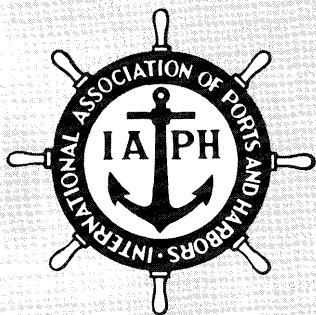


Ports & Harbors

**November
1988
Vol. 33, No. 9**



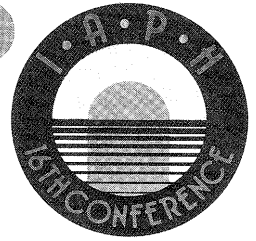
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The International
Association of
Ports and Harbors**

Port Rashid, Dubai

Located at the entrance to the Arabian Gulf, Port Rashid, Dubai is served by over 100 shipping lines and has gained most of the region's container transshipment traffic. (Inset is an aerial view of Port Rashid, Dubai)



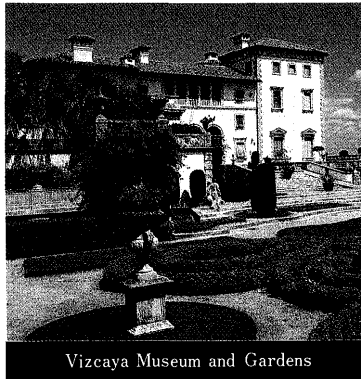
PORT OF MIAMI HOSTS THE 16TH CONFERENCE OF IAPH IN APRIL, 1989



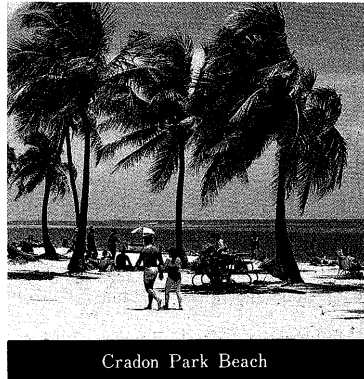
NORTHWEST

Official Carrier for
the IAPH Conference '89

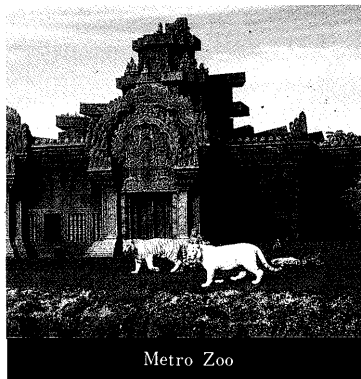
Ms. Lori Goodman, PR and Marketing Assistant, Port of Miami,
Promotes her port as venue for the IAPH Conference in 1989.



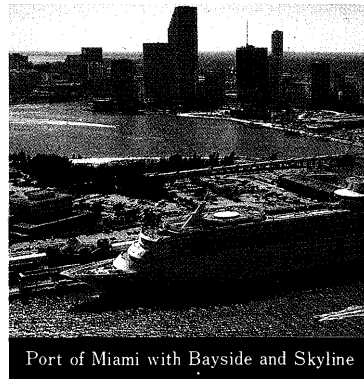
Vizcaya Museum and Gardens



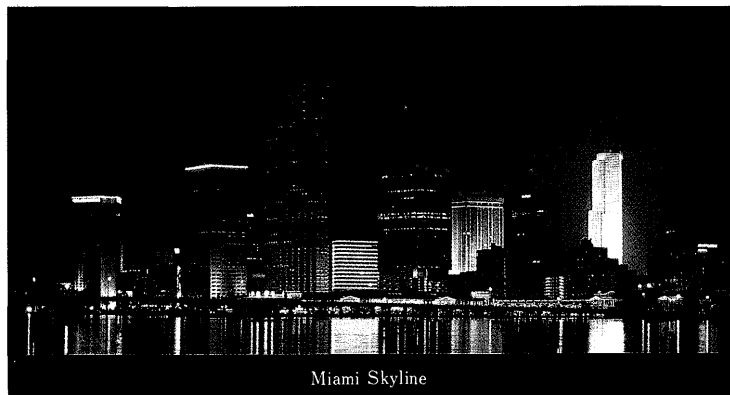
Cradon Park Beach



Metro Zoo



Port of Miami with Bayside and Skyline



Miami Skyline

HIGHLIGHTS OF THE CONFERENCE

**From the invitation address delivered by
Mr. C.J. Lunetta, Director, Port of Miami,
at the IAPH Conference in Seoul (May 1, 1987)**

- (A) A five-hour "Cruise to Nowhere" aboard one of the beautiful cruiseships based at the Port of Miami. The evening will include open bars, a full dinner, shows, dancing and casino action! We promise smooth seas and balmy weather.
- (B) A trip to the Florida Everglades complete with naturalist-guides, where you will see alligators, exotic birds and other wildlife in their natural habitat. This trip will feature an airboat ride through and on the "River of Grass", which we call the Everglades.
- (C) A wild hog barbecue at the Miami Seaquarium: this particular attraction features marine life, shows, great food, country & western style music and dancing.
- (D) A complete program for the spouses featuring a visit to the beautiful Vizcaya Museum and gardens.
- (E) A two-day tournament for our friendly golfers in IAPH who have been drooling to golf at the beautiful Doral Country Club.

**Pre- and post-conference packages
will offer trips to:**

- (A) Walt Disney World and the Epcot Center, both in Orlando, Florida, just some four hours from Miami; Kennedy Space Center in Cape Canaberal, just three hours from Miami; a three- or four-day Caribbean cruise which the Port of Miami will arrange at a very affordable price; trips to Key West, Florida, where Hemingway wrote most of his famous novels.

**Mark in your calendars April 22-28, 1989!
You can be assured that your visit will be
a memorable one.**

Ports & Harbors
November, 1988
Vol. 33
No. 9

Ports & Harbors

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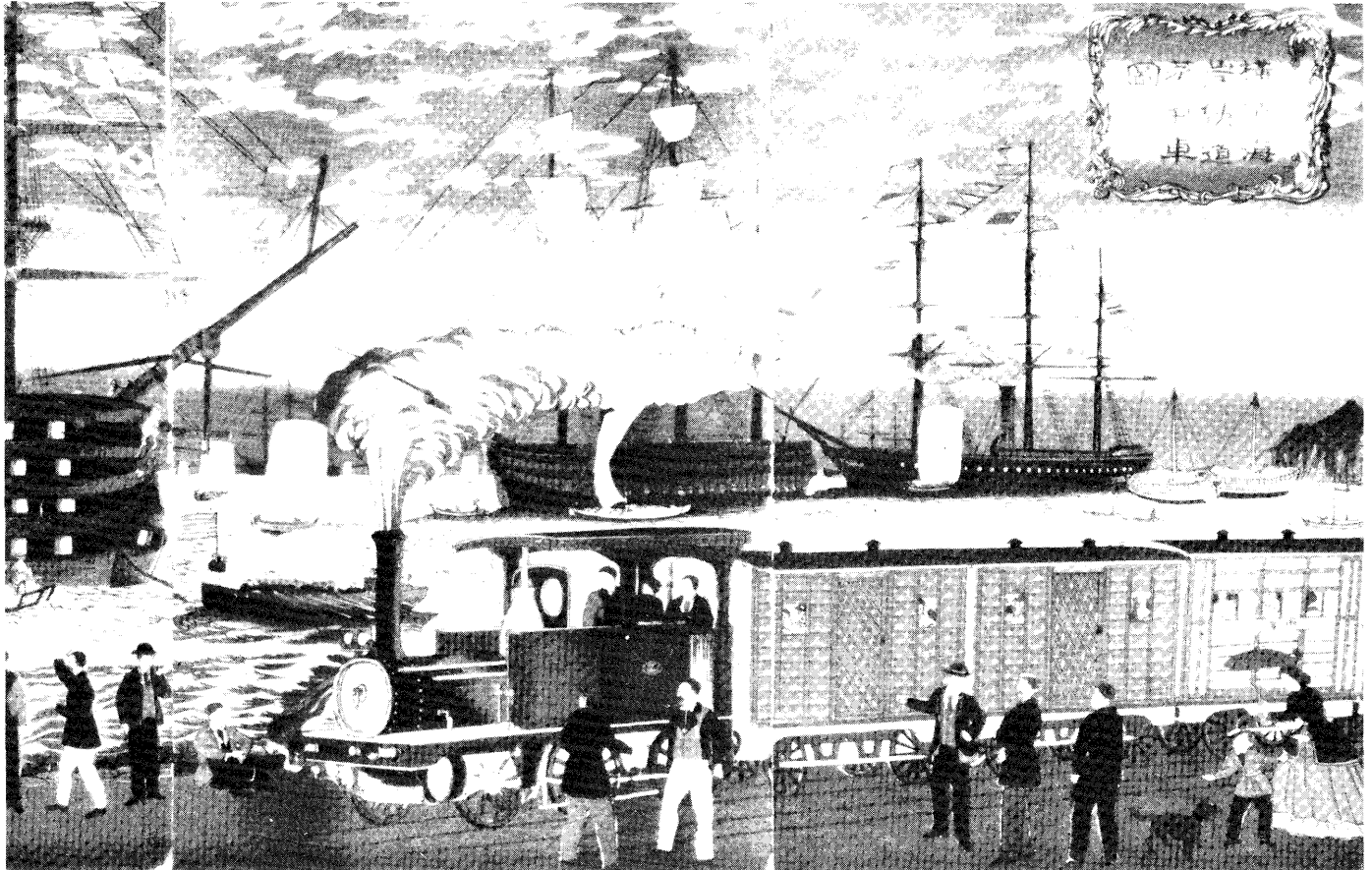
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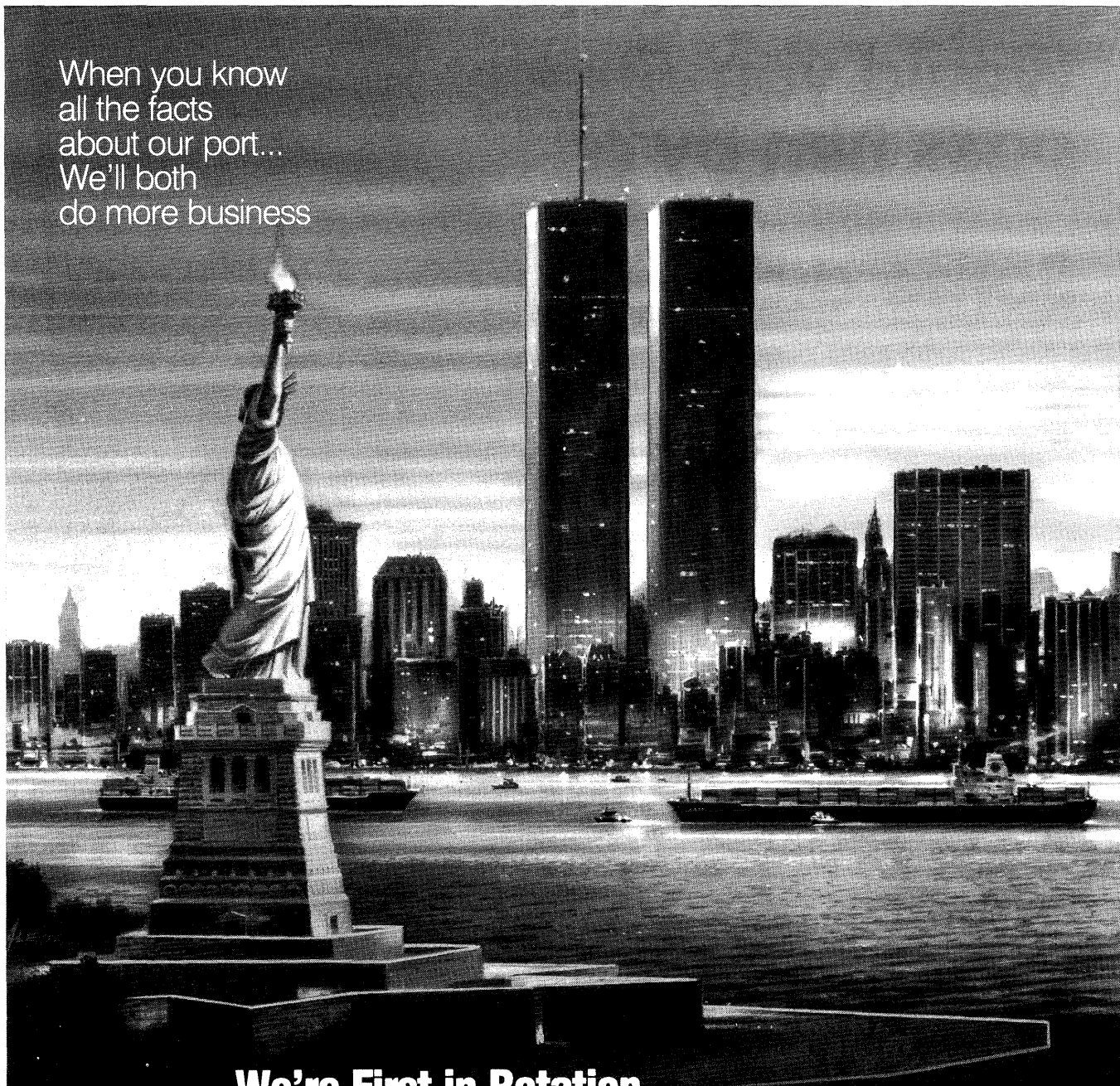


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all the facts
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Some did...

