Bohai Sea and the Liaodong Peninsula to foreign ports and is a major terminus of the Europe-Asia land-bridge transportation network.

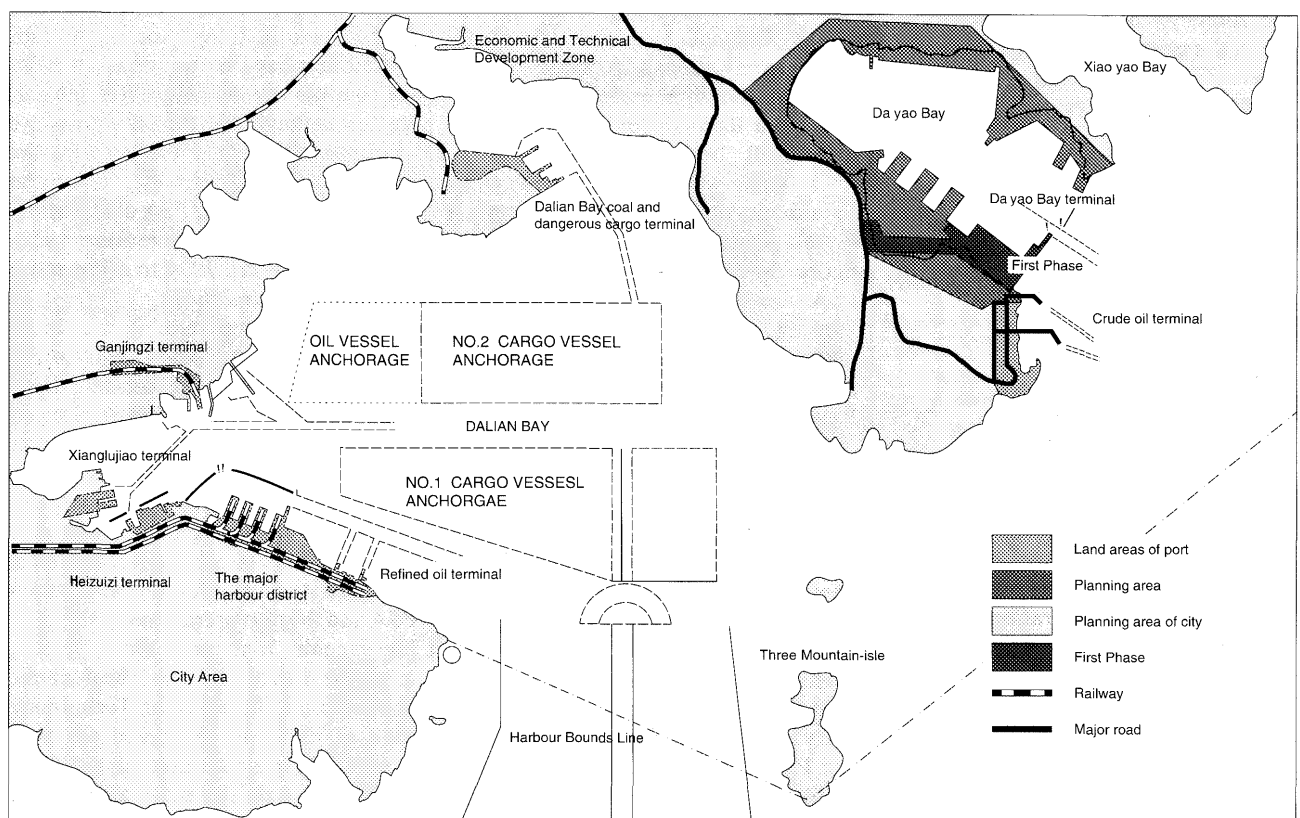
The Port of Dalian has convenient transportation links. It is connected with northeast China's railway network by the major national first-class Harbin-Dalian trunkline. As regards road transportation, it is connected with the national road network by the Shenyang-Dalian highway and the Horgan-Dalian, Heihe-Dalian and Zhuanghe-Linxi roads. In the case of water transportation, the port has trading ties with more than 140 countries and regions throughout the world, with more than 5,000 ships coming in and going out every year.