In 1986, this child was rescued by a merchant ship but only after other ships had passed him by. Today and everyday, there are other children like him, adrift in the South China Sea, in danger of death from drowning or other perils.

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Whenever your vessel encounters refugee boats, **PLEASE STOP** – the refugees need your help.



UNHCR

United Nations High Commissioner
for Refugees

P.O. Box 2500

CH-1211 Geneva 2 Dépôt

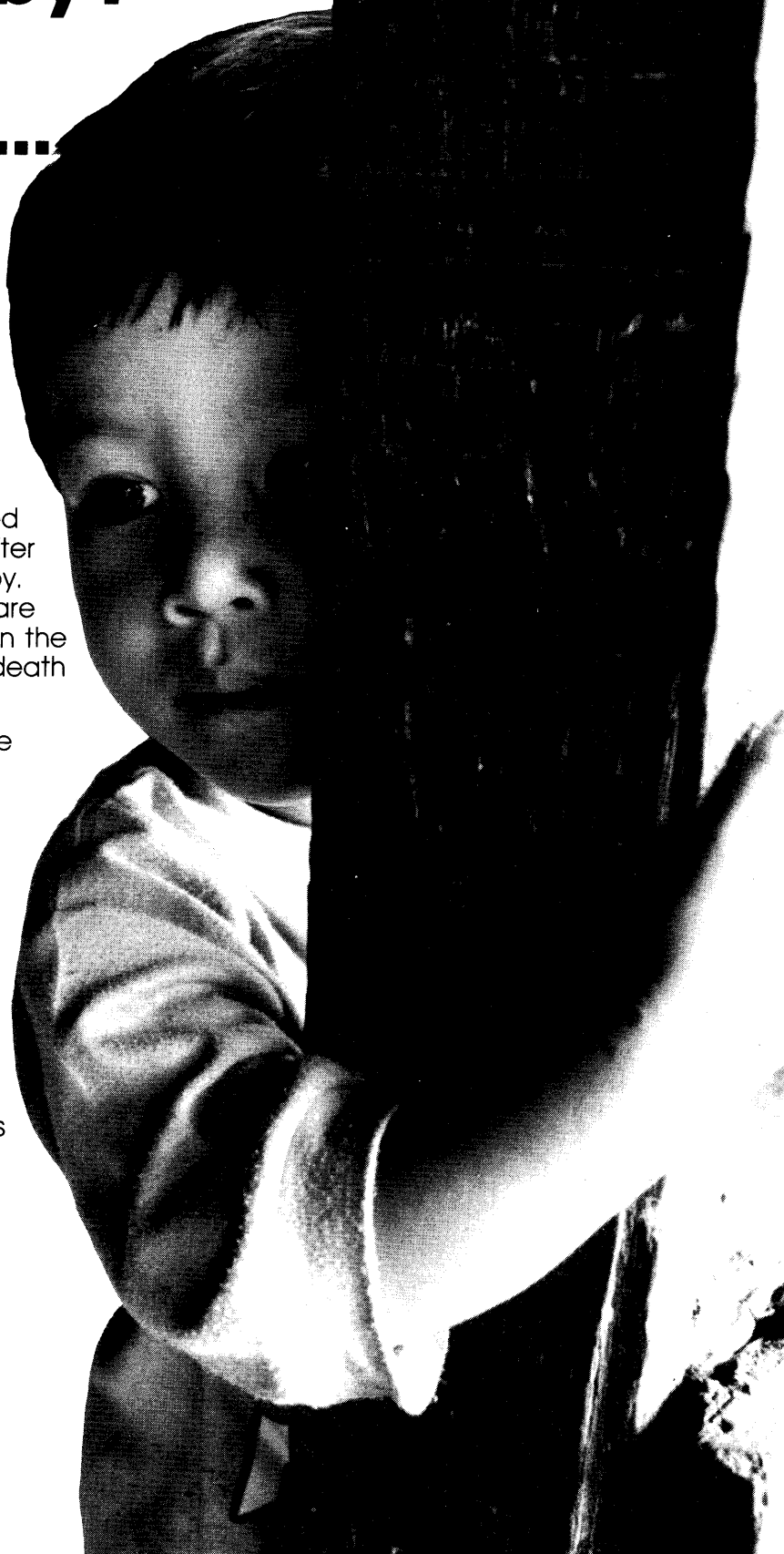
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Fax: (22) 319546

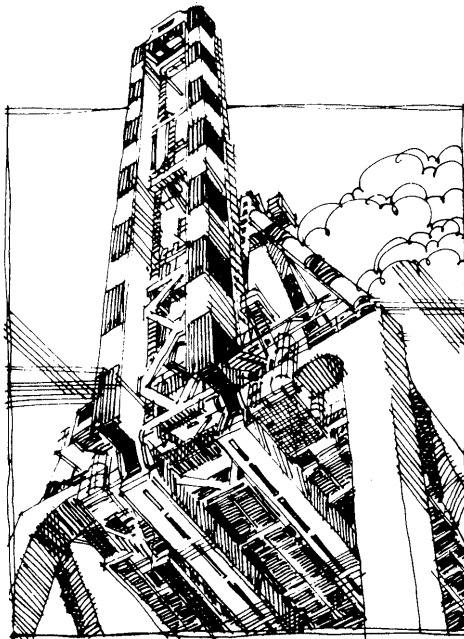
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UNHCR/R. Mann



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• vegetable oils • fats
• beverages • non-ferrous
metals • hides • skins
• cement • gypsum • paper
• wood • transport
equipment • iron • steel
• machinery • fruit
• vegetables
... just to mention a few of
the trade items!



Private enterprise groups and the Port of Brisbane Authority have spent \$250 million in recent years to ensure that Brisbane is equipped with the very best port facilities. In addition, the port has the backing of a modern rail and road transport system for the quick movement of cargo to and from any destination in Australia.

Need we say more?



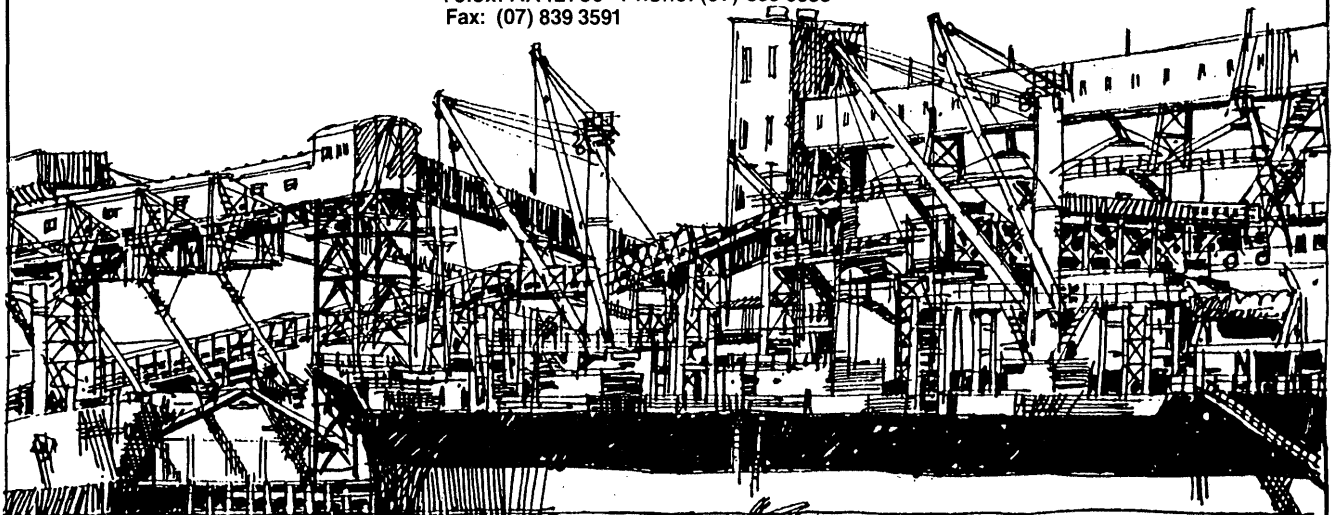
PORT OF BRISBANE AUTHORITY

Box 1818 G.P.O. Brisbane, Australia. 4001.

Telegraphic address: 'Portbris'.

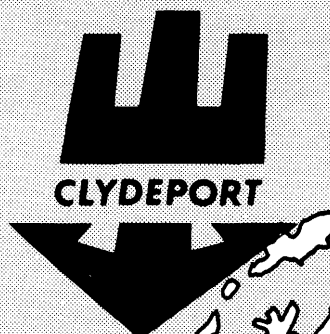
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IAPH ANNOUNCEMENTS AND NEWS

IAPH Observes 33rd Anniversary

November 7, 1988 is the 33rd anniversary of the foundation of IAPH. Thirty-three years have passed since our Association was established at the inaugural conference held at the Hollywood-Roosevelt Hotel in Los Angeles, California, in November 1955. At this conference, the Constitution and By-Laws were adopted and the Board of Directors was established with representatives of the 14 countries comprising the membership. This figure has since expanded to the current total of 81 countries.

To grasp the essence of IAPH, one could hardly do better than refer to what our President Wong once said: "IAPH is the United Nations of Ports."

The principal aim of IAPH, as laid out in its Constitution, is: "to increase the efficiency of ports and harbors through the development and dissemination of information useful to port and harbor administrations, through providing them with an opportunity to associate together for the purposes of furthering knowledge in the fields of port organization, management, administration, operation, development and promotion; thereby advancing international friendship and understanding and the growth of waterborne commerce."

IAPH has NGO consultative status with the United Nations Economic and Social Council (ECOSOC), the United Nations Conference on Trade and Development (UNCTAD), the International Maritime Organization (IMO), and Customs Cooperation Council (CCC). It also keeps close working relations with other international maritime organizations. In each case IAPH and these organizations enjoy mutual access to each other's expertise and resources in relevant areas.

In the past 33 years, altogether 15 conferences of IAPH have been held at various venues throughout the world. The last one was held in Seoul, Korea in 1987, while the next is scheduled for April 1989 in Miami, Florida, U.S.A.

The Presidents and Secretaries General together with their terms of service are listed below.

The Association's Board of Directors currently numbers 83 members from as many as 81 countries. The Directors' efforts are backed up by the members of the Executive Committee, six Technical and three Internal Committees as well as a group of Legal Counselors.

The Technical and Internal committees are served by volunteers from member organizations appointed by the President and have played a vital role in maintaining the dynamism of the Association's activities. The Technical Committees and their major areas of work are shown below:

International Port Development (CIPD): Proposes, de-

velops and administers plans for the provision of training, education, and technical assistance to developing ports. Works to promote cooperation between developing and developed ports.

Port Safety, Environment and Construction (COPSEC): Handles matters related to the construction, maintenance and safe marine operation of ports and harbors and the protection of port environments, including vessel traffic services, the control of dangerous substances, pollution control and crisis management. It is divided into 5 working groups, which are:

- 1: Marine Safety Sub-Committee
- 2: Port Safety Sub-Committee
- 3: Engineering Sub-Committee
- 4: Ship Sub-Committee
- 5: Dredging Task Force

Cargo Handling Operations (CHO): Examines and reviews matters relating to the planning, development and operation of cargo handling facilities and systems. These include general cargo, containerization, Ro/Ro, barging, equipment and manpower training.

Legal Protection of Port Interests (CLPPI): Examines and reviews provisions of international laws affecting port interests. IAPH works closely with many representatives of inter-governmental and other international maritime organizations.

Public Affairs (PACOM): Encourages the development of all ports and harbors, which in turn means the development of the whole port community. Seeks to identify community attitudes to port development and operations and the growth of industries in port areas, to highlight areas of public concern, to assess the economic impact of ports on the daily lives of their communities and to formulate a public relations strategy to deal with problems that may arise.

Trade Facilitation (TF): Handles procedures and documentation related to the facilitation of trade through ports and harbors, including the communication and processing of data on a local, national or international basis.

Throughout the history of IAPH, the Association's Head Office has been in Tokyo, Japan, although the actual location of the office within Tokyo has changed several times. It is currently in Toranomon, Minato-ku, a prominent business center near Kasumigaseki, where most of Japan's administrative, economic, commercial and cultural organizations are based. The Kotohira Kaikan Building in which our IAPH Head Office occupies a modest amount of space is well-known among the people who work in maritime-re-

lated businesses in Japan because it is located in the same compound as the Shinto shrine called "Kotohira Jingu", which houses the deity overseeing safe navigation and commerce. When the IAPH Head Office staff receive visitors from overseas, they often take pleasure in showing their guests around this shrine and sometimes photograph them with the shrine in the background.

Secretary General Kusaka and six staff members are working at the Head Office.

Since the Seoul Conference, IAPH has operated a London Office through a special arrangement with the British Ports Federation. Mr. A.J. Smith serves as our European Representative and is working to strengthen IAPH's presence in the international maritime scene in Europe.

On the occasion of our 33rd anniversary, it is fitting to note the size and diversity of our global family in the form of 233 Regular Members and 121 Associate Members representing 81 countries.

IAPH Presidents

Bennett J. Roberts, Canada (Nov. 1955 — Feb. 1958)
 John-Iwar Dahlin, Sweden (Feb. 1958 — June 1959)
 Lloyd A. Menveg, U.S.A. (June 1959 — June 1961)
 Jen-Ling Huang, Rep. of China (July 1961 — May 1963)
 John P. Davis, U.S.A. (May 1963 — May 1965)
 Rt. Hon. Viscount Simon, U.K. (May 1965 — May 1967)
 Chujiro Haraguchi, Japan (May 1967 — March 1969)
 V.G. Swanson, Australia (March 1969 — June 1971)
 A. Lyle King, U.S.A. (June 1971 — May 1973)
 Robert L.M. Vleugels, Belgium (May 1973 — March 1975)
 Howe Yoon Chong, Singapore (March 1975 — April 1977)
 George W. Altwater, U.S.A. (April 1977 — May 1979)
 Paul Bastard, France (May 1979 — May 1981)

New Appointments

At the recommendation of Mr. Jean Smaghe, Director General, Port of Le Havre, who currently chairs the IAPH Committee on Port Safety, Environment and Construction (COPSEC), the individuals from the Port of Le Havre listed below have been appointed by President Wong to serve on the IAPH Technical Committees. According to Mr. Smaghe, the new appointments were suggested on the basis of the recent reorganization which occurred at his Port Authority.

COPSEC

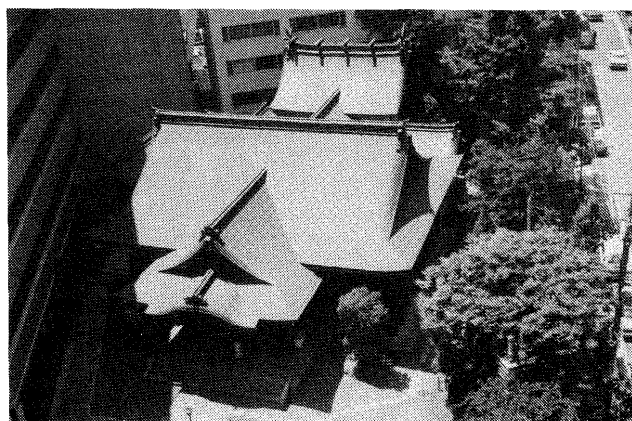
Mr. José Perrot, Assistant Manager, Port of Le Havre, as Assistant to the Chairman of COPSEC

Mr. Jean-Pierre Hucher, Head of the Economics Department, Port of Le Havre, as a member of the Ship Sub-Committee

Pascal Lelarge, Ingénieur des Ponts et Chaussées, Works Manager, Port of Le Havre, as a member of the Engineering Sub-Committee (in replacement of Mr. Gérard Patey, Mr. Lelarge's predecessor at the Port of Le Havre)

Cargo Handling Operations Committee (CHO)

Mr. Gérard Patey, Ingénieur des Ponts et Chaussées, Equipment Manager, Port of Le Havre, as a member of the CHO (in replacement of Mr. Jean-Pierre Lannou)



Kotohira Jingu

A.S. Mayne, Australia (May 1981 — June 1983)
 Anthony J. Tozzoli, U.S.A. (June 1983 — May 1985)
 J. den Toom, The Netherlands (May 1985 — May 1987)
 Wong Hung Khim, Singapore (May 1987 —)

Secretaries General

Gaku Matsumoto, Japan (Nov. 1955 — May 1967)
 Toru Akiyama, Japan (May 1967 — May 1973)
 Hajime Sato, Japan (May 1973 — May 1987)
 Hiroshi Kusaka, Japan (May 1987 —)

IPD Fund: Contribution Report

Contributions to the Special Fund (As of Oct 7, 1988)

Contributors	Amount
Paid:	(US\$)
Associated British Ports, UK	3,000
South Carolina State Ports Authority, USA	1,000
Cyprus Ports Authority, Cyprus	700
Japan Port & Harbor Association, Japan	450
Toyo Construction Co., Ltd., Japan	234
Toa Corporation, Japan	500
Port Alberni Harbour Commission, Canada	200
Korea Dredging Corporation, Korea	300
Port Authority of New York & New Jersey, USA	1,000
Vancouver Port Corporation, Canada	1,000
Klang Port Authority, Malaysia	200
Saeki Kensetsu Kogyo Co., Ltd., Japan	250
Penta-Ocean Construction Co., Ltd., Japan	1,000
All French Ports by UPACCIM*	1,560
Shimizu Construction Co., Ltd., Japan	390
Taisei Corporation, Japan	390
Japanese Shipowners' Association, Japan	390
Port of Redwood City, USA	100
Puerto Autonomo de Barcelona, Spain	991
Port Authority of Thailand	100
Port Rashid Authority, UAE	500
Japan Cargo Handling Mechanization Association	390
Ohbayashi Corporation	400
Total	US\$ 15,045

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

Visitors to Head Office

On September 2, 1988, **Mr. Kim, Jae-Ha**, an Associate Member of IAPH, visited the Head Office where he was received by Mr. R. Kondoh, Dy Secretary General, and other secretariat staff. Mr. Kim, a professor of economics of Junju University, called on the Head Office after completing his visit to the United States to investigate the current situation concerning the major ports there in his capacity as a special reporter to the *Korean Maritime Daily*, a Korean maritime business paper.



Front row: Dr. Kim Jae-Ha (right), Mr. R. Kondoh; Back row: Mr. K. Onso (right), Ms. K. Takeda.

On September 6, 1988, **Mr. Ron Brinson**, Executive Director, Port of New Orleans, visited the Head Office and was received by Mr. R. Kondoh, Dy Secretary General, and his staff. He was visiting Japan as a member of the Tripartite States Trade Development Mission led by Governor Bill



Front row: Mr. R. Brinson (right), Mr. R. Kondoh; Back row: Ms. K. Takeda (right), Mr. H. Matsumoto.

Clinton of Arkansas, Governor Buddy Roemer of Louisiana, and Governor Ray Mabus of Mississippi. With a view to boosting Japanese investment from various business sectors in those states, the tripartite mission called on Prime Minister Noboru Takeshita and the Federation of Economic Organizations (Keidanren) in Tokyo, Toyota in Nagoya and the Kansai Federation of Economic Organizations in Osaka.

On September 9, 1988, **Dr. Yuzo Akatsuka**, Immediate Past Manager of the Ports, Railways and Telecommunications Division, Infrastructure Department, Asian Development Bank (ADB), visited the Head Office. After serving the ADB for ten years he had left the Bank at the end of August and had become a professor of civil engineering at the University of Tokyo.



L to R: Mr. Kondoh, Mr. R.H. Rentema, Mr. K. d'Angremond, Mr. H. Kusaka, Miss K. Takeda and Mr. K. Okubo, in front of the Kotohira Shinto Shrine.

On September 30, 1988, **Mr. Kees d'Angremond**, Managing Director, and IAPH Liaison Officer with PIANC, together with **Mr. Reinder H. Rentema**, Marketing Manager, Amsterdam Port Management, visited the Head Office where they were received by Mr. Hiroshi Kusaka, Secretary General, and his staff. Mr. d'Angremond as a member of the COPSEC discussed with the Secretariat staff the current state of activities of the Committee. The meeting was also attended by **Mr. Kiichi Okubo**, Vice President of PIANC & President of PIANC's Japan Section, and an executive of Penta Ocean Construction Co., Ltd., as well as being a member of COPSEC's Engineering Sub-Committee. Mr. d'Angremond was on a trade promotion mission to Asia.

On September 28, 1988, **Mr. Lee, Seok-Tae**, Senior Researcher, Ocean Economics Department, Korea Ocean Research & Development Institute, Korea Advanced Institute of Science and Technology, together with **Mr. Joun Kum-Souk**, Manager of the Civil & Architectural Engineering

(Continued on Page 47, Col. 1)

OPEN FORUM

Changes in the Shipping Environments in Developing Countries Towards the Year 2000

By **Dr. Ernst G. Frankel**
Professor, Massachusetts Institute of Technology
U.S.A.

Presented at the International Maritime Seminar on Changes of the Shipping Environments and Counter-Strategies towards the Year 2000, 25-26 July 1988, Seoul, Korea, which was hosted by Korea Maritime Institute and sponsored by the Korea Maritime & Port Administration

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Summary and Abstract

Shipping in developing countries has expanded nearly threefold both in terms of tonnage and participation in trade since 1965, but most of this development has taken place in East and Southeast Asia, while the LDCs in Africa and South America have participated little in this growth. The same applies to technological and performance improvement where shipping in Africa and South America retained largely traditional general cargo and similar tonnage, while the LDCs in Asia (with the exception of India) have introduced modern container, RoRo, bulk, and specialized tonnage. The hope that protectionist conventions such as the Liner Code of Conduct, uni- or multi-lateral cargo reservation or similar measures would enhance national shipping development in the LDCs has not materialized. The reason is largely found

in the high cost and low efficiency of shipping in these countries. This trend is expected to continue as financing of LDC shipping becomes increasingly difficult. Economic developments in cargo reservation countries expected to occur in the remainder of the 20th century are discussed as are their developments of shipping.

1.0 Shipping and Its Role in Development

Shipping has formed the basis for conquest and economic dominance for hundreds of years. Colonial empires were built on strong shipping capability. Large colonial powers were all large shipping and trading nations. British shipping conquered much of Africa, India, and North America for its homeland through trade, subjugation and infiltration. The same applies to Holland, Spain, Portugal, Japan, France and others. Merchantmen were usually armed, and the sword and trade nearly always went hand in hand. Even when trade and conquest became separable activities in the last century, shipping and trade maintained their important role of assuring continued dependence on the homeland. Later when conflicts extended over several continents, shipping provided the means for resupply and support of the naval or military forces. The role of shipping in development has many dimensions, such as:

1. conquest and military subjugation;
2. economic dependency;
3. gateway to markets;
4. employment and profit opportunity;
5. technology transfer; and
6. political and marketing influence.

In fact shipping offers many opportunities, challenges, risks and actual dangers, yet for some reason shipping has maintained an aura of romanticism and challenge that any self-respecting nation must be involved in. It is an activity which promises instant industrialization, unheard of opportunities and — most importantly — recognition. Yet these promises seldom come true because of the misconception of the role and workings of shipping.

1.1 Development Effectiveness

Since Bretton Woods, development has been a principal objective of economic policy worldwide. It initially included

the reconstruction of countries of Western Europe such as Norway, Greece and the Netherlands, whose economies were assisted by early loans from the World Bank. Since the late fifties, though development — and particularly development financing by international institutions such as the World Bank and its regional and subregional sisters — has implied mainly financial assistance to developing countries, a mixture of independent and newly independent low income countries. After 40 years of developing finance, only a handful of countries such as Singapore (which until the late sixties was a part of independent Malaysia), Greece and Spain have graduated to the status of developed country. Others such as Korea and Taiwan, which is no longer a member of the World Bank, are now classified as newly industrialized countries (NICs) because of their economic growth and industrial prowess. The success of international development financing is not only a mixed bag, but there are questions if it did any good in some cases, and if the investment was wise in others.

For graduation, developing countries are usually sorted by per capita income — a most elusive concept which is more a measure of government policy than standard of living. A monthly income of \$60 per worker is quite adequate in China, for example, where rents, transport, basic food and clothing were subsidized by the government until recently. Even calculating per capita income using the GDP distorts the per capita income in socialist countries. In countries like India, on the other hand, the same per capita income really denotes poverty.

I have a problem with the definition of developing LDCs,

NICs, and developed countries and believe that our failure in development is largely the result of our misconception that the state of development can be measured by purely economic measures and that the need for development finance is inversely proportional to the economic state of a country in terms of per capita income.

It is interesting to note, for example, the role that education (or percentage literacy) plays in the effectiveness of the absorption of development finance. Another factor appears to be the political and social structure of a country. More democratic and socially homogeneous nations seem to do better on average than dictatorships and multinational countries, though in the latter case it should be noted that countries with a homogenous majority, yet significant and freely operating minority, seem to do even better. The degree of government interference in the economy of a country seems to directly impact on the effectiveness of development and the use of development financing.

It is only recently that some of these interdependencies have been recognized, yet they do not seem to be taken into account in development investment allocation. Instead more and more development financing is channeled into difficult to control "structural adjustment financing" instead of the more traditional project (often infrastructure project) financing.