Eight international container lines and eight domestic passenger transport lines serve the port, together with international cruising lines operating periodically. The Port of Dalian has sister-port affiliations with the Ports of Yokohama, Kitakyushu and Fushiki-Toyama in Japan, the Ports of Oakland and Houston in the US and the Port of Vancouver in Canada. The airport of Dalian is an international airport from which many domestic and

international routes operate.

The economic hinterland of the port comprises the three provinces of northeast China and the eastern part of Inner Mongolia. With an area of 1,240 thousand square km and a population of 100 million, the hinterland has abundant resources and rich industrial and agricultural foundations. Industry, forestry, grain, livestock husbandry and foreign trade are essentially founded on the iron and steel, machinery and petrochemical sectors. Railways, roads, water transport, pipelines and airlines are the components of the area's advanced transportation network. There are several cities with established infrastructures and advanced science, technology and educational facilities in the hinterland. It not only plays an important role in the national economic regional division, but is also a location for the throughput of cargo, on which the port's development depends. The city of Dalian is long-established coastal harbour city with good foundations which provides a favourable setting for the development of the port.

The natural conditions of the port are most advantageous. The new and existing harbour areas are situated in Dayao Bay and Dalian Bay respectively



in the Yellow Sea, both having rocky bottoms and no rivers emptying into them. Both harbours are siltless and ice-free, being surrounded by mountains on three sides and offering spacious conditions, deep water, short channels and wide anchorages.

Compared with other ports, Dalian is the most suitable place to construct large-scale and deepwater berths. The container berths can accommodate ships of the third and fourth generations. Therefore, the Port of Dalian has been designated by the State as an international deepwater transshipment harbour.

Being founded in 1899, the port has a long history. The annual throughput was 12 million tons before the founding of the People's Republic of China. Since then, the existing harbour areas have been renovated and modified. The oil terminal of Siergo and the harbour zone of Xianglujiao have been expanded. In order to meet the requirements of crude oil exportation, the oil terminal in Nianyu Bay was completed in the 1970s, and in the 1980s coal import and dangerous goods operation terminals were put into operation. There are 58 production berths in the port, of which 28 are for vessels of more than 10,000 tons.

The port has jurisdiction over about 8 square kilometers and 346 square kilometers of water. There are nine subordinate harbor operation districts and two bays. The present annual cargo throughput is more than 50 million tons and passenger traffic is about 4 million persons/times. Foreign trade takes more than 70% of total traffic. International containers handled amount to 200,000 TEUs. The port has both cargo and passenger transportation and cargoes are of great variety. It is a major import/export harbour and a base for the transshipment of grain, crude and refined oil, containers, bulk minerals, iron and steel, timber, cement and general cargo. The facilities and all necessary accessories in the port serving cargo, passengers and ships are in complete sets. There are more than one million square meters of warehouses and stacking yards in the port.

Meanwhile, there are a lot of storage facilities in the city. There are more than 600 handling machines of large size, more than 140 km of harbour railway lines, more than 30 harbour workboats and also equipment for oil

and water supply, environmental protection, fire-fighting, machine repair, vessel repair, harbour engineering, navigation assistance and communication.

Summing up the above, the Port of Dalian is a large and comprehensive port with foreign trade taking the first place. It is an important pivotal harbour in the national transportation system.

In order to meet the requirements of social and economic development, to expand harbour throughput and to increase harbour modernization, the development program for the port will be combined with development programs for the economic and technical development zone and the north area of the city, with the overall program of the city as the guideline.

The development of the new area of Dayao Bay will be given priority, while the existing harbour will be modified and expanded, and the production layout of the port will be gradually adjusted to form a scientific layout system with oil, passenger transportation, containers, grain and bulk cargo as the main body, to perfect the harbour equipment, service facilities and collection and distribution system and to accelerate the throughput of passengers and cargo and the turnaround of ships.