1.2 The Role of Science and Technology in Development

Development requires more effective use of science and technology, which are in many developing countries today

Table 1—Distribution of World Tonnage* (GRT and DWT) by Groups of Countries of Registration, 1970, 1983, and 1984 (mid-year figures)

Flags of registration in groups of countries	Tonnage and percentage shares*						Increase in tonnage (millions of DWT)	
	In grt (millions)			In DWT (millions)			1970—1984 (Average)	1983—1984
	1970	1983	1984	1970	1983	1984		
World total	217.9 (100.0)	416.9 (100.0)	412.8 (100.0)	326.1 (100.0)	686.0 (100.0)	674.5 (100.0)	24.9	— 11.5
Developed market-economy countries	141.8 (65.1)	197.3 (47.3)	187.3 (45.4)	211.9 (65.0)	322.4 (47.0)	303.4 (45.0)	6.5	— 19.0
Open-registry countries	40.9 (18.8)	107.3 (25.8)	110.0 (26.6)	70.3 (21.6)	199.8 (29.1)	202.2 (30.0)	9.4	2.4
Total	182.0 (83.9)	304.6 (73.1)	297.3 (72.0)	282.2 (86.6)	522.2 (76.1)	505.6 (75.0)	16.0	— 16.6
Socialist countries of Eastern Europe and Asia	19.5 (8.9)	43.1 (10.3)	43.5 (10.5)	21.7 (6.6)	54.4 (7.9)	55.4 (8.2)	2.4	1.0
Of which:								
in Eastern Europe	18.6 (8.5)	33.7 (8.1)	33.5 (8.1)	20.5 (6.2)	40.2 (5.9)	40.3 (6.0)	1.4	0.1
in Asia	0.9 (0.4)	9.4 (2.2)	10.0 (2.4)	1.2 (0.4)	14.2 (2.0)	15.1 (2.2)	1.0	0.9
Developing countries	14.5 (6.7)	66.3 (15.9)	68.0 (16.5)	20.5 (6.3)	104.9 (15.3)	107.1 (15.9)	6.2	2.2
Of which:								
in Africa	0.8	5.3	5.4	1.1	7.7	7.8	0.5	0.1
in America	6.4	14.9	14.8	8.7	22.3	22.2	1.0	— 0.1
in Asia	7.3	45.0	46.1	10.7	73.4	74.6	4.6	1.2
in Europe	—	0.9	1.4	—	1.3	2.1	—	0.9
in Oceania	—	0.2	0.3	—	0.2	0.4	—	0.2
Other, Unallocated	1.2 (0.5)	2.9 (0.7)	4.0 (1.0)	1.7 (0.5)	4.4 (0.7)	6.4 (0.9)	0.3	2.0

*Excluding the US Reserve Fleet and the US and Canadian Great Lakes fleets, which in 1984 amounted respectively to 2.2, 1.7, and 2.0 million grt

*Percentage shares are shown in parentheses

Source: 'Review of Maritime Transport 1984', UNCTAD, Geneva, August 1985. Compiled on the basis of data supplied by the Shipping Information Services of *Lloyd's Register of Shipping* and *Lloyd's of London Press, Ltd.*

largely subjects of academic interest and are not used as effective means of achieving economic development. The reason appears to be the preoccupation of academics with scientific status which often results in an emphasis of highly theoretical scientific work which seldom has a chance on near term application or even translation into potentially useful technology. Similarly, comparatively little investment is made in scientific research and technological developments directly aimed at the major afflictions of developing countries, such as:

1. inadequate human resource development;
2. lack of communications;
3. low productivity and ineffective use of investment;
4. unavailability of affordable energy and effective energy distribution;
5. lack of effective goods transportation and distribution;
6. no modern financial management and effective debt control;
7. inadequate health service; and
8. ineffective management of development.

Efforts in science and technology should be aimed at alleviating some of these afflictions instead of engaging in esoteric developments, which not only use scarce resources to no near-term benefit, but also point aspiring scientists and technologists in the wrong direction. There are a number of developing countries which pride themselves in the esteem of their scientists, but who must import foreign technicians to operate and maintain basic machinery or process technology.

2.0 Shipping in Developing Countries

Shipping is a small industry which gets a disproportionate degree of attention for a variety of reasons in most countries. While in most developed nations the reasons are strategic (defense) and economic, developing countries justify their interest in shipping also for reasons of technology transfer, employment, freight rate or transport cost control, and political influence. Shipping not only captures a nation's interest but usually also attracts direct and indirect government aid and various measures of protection usually unobtainable by other industries (including transportation industries) in the country.

Shipping can and sometimes does play a disproportionately large role in national and international affairs and is still the principal transport mode used for international trade with well over 92% of the volume and 81% of the value of goods in international trade transported by shipping.

As shown in **Table 1**, the participation of developing countries increased from 6.7% to 16.5% of world GRT between 1970 and 1984 (or 6.3% to 15.9% of world DWT). As the world fleet roughly doubled in capacity during that period, the capacity of the developing country fleet actually expanded by a factor of 4.92 during this 14-year period, while the fleet of industrial Western countries only increased by a factor of 1.32 (or by 32%). Yet considering the distribution of the fleet expansion in developing countries, it can be seen that practically all the growth was experienced in Asia (a nearly seven-fold increase), while American LDC only increased their fleet by a factor of 2-3. While the African LDC fleet growth was spectacular, it started from a minuscule level and occurred largely in North Africa. Through the Asian LDC fleets comprised only 50% of total LDC fleets in 1970, they had grown to nearly 70% by 1984.

Another important issue is that most of the growth in

Asian LDC fleets was experienced by countries in East and Southeast Asia, and consisted largely of the acquisition of new or young, modern containers, dry/liquid bulk carriers or specialized vessels, while the growth of shipping in the African and American LDCs consisted largely of fairly old general cargo ships and tramps, as shown in **Table 2** for containerships. It is noteworthy that 98.5% of LDC containership capacity in 1984 was registered in the Asian LDCs (in fact 90% of these were registered in the NICs of East and Southeast Asia).

The major development affecting LDC shipping has been the Code of Conduct for Liner Conferences which came into force in 1984, in the hope of providing a framework for the greater participation of LDCs in the shipping of their trade. This, as discussed later, did not happen. In fact, the Code had by and large the effect of reducing LDC maritime growth and increasing their shipping costs.

Table 2—Distribution of World Fleet and TEU Capacity of Fully-cellular Containerships by Groups of Countries, at mid-year 1981, 1983, and 1984

Flags of registration by groups of countries	Number of ships			TEU capacity and percentage shares*		
	1982	1983	1984	1982	1983	1984
World total	718	786	900	598,120 (100.0)	697,459 (100.0)	832,112 (100.0)
Developed market-economy countries	431	454	496	412,490 (69.0)	461,608 (66.2)	532,229 (64.0)
Open-registry countries	153	127	161	94,765 (15.8)	74,603 (10.7)	100,217 (12.0)
Sub-total	584	581	657	507,255 (84.8)	536,211 (76.9)	632,446 (76.0)
Socialist countries of Eastern Europe and Asia	35	49	61	15,934 (2.7)	26,525 (3.8)	33,340 (4.0)
Of which:						
in Eastern Europe	33	39	49	15,280 (2.6)	19,861 (2.8)	23,902 (2.9)
in Asia	2	10	12	654 (0.1)	6,664 (1.0)	9,438 (1.1)
Developing countries	76	128	147	53,814 (9.0)	104,264 (14.9)	120,968 (14.5)
Of which:						
in Africa	—	—	—	—	—	—
in America	16	11	11	1,529 (0.3)	985 (0.1)	2,048 (0.2)
in Asia	60	117	136	52,285 (8.7)	103,279 (14.8)	118,920 (14.3)
in Europe	—	—	—	—	—	—
in Oceania	—	—	—	—	—	—
Other, unallocated	23	28	35	21,117 (3.5)	30,459 (4.4)	45,358 (5.5)

*Percentage shares are shown in parentheses

Source: 'Review of Maritime Transport 1984', UNCTAD, Geneva, August 1985. Shipping Information Services of *Lloyd's Register of Shipping* and *Lloyd's of London Press, Ltd.*

Excepting the East and Southeast Asian countries, the LDCs as a group today have a marginally larger fleet in terms of world capacity percentage, but actually carry a smaller percentage of their trades in their own vessels because of their lack of containerships. A containership usually carries a multiple of the cargo carried by a breakbulk liner of the same capacity per unit time in a particular trade.

In Africa, for example, the percentage of trade carried

Table 3—Redistribution of Tonnage 50/50 Shares (000 DWT) (1984)

Country Group	Present DWT				Dist. with 50/50			
	Bulk	%	G.C.	%	Bulk	%	G.C.	%
Africa (Dev.)	300	0.1	2647	2.1	9450	4.5	3560	2.8
Central America & Caribbean	272	0.1	1518	1.2	1050	0.5	2160	1.7
South America	9945	4.7	11411	9.0	14850	7.0	4578	3.6
Asia	20662	9.8	17847	14.1	8400	4.0	17040	13.4
Oceania	60	—	107	—	68	—	112	—
Europe	84720	40.3	49796	39.2				
North America	1200	0.5	4242	3.3				
Other Dev.	25600	12.2	9004	7.1				
Open Registry	63400	30.2	23392	18.4				
Total	210000	100.0	127160	100.0	210000	100.0	127160	100.0

by national flag vessels dropped 14% by volume and 34% by value between 1980 and 1985. Furthermore African LDCs find it increasingly difficult to keep up with their mortgage payments, and today debts are owed on a larger percentage of the market value of African (as well as South American, etc.) LDC fleets than ever before. In fact, there are indications that the market value of the fleet is less than the outstanding indebtedness against the vessels. This condition has made the financing of replacement shipping practically impossible.

Comparing the existing fleets with fleet requirements in the even that trade were to be shared 50/50, **Table 3** indicates that African LDC would show a large deficiency in bulk carriers and that there would be a need to expand liner capacity by about a million DWT.

On the other hand, Asian LDCs would show a surplus of over 12 million DWT in bulk carriers and about 800,000 DWT in general cargo ships, while American LDCs would have a large surplus in general cargo tonnage and a large deficit in bulk carriers. More disturbing than the proportion or sizes of the fleets, though, is the fact that the average age of African and South American fleets is several years more than the world average and that the gap is growing.

3.0 Trade Barriers and Developing Countries

Regional bilateralism under which regional trade is fostered is on the rise now and is challenging the only large homogeneous trading region, the USA, for trade supremacy. The European trading block of 320 million people will become a single borderless and standardized trading block. Similar developments are under discussion in the Far East now. Such regional trading blocks will become increasingly independent of world trade and may, furthermore, challenge the global movement towards freer trade which helped advance post-war economic expansion.

These developments may affect economic development as rival trading blocks struggle for dominance while protecting their region and turf. The major casualties of such a development may well be the developing countries left out of these trading blocks. Past experience certainly shows that regionalization and bilateralism does not provide for consistent and expanding trade and that such developments will invariably lead towards regional protectionism, which in turn will affect LDCs most as it is they who depend on

freer access to markets.

GATT, as a 96 nation association of countries, serves as the Forum for multi-lateral trade agreements and has been the major instrument designed to foster freer trade since the late 1950s. GATT, which is continuing the Uruguay Round of talks started in 1986 (and planned to end in 1990) is largely ignored and the GATT talks have become largely irrelevant to developments in world trade as protectionism again raises its head everywhere.

Although the proponents of regional trade maintain that it is not protectionist, as trade increases inside such a regional block the outside countries invariably lose part of their market inside the block, even if no overt or covert protectionist measures are adopted by the block. Experience, in fact, has shown that blocks or their individual members actually do often employ barriers to foster their internal trade.

Heavy debt-burdened LDCs are in a particular predicament. They rely on higher exports as the only way to reduce their debt-burden, yet the creditor countries themselves are now moving toward greater bilateralism and its inherent barriers to outsiders.

The unfortunate situation is that the LDCs started the trend towards bilateralism and are now becoming the victims of this approach. Bilateralism alone as a policy is considered dangerous, as only by expanding trade worldwide can a trade surplus and foreign debt reduction be achieved.

This is particularly important now, when trade in most goods is highly volatile and trading relationships change all the time as important substitutes and various policies close some markets, while others open up. Only with free multilateralism can LDCs improve their position in such a dynamic trading environment.

A major issue of discussion is the relationship between free and fair trade. The two are obviously not synonymous. Nor are nations concerned with the one necessarily advocates of the other. When free trade is fair or fair trade free is a difficult problem to define, particularly under ever-changing or dynamic conditions. Much depends on the environment. There are a number of nations, for example, who have developed fair trading relationships among pairs or groups of countries with the virtual exclusion of others. Similarly, there are free trading arrangements among unequal trading partners which are not really fair because they do not consider

large differences in capability.

Similar arguments can be raised with regards to free and fair shipping arrangements in international trade. Since the industrial revolution, nations have attempted to tie their citizens and their productive activities to themselves and to the concept of the national entity locked in competition with similar foreign entities. Trade in a way has been considered conflict without weapons. The mercantilist view is still very much alive today, notwithstanding the fact that its benefits have been disproved and its costs shown to be destructive to those who practice it in today's highly interdependent world economy.

That is why GATT works like a seesaw, where agreements are advanced and then are again retracted. The mercantilist view is a convenient concept to states with protectionist interests and many LDCs accept it today in the same vein as did Europeans during the last century. The concept is simple and forms the basis of all protectionism. The nation assumes the role of defender of citizens who may be hurt by foreigners in any way. Most nations, and particularly LDCs who practice shipping protectionism, assume the right of intervention and rulemaking which is really a coverup of their self-interest in the national flag.

Free shipping and fair shipping, like free trade and fair trade, are antitheses, and as Martin Wolf⁽¹⁾ states, "fair trade is usually impoverishing". Similarly most 'fair' bilateral shipping agreements which shut out or reduce third party competition are often counterproductive and self-defeating expensive exercises. The main problem with most LDCs' shipping in the last 20 years has not been lack of capital or skilled crews, nor has it been the market dominance of entrenched Western shipping companies, but mismanagement, government overregulation, protectionism, corruption, favoritism and patronage. Many LDC shipping companies have missed great market opportunities and operational advances because of heavy handed government control. The major strategic development in LDC shipping will be the privatization of government-owned and/or -controlled shipping. Some countries, like Mexico, have recently sold some of their government-owned shipping interests to private investors and many other countries are expected to follow. The major reason is to induce private sector discipline in finance, personnel, operations and marketing to these companies. Most LDC government-owned or -controlled shipping companies are operated either as government departments or government enterprises, without profit objectives, with ready access to government financing and subsidies, subject to political and personal pressures and as a result as unbusinesslike enterprises accountable only to the political system. A recent study of a sample of 10 African government-owned shipping companies found that they have, on average, shoreside staff and shipboard crewing (including replacement, stand-by, etc.) of 3.2 and 2.8 times as large as comparable privately-owned shipping companies (in size and fleet composition) serving similar trades.

It is sometimes argued that lower labor costs allow overmanning and overstaffing. While this may be true in terms of direct labor costs, such as wages, it is not true when it comes to overhead costs, which are higher on a per capita basis for government-owned shipping than for private shipping (local- or foreign-owned). Government-owned

shipping usually has extra cabin space and other facilities. The fact is that non-wage costs which include:

1. insurance and health costs;
2. repatriation and relocation costs;
3. capital costs of on-board accommodation;
4. operating costs of on-board accommodation;
5. cost of foreign exchange allowances; and
6. holiday and vacation pay

often make overmanning with low-cost crews a very expensive proposition which makes LDC shipping non-competitive.

3.1 Protectionism as a Policy of Shipping Development

Protectionism in various forms has been the principal policy of many countries for the development of their national fleet. Protectionism takes many forms and includes:

1. cargo sharing or reservation for national shipping;
2. cargo preference schemes for national shipping;
3. preferential port facility allocation to national shipping; and
4. preferential exchange rates for national shipping.

Cargo reservation and preference are commercial concepts based on the belief that a nation benefits when its shipping participates in its national trade, and they have enormous political appeal, particularly for LDCs. Cargo sharing is often assumed to foster national control over price and service levels in shipping; to protect nascent domestic shipping; to retain profits for trading partners; to improve the balance of payments; and, to increase employment in shipping.

Cargo sharing affects market forces in shipping and regulates the competition among shippers and the quantity of affreightment in the carriage of goods in international trade. There are indications that cargo sharing also affects the productivity of shipping and the effectiveness and capacity assigned to carry the allocated shares. These in turn influence the cost of transportation. Finally, the limitations on competition and regulation (often associated with the introduction of cargo sharing and cargo reservation) tend to affect the shipping prices of goods covered by such systems, and consequently have an economic impact on the trading nations. In sum, cargo sharing affects the operation of free market forces in shipping by regulating the quantity and terms of shipment. It affects rates; shipper choices; quality and level of service; and, technological change; investments and fleet expansion and contraction.

The subversion of cargo sharing is particularly acute in the case of developing countries. Few of their trades have the commensurate partners and balanced trade flow to make it work effectively. There are necessary conditions if the strict forms of cargo sharing are to be efficient and advantageous. Most forms of cargo reservation interfere with the rational use of shipping and as a result increase costs, reduce service quality and obviously limit competition.

There are a number of important basic facts that influence the effectiveness of cargo sharing which are usually ignored. First, once a ship is scheduled to undertake a voyage, 70-85% of the voyage costs are normally fixed. Therefore the marginal costs of a voyage, incident with the carriage of cargo, are usually only 15-30% of voyage costs.

Second, increases in freight rates or shipping costs must be absorbed by increased domestic prices. The increased freight costs are, therefore, more often than not borne by the importer of the liner cargo. The same applies to the CIF cost exports an LDC ships to a market. Similarly, in

⁽¹⁾ "Why Free Trade is Not Fair", Martin Wolf, *Financial Times*, June 13, 1988.

liner shipping conferences, behavior is usually interpreted as maximizing the joint profits of members by an attempt to assure minimal profit to the marginal members of the conference. As a result, in the absence of an uncontrolled operator in the trade, rates will usually increase to assure the marginal conference members financial viability while contributing excess profits to the remaining members.

Cargo reservation or preference policies have generally not furthered the objectives of enhancing LDC participation in their trade. In fact, most developing countries with the exception of East and Southeast Asian countries actually carry a smaller percentage of their trade in national shipping than before the U.N. Code of Conduct and other cargo sharing provisions were suggested. To cover up the lack of success of such schemes, various definitions of national shipping have been introduced and include:

- any shipping under national control such as chartered or space chartered shipping capacity;
- joint venture shipping; and
- offshore shipping managed or partially owned by national interests.

A distinction should be drawn between "cargo reservation" and cargo allocation schemes. Cargo reservation is usually applied to particular commodities or to government-controlled shipments. In these cases, carriage of the specified goods is reserved for particular carriers (usually the national flag fleet). Administration of these preference schemes is thus typically performed by governments through level statutes and regulations. Cargo allocation, on the other hand, is the assignment of cargo to specific operators. Sometimes cargo allocation is used in conjunction with cargo preference; however, the two remain distinct in concept. An example of a cargo reservation agreement is "equal access" agreements whereby national flag carriers are granted transferable national flag status under national cargo preference laws. (Each such carrier may transfer his allocation to someone else.) One such "equal access" agreement is the 'Agreement Between the United States of America and the Union of Soviet Socialist Republics'. This agreement states the intent of the U.S. and the U.S.S.R. to carry equal shares (or at least one-third) of all trade between the two nations. Shares are computed separately for liner and non-liner carryings and are based on weight tonnage. Allocation schemes represent agreements between carriers to limit competition amongst themselves. The parties to the agreement as a whole will still in general compete for the unallocated portion of the market. Thus trade carried by the parties to the agreement is allocated amongst them. No prohibition of carriage by non-parties is implied by the term "allocation". Cargo preference reserves an entire market (or market segment) for a particular carrier or set of carriers. Cargo preference thus offers the greatest degree of security to the (preferred) carriers on a trade route.

Cargo preference schemes similarly had little, if any, effect on the advancement of their stated objectives, nor had preferential facility allocation or self-defeating measures such as preferential exchange rates to national shipping. By and large all protectionist measures were found to be counterincentive, to reduce the efficiency and productivity of national shipping, and to be very costly to the national economy.

The economic impact of cargo sharing may take many forms. It may be caused by the replacement of efficient shipping, by less efficient shipping, by the change in the quality and level of shipping services, by the increased cost

of shipping, by restrictive access to markets or sources of supplies, by limiting access to shipping or by selective accommodation of cargo in shipping. The economic impact may also result from jurisdictional problems, regulatory constraints, or legal impediments to the movement of cargo and the unhindered operation of shipping. Similarly, structural deficiencies and institutional constraints or factors may cause economic impact. The cost and pricing of shipping, as well as the demand for and supply of shipping, has been analyzed in earlier chapters. We have shown there how restrictive practices of various sorts affect shipping costs, freight rates, and the demand for, as well as supply of, shipping. Now we will analyze the economic impact of cargo reservations and other restrictive practices in their various forms.

It is usually assumed that there is a causal relationship between the existence of effective shipping and economic development, as international trade, which is largely dependent on shipping, is one of the prerequisites for economic growth.

As noted, the principal reasons for the increasing use of restrictive shipping practices and particularly cargo reservation are the desire for participation in the profits accruing from shipping, control of the terms of shipping, and the accrual of benefits from spin-off effects such as employment in shipping, technology transfer and profits from maritime insurance.

The effect of protectionism in shipping costs, rates and the rational use of resources can be evaluated. Restrictive shipping practices affect the financial and economic viability of shipping operations, and have an economic impact on trading nations in terms of:

- cost of trade and cost of shipping;
- volume of trade;
- shipping and port investment;
- technological change; and
- quality and level of shipping service.

It is assumed that it is in the national interest of any country to encourage low freight rates and other shipping charges to lower the transport costs of trade and thereby

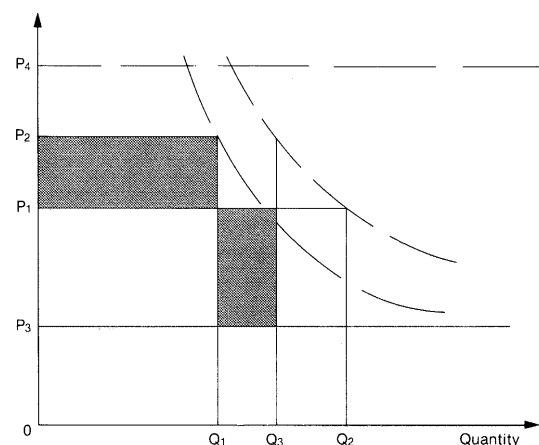


FIGURE 1
SIMPLE MODEL OF THE IMPACT
OF CARGO SHARING

assure greater competitiveness of exports as well as to lower the price of imports and thereby aid in the maximization of consumer surplus or satisfaction.

A simple model of the impact of sharing on the basis of a 40-40-20 or any other share allocation is shown in

Figure 1. Given that D_1 is the demand curve on the liner route under consideration and that $D_2 = 0.6D_1$ is the 60% demand curve, if P_1 is the conference freight rate before entry of the national shipping members, and if because of the higher costs of the national shipping members, the conference agrees to raise the freight rates to $P_2 > P_1$, then $(P_2 - P_1) Q_1$ = additional profit of non-national shipping conference members (who earlier accepted P_1 which included marginal profit and $(P_2 - P_1) Q_3$ = additional cost to the country's trade of carrying Q_3 . Finally $(Q_2 - Q_3)$ is the reduction in trading volume resulting from the increase in freight rates.

If $P_4 > P_2 > P_1$ is the CIF price obtained for the commodity, and $P_3 < P_4$ is the cost per unit of the commodity then the gross product without cargo sharing is $(P_4 - [P_3 + P_1]) Q_2$ and with cargo sharing $(P_4 - [P_3 + P_2]) Q_3$.

If this is pure export trade, then total foreign exchange revenues are without cargo sharing (assuming all freight paid in foreign exchange) $(P_4 - P_1) Q_2$, while with cargo sharing (assuming freight for national shipping constitutes foreign exchange savings) $[(P_4 - P_2) Q_1 + P_4(Q_3 - Q_1)] = [P_4 - 0.6P_2] Q_3$. Assuming $(Q_3 - Q_2) = (P_2 - P_1)$ and $Q_1 = 0.6Q_3$, then the difference in foreign exchange earnings is $(P_4Q_2 - P_1Q_2 - P_4Q_3 - 0.6P_2Q_3) = P_4(P_1 - P_2) - P_1Q_2 - 0.6P_2Q_3$ and the total cost of carrying $Q_2 = Q_2P_1$ and the total cost of carrying $Q_3 = Q_3P_2$. If $P_4 > P_2 > P_1$ is the CIF price obtained for the commodity, and $P_3 < P_4$ is the cost per unit of the commodity, then the gross profit without cargo sharing is $(P_4 - [P_3 + P_1]) Q_2$ and with cargo sharing $(P_4 - [P_3 + P_2]) Q_3$.

The economic impact of cargo sharing or preference shipping agreements can be summarized as:

Added Costs

- increased costs of imports
- increased price of exports and resulting loss of market share
- foreign exchange expenditure for chartering-in of foreign vessels or capacity
- investment costs of fleet acquisition
- loss of technological improvements because of lack of productivity or service quality incentives

Marginal Benefits

- small savings in foreign exchange for use of foreign shipping
- employment of nationals

On balance, the conclusion can be reached that protectionist measures have a negative economic effect.

Bilateral cargo sharing agreements can only result in efficient, low-cost shipping if effective operational and investment incentives are provided. This may require the admission of reasonable participation by third country carriers preferably in the form of independents.