The development plan includes the following elements:

in the existing port area, to expand the Siergou port area, to build bases for transferring chemical products and supplying fuel to ships, to start business in bonded goods and to develop foreign-funded enterprises for oil refineries;

in the main harbour area, to expand passenger and ro/ro berths, improve the facilities for passenger transport and upgrade the passenger transport capacity and service levels;

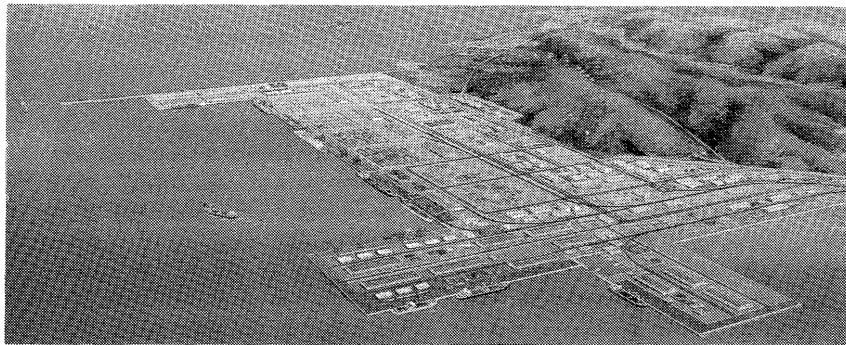
in the eastern port area, to reclaim land from the sea, adjust production and other auxiliary facilities, expand the through capacity of the area's warehouses and open yards, build a harbour workboat base and a base for repairing gantry cranes, and resolve the problem of rational traffic organization and cargo collection and distribution in the port area in coordination with the con-

struction of the special roads for reducing the pressure on existing roads to the port; to renovate the Heizuizi port area and upgrade the capacity and tonnage of the berths in order to adapt them to the requirements of the development of local cargo transport; and to build Dalian Bay cargo ro/ro berths and an area of bonded warehouses.

In conjunction with the need to expand the electric power plant, the coordinated renovation of the coal wharf in the Dalian Bay port area will be carried out in the near future, to increase the number of berths for conventional ships.

In the long-term, there are plans to build a new coal wharf and a train ferry wharf; to renovate the Ganjingzi port area to meet the requirement for exporting cement and other cargo; to expand the Nianyu Bay port area and rehabilitate the crude oil berths in order, on the basis of exporting crude oil, to be able to import crude oil required by the oil refineries in the hinterlands and in the economic development zone; and to build a new wharf for oil products to serve the Zone's oil refinery, enabling the Nianyu Bay port area to become a combined oil transportation centre for importing and exporting both crude oil and oil products. Furthermore, such problems as constructing the port's special roads, establishing a telecommunications system and providing environmental protection in the existing port area will be resolved in coordination with urban construction and renovation.

Dayao Bay's new port area, an ideal port site in the Port of Dalian's long-term development, is situated 13 km away from the southeast of Dalian city's Jinzhou district and is adjacent to the economic development zone of Dalian Municipality, with Dagushan peninsula lying between Dayao Bay and the Dalian Bay port area. Dayao Bay is 50 km by road and 15 nautical miles from Dalian city and has a water area of 33 square km and a natural coastline of 27 km. Its natural conditions are similar to those of the existing port area: it does not freeze, there is no silt and it has the potential for reclaiming land from the sea and constructing deep water berths. At the mouth of the Bay, the already-built Nianyu Bay oil terminal and the economic development



Dayao Bay Terminal — A Developing Area in Port of Dalian

zone which has reached a significant scale after some years' construction have provided very good, reliable conditions for the construction of Dayao Bay port and the development of the whole bay. According to the master plan of Dalian Municipality, the coastline, land and water areas of Dayao Bay are to be used for the development and construction of a new port.

Following the State's approval, the first phase of work on the Dayao Bay new port area started on the southern side of the mouth of the Bay in 1988 and the first four berths will be put into operation this year. By sometime in 1995, the construction of about 11 berths, including those for bulk grain, containers, chemical fertilizers, iron and steel and general cargo, and multi-purpose berths will be completed, thus allowing a port throughput capacity of over 10 million tons. In addition, the construction of the port's production and other auxiliary facilities will also be completed. From 1995 to 2000, the second phase of work on 9-10 berths will be continued, thus allowing a throughput capacity of 5-6 million tons.

From the year 2000 onwards, the construction of the following works will be carried out successively: a container handling district on the southern shore, a district for developing passenger transport, and the handling district for bulk and general cargo berths, the bases of the support system including oil and water supply, machine repair, post-voyage repairs, engineering, bases for ships and telecommunications, and also including the building and development of port-related maritime industries, so that the functions a modernized port should have can be displayed and updated in relation to the transfer of passengers and cargo,

warehouses and storage yards, bonded goods business, industries, processing, commerce and trade, information, tourism, fisheries and maritime industries.