For a simple economic explanation, when under a bilateral cargo sharing agreement both national fleets have the same short run marginal costs, SMC (**Figure 2**) and agree to a share(s) of D for one and $(1-5)D$ for the other fleet (where $d = sD$ for all D), then the price set by both would be equal to the monopoly price P_1 and the shares of the two fleets would be Q_1 and $(Q_2 - Q_1)$ respectively. If the short run marginal costs of the two fleets are different (SMC_1 and SMC_2 respectively) as shown in **Figure 3**, in which the high cost fleet in the conference is assumed to determine the rates (price leader), then the price set would determine the market

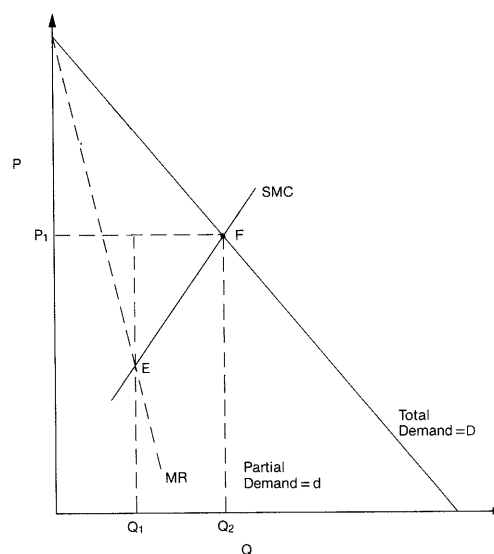


FIGURE 2
PERFECT CARGO SHARING
UNDER BILATERAL AGREEMENT

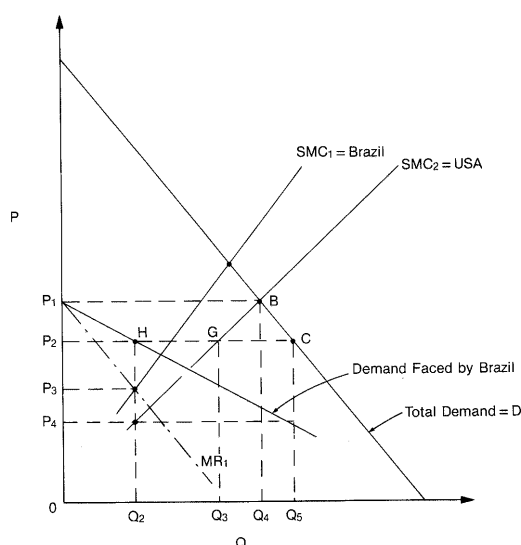


FIGURE 3
CARGO SHARING
WITH DIFFERENTIAL MARGINAL COST

share of the fleets. For example, if the price set by the conference is P_2 , then the total demand is Q_5 , of which the high cost fleet would supply Q_2 as this would maximize its profits (intersection of marginal revenue and marginal cost curve for higher cost fleet). With a more realistic concave total demand and marginal cost curve, the shared the higher cost fleet would claim increases. This in turn would increase the profit of the lower cost fleet. It is interesting to note that developing countries with the most stringent protectionist shipping policies have had the largest decline in real participation or growth of their national shipping and in economic benefit from their national shipping.

4.0 The Changes in the LDC Shipping Environment

LDC shipping, with the exception of shipping in East and Southeast Asia, has declined in participation in national trade and quality. While the deadweight of GRT capacity of the LDC fleets has increased marginally in percentage terms, the lack of quality has actually resulted in a serious decline in participation or transport capacity. (LDC general

cargo ships often serve liner routes in competition with RoRo or containerships, which offer 3-5 times the transport capacity for an equivalent deadweight.) Another issue is the increasing dependence of LDC shipping on foreign-owned (and often-managed or -operated) tonnage.

A major issue in LDC shipping is its lack of sufficient, effectively trained shipping management. Most LDC shipping is government-owned (though highly-mortgaged) and managed. As a result, LDC shipping is often subject to bureaucratic processes incompatible with effective shipping management requirements.

Over 82% of LDC shipping is controlled by government-owned shipping companies. In fact there are 52 countries in which there is no privately-owned oceangoing shipping. Government-owned shipping companies operate in 62 countries as departments of governments and in only 38 countries as autonomous government companies or entities. Where government and private national shipping companies exist side by side (India, Malaysia, Mexico, etc.), the government-owned shipping companies often receive preferential cargo allocation, financing, foreign exchange allowances and more.

Most LDC government owned shipping companies are highly overmanned, both on ships and in management. The average ratio of shipboard manning between an African LDC and a European shipping company using similar vessels on comparable trades was 1:2. Similarly, the African government-owned company employed over four times as many in management and other shoreside activities.

Most importantly, few LDC government-owned shipping companies allow management to make effective and timely decisions and generally impose a burdensome and restrictive bureaucracy who delay urgent decisions are risk averse and defer action until it is generally too late. It is

impossible to run shipping in this way.

4.1 Counterstrategies in Developing Country Regions Towards the Year 2000

Developing countries, with the exception of NICs and East/Southeast Asian countries, such as China and Malaysia, have fallen further behind other nations in participation in their shipping and in shipping technology. They now carry less of their trade by volume and, more importantly, by value in their own national vessels. To cover up the failure of protectionist policies, national shipping has often been re-defined, yet even this does not reduce the dilemma of declining national benefits from shipping and adverse effects on LDC trade.

The LDCs will have to change many of their policies to reverse this trend. Among counterstrategies discussed and considered by some of the more realistic developing countries are:

1. privatization of or at least formation of autonomous government owned companies;
2. hiring of effective, well paid, autonomous shipping management including, where necessary, expatriate shipping managers;
3. development of effective shipping financing strategies which assure investment safety and low cost financing;
4. elimination of restrictive ship ownership and capacity use policies;
5. elimination of direct government aid to shipping;
6. education of shipping management including operational, financial, technical, marketing, human resource and legal management;
7. scrapping of obsolete tonnage and replacement by smaller but more modern fleets (with less DWT but equal

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Port of Montreal Adopts A Development Strategy for Horizon 2010

The Port of Montreal recently unveiled its development strategy designed to satisfy the growing space requirements of its current and future customers through to the year 2010.

Mr. Ronald Corey, Chairman of the Board of the Port of Montreal, explained that the strategy has three facets:

1) maximum utilization of port facilities on the Island of Montreal and planned investments of \$120 million by the year 1992, including, among other things, the enlargement of Cast Terminal, the completion of Maisonneuve Terminal and the improvement of other terminals;

2) implementation of a policy of acquiring any available land that can be developed economically adjacent to active handling zones on the Island of Montreal;

3) as demand grows from now to the year 2010, development of port facilities on about 150 hectares of land at Contrecoeur.

Mr. Corey specified that the new facilities will be needed to handle the increase in containerized traffic and dry bulk stored outdoors. He added that the Port Corporation will

do everything in its power to fully develop its existing facilities before the first shovelful of earth is turned at Contrecoeur.

The Port Corporation will finance implementation of its development strategy from its cash flow, the Port's standard practice for all its capital expenditures.

In the immediate future, the Port will have to finance only the investments called for in its 1988 budget to improve existing facilities and the acquisition of land at Contrecoeur.

Mr. Corey said that the Port's strategy derived from two major studies carried out by Dessau (Desjardins, Sauriol and Associates) and Lavalin, which were followed by analyses conducted by the Port Corporation and its Planning Department. Furthermore, it has been subject to extensive consultation with the different levels of government, various participants in port activity and business groups.

In accordance with the Federal Environmental Assessment and Review Process, the Port will ask the Federal Minister of Transport to convene an environmental commission which is expected to hold public hearings.

"In line with its strategy, the Port of Montreal will continue improving, adapting to new handling techniques, and even insofar as is possible, enlarging its facilities on the Island of Montreal. We will see to it that our current facilities are utilized to the maximum, and we will increase their handling capacity by acquiring any land that becomes available around our terminals," said Mr. Corey.

He pointed out that, since 1980, the Port of Montreal has already invested approximately \$110 million in the improvement and redeployment of Port facilities on the Island. "Our five-year corporate plan already calls for capital expenditures in the order of \$120 million. \$60 million of this has been earmarked for our container terminals, \$20 million for our railway system, \$25 million for the grain elevators and \$15 million for our other infrastructures," said Mr. Corey.

However, the Port Chairman pointed out that there is no more large riverfront acreage available on the Island of Montreal suitable for development into port areas. He explained that the Port is caught in a squeeze between the river and the city "where homes, businesses, industry, recreation, green space and port activity compete for every

inch of land."

"That's why our development strategy includes the simultaneous acquisition of land on a designated site at Contrecoeur," said Mr. Corey.

This site was identified by the Dessau Study as the one offering the best prospects for port development of the 11 sites downstream from Montreal Island the firm analyzed. The Port Corporation has selected it for several reasons.

In effect, the Dessau Study found that the Contrecoeur site is capable of satisfying all the Port's additional space requirements for Horizon 2010, and fulfils all the technical, operational, economic and environmental criteria. The site can be developed gradually in response to the growth in demand for facilities.

Furthermore, development of this site will have no major impact on the human environment, since it mostly encompasses vacant lots that already abut upon port facilities and an industrialized zone, far from the residential and business centers of Contrecoeur and Verchères.

Before preparing its development strategy, the Port of Montreal had asked the Lavalin firm to study, in 1985, two potential sites on the Island of Montreal. The Port Authority would have been ready to develop one of those sites into a container terminal even though the 20-hectare site would far from satisfy the estimated 150 hectares required for Horizon 2010.

The site, called Tétreaultville, adjoins the Cast Terminal in east-end Montreal. It meets technical, operational and economic criteria, but its development into a terminal presents a major constraint: its impact on the human environment.

This site encompasses 13 hectares of green space including Honoré-Mercier Park and 800 meters of riverfront access along the Promenade Bellerive.

Mr. Corey said, "Because of the foreseeable negative impact on the environment, the Port of Montreal will not insist on building a container terminal on the Tétreaultville site unless the environmental commission so recommends following the environmental impact study."

The Port Chairman concluded by adding, "We thoroughly considered and carefully weighed every factor in preparing our development strategy. It is now important to implement it as quickly as possible to ensure the success of the Port of Montreal, by far Canada's Number One Container Port."

The Impact of Growth in Containerized Traffic

Following Mr. Corey's announcement, Port of Montreal General Manager and Chief Executive Officer Dominic J. Taddeo said that the Port Authority had anticipated the need to work out a development strategy for Horizon 2010.

"As our containerized traffic kept growing, it required more and more space on land that cannot be enlarged."

Mr. Taddeo recalled that containerized traffic at the Port had increased at an average annual rate of 13.1 percent from 1977 to 1987.

"Again in 1987, our containerized traffic soared by 11.9 percent or some 600,000 tonnes to a total of 5.5 million tonnes, thus marking our fifth consecutive record year," said Mr. Taddeo, adding that in the first half of 1988, containerized traffic increased 10.4 percent compared with the corresponding period last year.

He noted that the average annual growth in containerized traffic at the Port of Montreal was clearly higher than the 3 percent recorded by the industrialized O.E.C.D.

Towards the Year 2000

(Continued from Page 17, Col. 2)

or larger transport capacity often at lower cost); and

8. reduction of government controls.

Introduction of some of these counterstrategies is planned by a few forward looking LDCs, yet a majority hold on to the old policies which will continue to drag down their economies.

It is expected that nearly 20% of LDC government-owned and -managed fleets will be privatized by 1992 and more are expected to follow as more LDC governments recognize their inability to effectively manage and maintain their national shipping.

4.2 LDC Shipping Industry Towards the Year 2000

LDC shipping capacity will decline to 14.8% of the world total (in GRT) by the end of the century, but it will consist of a larger percentage of modern vessels, not only in terms of age but also of technology.

China and India, the two largest non-NIC developing nations, are now making strenuous efforts to replace their tonnage with more modern technology, such as full cellular containerships.

Similarly, LDCs will be driven towards more effective intermodal transport which in turn will force them to redevelop their logistics systems and, as part thereof, the ownership, control and management of shipping. LDCs by the year 2000 will be divided into very poor, dogmatic, non-compromising, backward nations who hold on to the controlling role of government in transport and, therefore, shipping. These will be left with a declining non-competitive obsolete fleet and increasing transport cost. Other LDCs will make shipping autonomous and international, and will allow it to be managed as very competitive business enterprises. In some cases it will involve privatization or joint venturing with private (often foreign) interests. As a result, we will have at that time large discrepancies among LDC shipping, with some (about 50% of the LDC fleet) sinking further into obsolescence, with the rest rapidly catching up with the developing world.

economies from 1978 to 1986.

Container-handling, for all practical purposes non-existent at the Port of Montreal before 1968, today takes up nearly 40 percent of its 142 hectares of facilities. "At the current growth rate, we expect our container terminals to reach their handling capacity within the medium term," said Mr. Taddeo.

Over the past 20 years, the Port Corporation has carried out several expansion and redeployment projects to make room for containers on its land, while continuing to offer services and facilities suitable for handling other cargo.

Mr. Taddeo recalled that the Port of Montreal had considered its future before working out its development strategy. "We gave Dessau a mandate to determine the nature, scope and relative urgency of our space needs before identifying potential port development sites."

To do this, Dessau first undertook studies to establish traffic forecasts for each cargo category.

Traffic Forecasts

According to these projections, which were again reviewed, updated and validated by Dessau in June, total traffic at the port of Montreal should reach 35.6 million tonnes in 2010. The difference between the 21.9 million tonnes handled in 1987 and the forecast for 2010 amounts to an average annual growth rate of 2.1 percent.

Containerized traffic should reach 13 million tonnes in 2010; this represents a gain of 7.5 million tonnes over 1987 or an average annual growth rate of 3.8 percent.

Breakbulk general cargo will remain rather stable, reaching 1.3 million tonnes in 2010.

Meanwhile, dry-bulk traffic (excluding grain) should increase at an average annual rate of 2.2 percent to the year 2010 and attain 7.3 million tonnes.

Mr. Taddeo emphasized that Dessau's projections clearly showed that containerized traffic would have the greatest impact on space requirements to the year 2010, followed by dry bulk.

Other traffic — meaning grain and liquid bulk — will not require any additional space for rather obvious reasons.

First of all, the Port's two existing grain elevators have all the capacity and efficiency required to handle the 7.6 million tonnes of grain forecast for 2010. This tonnage almost equals what the Port handled in 1980.

Traffic in liquid bulk, meanwhile, which will remain rather stable and total 6.4 million tonnes in 2010, is handled by pipeline and stored off port land. This traffic, therefore, does not have any impact on our future space requirements.

Space-Requirement Projections

Based on these facts and the established traffic forecasts, it is expected that the Port of Montreal will need 294 hectares to handle and store all its cargo traffic in 2010.

"Since our current facilities span 142 hectares, we therefore have to add approximately 150 hectares," said the Port's General Manager.

"Container-handling alone will occupy 120 of these 150 hectares, which will be developed in line with the growth in demand to the year 2010. The remaining 30 hectares will be used mainly for handling dry bulk."

"The Port of Montreal has nothing to lose and everything to gain by acquiring land at Contrecoeur. It does not risk incurring needless capital expenditures since the site will be developed in tandem with the growth in demand. It has everything to gain by acquiring what it needs to handle the

projected growth in its traffic," said Mr. Taddeo.

He stressed that the Port Corporation does not build a single terminal prior to obtaining from its clients contractual commitments that provide the required revenues. Until required, the Contrecoeur site will only be a land bank.

During the 1980-87 period, the Port Corporation's net income totalled nearly \$135 million. It was able to finance capital expenditures of approximately \$110 million during the same period.

Mr. Taddeo concluded by saying that the Port of Montreal must urgently implement a development strategy whereby it will acquire the large areas that will eventually allow the Port to continue to build efficient facilities and improve its competitiveness. "In this way, the Port will provide the incentive necessary for attracting new traffic. This will result in sustained growth for the benefit of all."

"Efficiency is the key of survival."

Transformation of Port of Montreal Since Its Entry Into the Containerized Shipping Market

The Dawn of Containerization

One need not look far into the Port of Montreal's history to find an event that ultimately revolutionized port activity. In 1968, the Port of Montreal inaugurated Manchester Terminal, Canada's first container terminal. With the dawn of containerization, the Port would again broaden its horizons, as it had when the first steamship docked in 1809, regular service between Liverpool and Montreal was inaugurated in 1856, the first locomotive chugged along its wharves in 1871, the navigation channel was dredged to 10.7 meters (35 feet) in 1952, and year-round navigation began in 1964.

When man invented the giant metal box we call a container, the Port of Montreal's customers were quick to adopt this new technique — faster, more economical and safer — for handling general cargo. The Port's commitment to containerization also drew fresh shipping lines and new regular sea links to its wharves.

Containerization would allow the Port of Montreal more than ever to take advantage of its unique geographic position at the doorstep of North America's industrial heartland and its intermodal transport system (sea, rail and road) for serving this vast hinterland, linked to the Old World by the shortest and most direct land-sea route.

These advantages, combined with efficient, competitive services, have rapidly made the Port of Montreal Canada's Number One Container Port and a leader on the North Atlantic route.

Growth in Containerized Traffic at the Port of Montreal from 1968 to 1987

In 1968, the year its first container terminal opened, the Port of Montreal handled 13,798 containers of TEUs. Ten years later in 1977, it processed its 1,000,000th container, four years later its 2,000,000th, three years later its 3,000,000th, and before the end of 1986 or less than two years later, its 4,000,000th. Last year, the number of containers shipped through the Port in a single year reached a new peak: 574,522 TEUs.

The tonnage of containerized shipments has grown at an average rate of 13.1 percent annually over the last decade.

In 1987, the Port again saw its containerized traffic soar

by 11.9 percent or some 600,000 tonnes to 5.5 million tonnes, thereby marking its fifth consecutive record year.

The growth in containerized traffic at the Port of Montreal clearly outstrips that of the industrialized economies of the O.E.C.D. (approximately 3% per year from 1978 to 1986, the last year for which statistics are available).

The Port of Montreal's success in the containerized cargo sector is all the more significant for having been achieved in the face of fierce competition which has intensified in recent years due to an overcapacity in marine shipping along with transport deregulation in the United States.

Some might be tempted to draw the conclusion that this growth in the Port of Montreal's containerized traffic can be attributed to the phenomenon of cannibalization (containers swallowing breakbulk cargo until then carried in bags, boxes, barrels and on pallets).

There is evidence of cannibalization during the first decade of containerization. Since 1977, however, containerization has largely contributed to the growth in general cargo shipments through the Port, while breakbulk traffic has stabilized.

In fact, containerization has brought the Port of Montreal a net gain of 3.5 million tonnes in general cargo over the past 10 years. From 1976 to 1987, general cargo traffic has increased at an average rate of 7.6 percent. Last year, it rose by 10.8 percent to reach an unprecedented level in the Port's entire history: 6.7 million tonnes.

Hence cannibalization of breakbulk cargo utterly fails to explain the remarkable growth in containerized traffic. Rather, this increase is rooted in the competitive strength of the Port of Montreal, which handles about half of all the containerized cargo traffic shipped through Canadian ports.

Port of Montreal's Competitive Strength

The Port of Montreal's competitive strength stems mainly from its unique geographic location and intermodal transport service.

Its geographic position gives the Port of Montreal a strategic and economic advantage in serving North America's industrial heartland. It is located close to the sprawling cities and industrial centers of Canada and the American Midwest, New England and New York State. At the same time, it lies on the shortest land-sea route between these vast markets and those of Northern Europe and the Mediterranean.

The Port enjoys the advantage, of course, of its location at the heart of Greater Montreal. Moreover, it is only a few hours way from every region of Quebec, metropolitan Toronto, New England and New York State. For Midwest exporters and importers, Montreal lies on the shortest land-sea route between, for instance, Chicago and Antwerp.

The natural advantage of the Port's geographic location is therefore considerably enhanced by intermodalism. The Port of Montreal is very well served by excellent land-transport networks.

For shippers, shorter, more direct sea routes with rail and road links mean improved transit times and more competitive shipping costs.

Given these advantages along with numerous others such as more and more regular and frequent shipping links, and prompt, safe handling year-round, one should not be surprised that 46 percent of the Port of Montreal's containerized traffic has its point of origin or destination in the United States.

This fact alone says a great deal about the Port of Montreal's competitive strength.

Indian Ports

How Efficiency Could Be Improved

By Satkartar Batra*

(Reproduced from 'INDIAN SHIPPING' Vol. 40 No. 1-2, Journal of Indian National Shipowners' Association)

Efficiency at Indian Ports can improve when the Government of India consider ports as:

i) a vital link in the national system of transportation and means to serve over-all national interest.

ii) a link which provides passage-safe, convenient and economical, commercially and otherwise, with all maritime countries of the world; and

iii) essentiality for the nation same way as the military, roads, highways, bridges and other public works, and meet all the expenses of construction and maintenance of all essentialities required for ship to enter and leave a port from the Union Government budget irrespective of any consideration of returns and revenue.

To bring the above mentioned objectives in practical shape the suggestions are:

Port Authorities Not to Act as Bailee:

Port Trust Acts, Chapter: The Power and Functions of the Board.

A. 1) The Board shall, immediately upon the landing of any goods take charge thereof, except as may be otherwise provided in the Bye-laws, and store such as are liable in their opinion to suffer from the exposure in any shed or warehouse belonging to the Board.

2) (If any owner, without any default on the part of the Board, fails to remove any goods other than those stored in the warehouses appointed by the Board for the storage of duty paid goods or in warehouses appointed under Section 57, or licensed under Section 58, of the Customs Act 1962, from the premises of the Board **within seven clear days** from the date on which such goods shall have been landed, such goods shall remain on the premises of the Board **at the sole risk and expenses** of the owner, and the Board shall thereupon be discharged from all liabilities incurred by them in respect of such goods.)

B. The responsibility of the Board for the loss, destruction or deterioration of goods of which it has taken charge shall, subject to the other provisions of the Act and subject also in the case of goods received for carriage by railways to the provisions of the Indian Railways Act, 1890, be that of a bailee under section 151, 152, and 161 of the Indian contract Act 1872 omitting the words, "in the absence of any special contract" in section 152 of the said Act.

To improve the efficiency at Indian Ports the Gov-

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ernment of India through Parliament delete the above mentioned section from all Major Port Trust Acts, so that the carriership-owner or his representative becomes responsible for the safe delivery of goods to the consignee after getting written permission from customs and Port Authority as is the practice with other carriers rail, road and air.

It is felt that the Section in question was introduced in the Act to facilitate the British Shipowners by India's late rulers, the Britishers and still being followed unquestioned as is of advantage to Indian Shipowners — a very powerful section of the society. It is a stumbling block in quick discharge/loading of goods as well as in delivery to consignee and exporter.

In almost all affluent countries except U.S.S.R. the port authorities do not receive goods from the Master of vessel nor from exporter to handover goods to shipmaster.

The Port authorities should lease shore-side facilities (under stipulated conditions) to steamship companies or terminal operators (who employ stevedores) to look after the loading/unloading of vessel, storage of cargo and its delivery to the consignee or shipmaster as the case may be after getting clearance from customs and Port Authority.

It will result in the operations in Ship's hold and ashore as well as in the process of storage and delivery by a single agency and thus increase the rate of loading and discharge on one hand and systematic storage of goods and delivery on the other resulting in eliminating of multiple controls and interests and thereby quicken turn-round of the vessels from port achieving improvement in efficiency.

Working Hours at Port:

At present according to Dock Bye-laws working hours for loading/unloading of ships and delivery/receipt of cargo imported/for export in transit sheds are for:

A. SHIPS:

Day Shift: (normal) of eight hours with recess of one hour.

Night Shifts (with overtime): two each of eight hours recess of one hour.

Note:

(i) Work in recess is permissible with overtime.

(ii) Sunday and holidays: work in each shift is permitted with overtime and extra rates fixed from time to time by Board of Trustees.

For work in Night Shifts, Sundays and Holidays each time and every day Shipmaster/ship Agent has to apply to Dock Manager/Traffic Manager who may if deem fit and on production of necessary permission from Customs Department, will make necessary arrangements for proper conduct thereof.

Efficiency of working at port is termed as "Quick Turn Round of Vessel." In order to have our objective a reality it is desired that Dock Bye-laws, section working hours for in ships hold i.e. Loading/discharging of vessel as well as that of Quay cranes/mechanical loaders/unloaders and workers in transit sheds i.e. receiver/dispatcher of goods be amended as under:

Four Shifts: — normal each day including Sundays and holidays except closed National Holidays be: — of six hours each with no recess and overtime.

B. Transit Sheds:

For delivery of import cargo and receipt of cargo for

export at present are:

8 a.m. to 12 noon and 1 p.m. to 5 p.m. except Sundays and Holidays as may be notified by Port Trustees from time to time subject to following restrictions.

a) Deliveries at Docks transit sheds shall be stopped at:

i) 4.30 p.m. in respect of cargo other than that intended for Trustees Bonded warehouses.

ii) 4.00 p.m. in respect of cargo to be removed to Trustees Bonded warehouses.

b) Receipt of export cargo shall be stopped at Dock Road gates at 4.30 p.m.

Application to work at night or on Sundays, or on holidays, shall be made to Dock/Traffic Manager who, on production of necessary permission from Customs Department, will make necessary arrangements for conduct thereof. For work at night, or on Sundays and Holidays prescribed by the port Trustees at extra rates fixed from time to time shall be paid.

For better utility of transit sheds and regulating the flow of cargo imported and for export as well as to increase the handling capacity of transit shed per day it is a must that working hours should be normal:

12 hours (two shifts-each of 6 hours) minimum.

18 hours (three shifts-each of 6 hours) maximum.