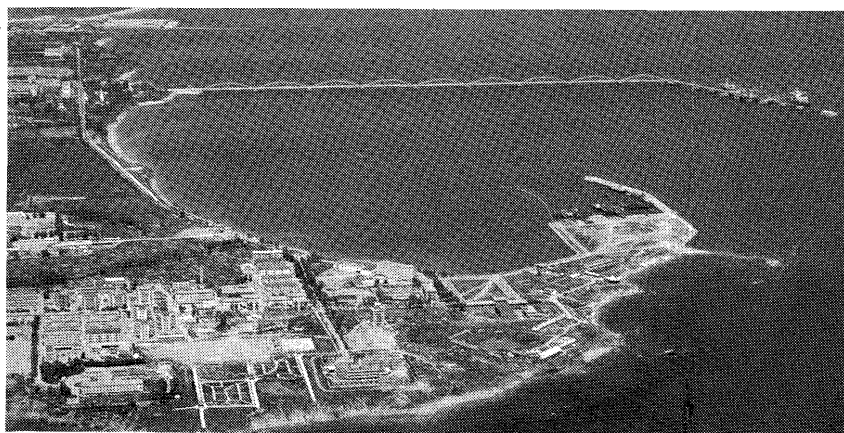
In line with the construction of Dayao Bay, the layout of both the new and existing port areas will be rationally adjusted, and by taking advantage of the good conditions of the new port area's deep water along the berths and infrastructure facilities, cargo such as containers and large amounts of bulk cargo which require a higher extent of modernization will be shifted gradually to Dayao Bay's new port area in order to resolve the problems of the existing port area such as backward infrastructure facilities, insufficiency of land to be used due for encirclement of the port area by the city and the congestion of urban traffic.

The development and construction of the Dayao Bay new port area in line with the principle of "promoting the rise of the city through the port and creating common prosperity for both" and of merging it with the economic development zone and the planned northern new urban districts, will not only promote and be favourable for urban development but will also leave

sufficient room for port development. The construction of Dayao Bay will be rationally planned and laid out by considering the Bay as a whole and then carrying out the work phase by phase. The development of the whole Bay will continue to the 21st century, and will acquire a final scale of 80-90 berths upon completion, thus forming a modernized port with complete matching facilities for containers and large amounts of bulk cargo as well as large-sized deepwater berths in the main, and combined with medium-sized and small berths.

In order to accelerate the Port of Dalian's construction and development and fully utilize the favourable conditions of the port and the city, the policy of reforming and opening up the State and the preferential policy granted to the Economic and Technology Development Zone, various means of widely collecting funds will be adopted, including foreign-funded, jointly-funded and cooperative schemes to construct new facilities and renovate existing ones. Modernized management measures and updated means of collecting harbor dues and charges will be adopted and the system of port operation and management will be reformed to meet the construction and development requirements of the new port area.

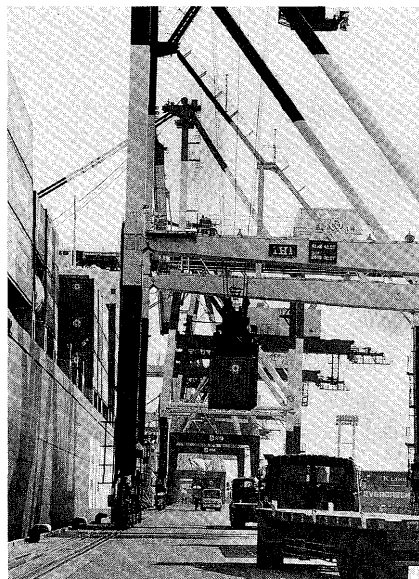
The Port of Dalian will sincerely cooperate with all friendly ports and other ports all over the world by taking "multi-functions, all directions and modernizations" as the development strategy, developing into an international deepwater transfer port as the target and "safety first, quality first, service first, prestige first" as the aim to promote with all efforts friendly intercourse with and the economic prosperity of the people of all countries.



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