With no recess as well as work on Sundays and Holidays except national holidays at normal rates and wages of employees.

Advantages

1. a good deal of elimination of paper work and uncertainties.

2. increase in actual working hours and output per day without extra capital expenditure.

3. more employment avenues.

4. decrease of vessel staying at a port and thus of berth by greater number of vessels.

5. lesser congestion or bunching of ships at a port.

6. decrease of demand of surcharge on freight by liner vessels due to congestions at a port.

7. feasibility of earning dispatch money from shipowners (chartered vessels).

8. Maximum utility of port equipment used in loading/discharge of vessel as well as delivering/receiving of cargo.

Gainful Deploying Quay Cranes and Mechanical Loaders/Unloaders:

At present port Administration hires Quay Cranes and Mechanical loaders/unloaders to stevedores/shipping Agents for cargo loading/discharging from ship at rate fixed which is either per hour or per shifts, irrespective of the output.

Requisition for hiring is to be made out in specific form in duplicate to Traffic/Dock Manager though cranes and loaders/unloaders are looked after by Mechanical Department of the Port Authority by stevedore/shipping Agency of a vessel.

Traffic/Dock Manager will hire the cranes as per availability and other considerations at his sole discretions.

Efficiency of working at a port can improve in respect of cargo handled from a ship to shore and vice versa if: —

a) Hire charges of Quay Cranes and mechanical loader/unloaders are fixed per tonne cargo handled; and

b) Ship's gears are allowed to be operated for loading/discharging if number of cranes requisitioned are

not available.

Advantages

- a) shipowner can be aware of the expenses in respect of cargo loading/unloading, as well as to a great extent the time required for it.
- b) decrease in prevailing malpractices and undesirabilities of inducements to crane operations to work efficiently; and
- c) regularity in output — a must for efficiency.

Re-classification of Commodities and the Purpose of Wharfage Dues (Landing and Shipping Charges):

The port authorities in India takes charge of all goods except as mentioned otherwise in port Bye-law landed from ships to deliver the same to consignee after getting instructions from Customs and shipmaster/Agent, and receivers goods from shipper to deliver to shipmaster after getting clearance from Customs and consent from shipmaster to receive.

For these services port authorities receive service charges. These charges are known as wharfage dues at some ports and at others Landing charges and shipping charges.

Mercantile goods under this heading are classified in about 100 items at each port. Charge varies from item to item and therefore requires the services of experts to calculate. Variation and calculations are always cumbersome and does not provide any material benefit to the port authorities.

Efficiency demands reclassification, items be reclassified broadly and unit of charge should be same for all commodities i.e. tonne and scale of rate be made simple.

As for example, now at port of Visakhapatnam under the chapter Schedule of landing and shipping fees in scale of rates first commodities to 100 items, variation of charge in each item is 5 to 20%.

It is desired the variation of charges in sub-item be removed and then calculation for payment of wharfage will become easy and convenient.

This will result in improved efficiency at a port in delivery and receipt of goods from consignee and shipper and therefore be considered.

Calculation of Pilotage Fees:

Efficiency in piloting a vessel inward and outward depends upon many factors. According to the existing facilities available at Indian ports, piloting service have very little room for improvement except its method of calculating charges for the services rendered. Method varies from port to port. Uniformity is essential for efficiency and understanding. It is desired as under:

Pilotage fees: Should be inclusive of towage, mooring and unmooring operations including the use of one, two or three tugs per N.R.T. or per N.R.T. per kilometre each wharf, exclusive of cost of tug boat assistance.

This will result in quick and convenient calculations of pilotage fees for masters/Agents of vessel and port authorities, which means, increase in efficiency.

Increase/Decrease in Port Charges/Rates to be made Effective from Financial Year:

At present, the port authorities notify the change in rates and charges as and when occasions arise. It would be better, if these increases/as is the practice in Government

Revenue Departments. This will remove uncertainties to shipowners and they would be able to fix their freight charges without a fear for the whole year. This would ensure greater efficiency.

Amendments in Customs Acts:

Efficiency in working of Customs Department, Ministry of Finance, Government of India, without whose permission:

- a) no vessel can enter/leave a port nor can load/discharge any cargo except under the supervision of its officer; and
- b) Port authorities can neither deliver the imported goods to consignee nor can receive export goods to consignee nor can receive export goods for delivery to the master of vessel.

Can be improved when the customs Act 1962 and customs Tariff Act 1975 are amended as under:

The Customs Act, 1962

a) Section 34: imported goods shall not be unloaded from, and export goods shall not be loaded on, any conveyance except under the supervision of the proper officer.

This section was laid down, when in India over 90% of the vessels coming to Indian ports were on liner terms.

Now 90% of the vessels coming to Indian Ports are on chartered terms, loading/discharging bulk cargo-one item at a time. Discharge/loading is by mechanical means and when manual, number of persons employed is much greater than used to be. Therefore, there is very little chance of smuggling imported goods from ship by a worker or workers due to the nature of cargo.

Efficiency demands that this Section of the Act be amended in such manner that the presence of a representative of Customs is not a must all the time during loading/unloading operations of a vessel on chartered terms with bulk cargo. For liner vessels and passenger ship Section may stand as it is.

If it is unacceptable, then a clause to be added to the Section as under:

"Customs at a port on their own accord without registration for Customs supervising officer from shipmaster/Agent, round the clock, without any change keep a supervisor at a vessel from time of discharging/loading till the operations are completed in a chartered vessel unloading/loading bulk cargo.

b) Section 36: No imported goods shall be unloaded from, and no export goods shall be loaded on, any conveyance on any Sunday or any holiday observed by the Customs Department or on any other day after the working hours, except after giving the prescribed notice and on payment or prescribed fees, if any.

This section should be modified as expressed in this article under caption "working hours at port" to enable all concerned to work smoothly and efficiently.

The Customs Tariff Act, 1975:

Efficiency demands the recast of the Customs Tariff in such a manner that it will result to:

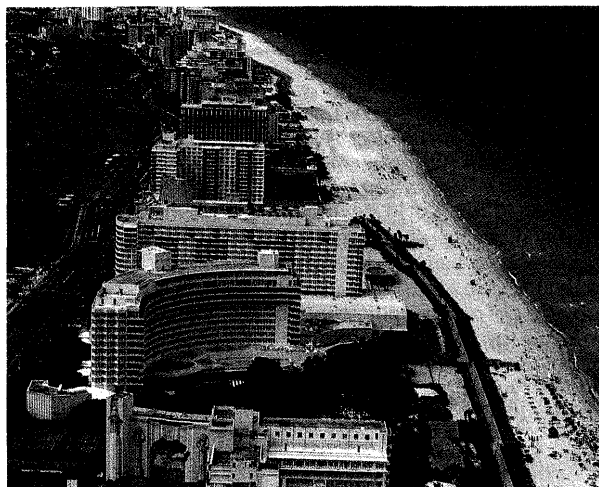
- a) rationalisation of Import duties in such a manner that its calculations becomes easy, convenient for Customs Appraiser as well as importer; and
- b) reduction of captions in General Exemptions.

This will help the importer to get the goods cleared from Customs conveniently and thus increase the efficiency of transit sheds.



Miami's Resort Attractions Will Highlight 1989 IAPH Convention

Famed as a world-class vacation playground for much of this century, Miami and its environs offer a wealth of natural beauty and resort attractions for IAPH members attending the organization's 1989 convention April 22—28.



From a mere fishing village in the early 1900s, Miami capitalized on its year-round warm climate, its scenic tropical setting on the Atlantic and picturesque bays and inlets to attract millions of visitors.

And in recent years, Miami's geographic proximity to developing nations of the Caribbean and Latin America has added a new element of sophistication to the area. As burgeoning commerce in those nations accorded them a more significant role on the global stage of commerce and politics, Miami was ideally situated to become their new world "gateway."

The still-growing Port of Miami has become the "cruise capital of the world" and, at the same time, the busiest containerport in the Southeast U.S. Miami International Airport also leads in area growth with high world and U.S. rankings in international passenger and cargo volume.

With a population exceeding two million dwelling in more than 20 municipalities in Dade County, the expansive area often referred to as "Greater Miami" provides visitors a great variety of recreational and cultural outlets. In addition, the area's fine hotel accommodations have helped it win acclaim throughout the world. Notable among these is the Fontainebleau Hilton—the IAPH convention hotel on Miami Beach—widely acclaimed for its striking architecture along with fine resort and convention facilities.

Visitors will discover much of Miami's charm in its traditional, water-related pastimes—oceanfront lounging on Miami Beach as well as excellent fishing in the Gulf Stream and boating in the Intracoastal Waterway.

Sightseers can find a diversity of attractions in Greater Miami, from the aquatic antics of worldwide TV's famous dolphin "Flipper" at the Miami Seaquarium to the rare antiquities of Vizcaya, the estate of millionaire eccentric James Deering. On Miami Beach, the Art Deco National Historic District contains the largest number of 1930s-era buildings with distinctive, fanciful facades to be found anywhere in the nation.

There are numerous convenient locations for recreation enthusiasts to enjoy golf, tennis and other healthful pursuits. And shopping is equally accessible, notably the new Bayside Marketplace near the Port of Miami, the nearby Omni and stylish Bal Harbour Shops a few minutes drive from the Fontainebleau Hilton.

The 1989 IAPH convention's social program will feature many facets of Greater Miami's most popular attractions. To obtain additional information, contact Lori Goodman, Conference Coordinator, at the Port of Miami, 1015 North America Way, Miami, Florida 33132; telephone (305) 371-7678; telefax (305) 372-7918; or telex 493 1214.



*Ms. Lori Goodman,
Conference Coordinator*



Port of Miami—Cruise Capital of the World

The First Port of Call in the Caribbean

(from the Port of Miami 1988 Directory)



For an ever increasing number of Americans, a cruise has become a popular alternative to the traditional land-based vacation. In the years ahead, passenger cruising promises to become an even more sought-after holiday, thanks to the introduction of a new generation of ships.

At the Port of Miami, home of the most popular cruise vessels in the world, several cruise lines have been engaged in rapid and exciting expansion of their fleets.

In 1982, Carnival Cruise Lines' M/S *Tropicale* was the first of a new generation of vessels to arrive at the Port of Miami, closely followed by Royal Caribbean Cruise Line's *Song of America*. Carnival made even further advances with the introduction of its SuperLiners *Holiday*, *Jubilee* and *Celebration* from 1985 to 1987, and will construct three more ships by 1991.

This year the Port welcomes the largest cruise ship ever built—Royal Caribbean's *Sovereign of the Seas*—and another new vessel, the *Seaward*, from Norwegian Cruise Line. Other new ship construction now underway underscores the confidence cruise lines have in the continuing growth of passenger cruising as a value-oriented vacation mode.

All these new ships are technologically advanced and provide passengers with an array of on board amenities and comforts. Their fuel-efficient features allow them to visit Caribbean islands that previously were not within reach on seven-day cruises from Miami.

The Port of Miami plays a vital role in the development of the cruise industry. With 10 state-of-the-art passenger terminals in use, and two more completed in the spring of 1988, the Port will enhance access through construction of a five-lane, 65-foot-high bridge to the mainland, which eventually will be linked through the interstate system to Miami International Airport.

With new capabilities provided by facilities expansion, The Port of Miami began its first solicitation of seasonal operators and has already met with success. Last year, Princess Cruises positioned the *Sun Princess* and Pacific Princess in Miami for a series of seven-day cruises to the Caribbean.

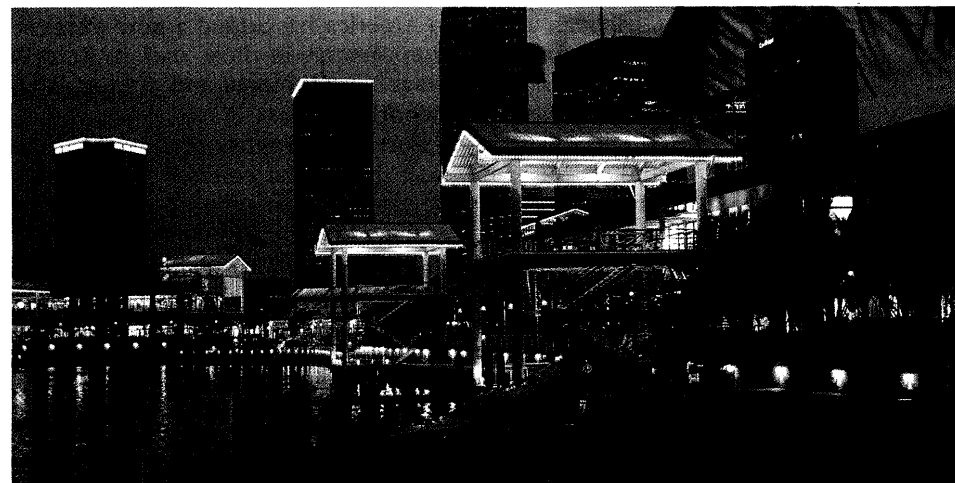
In recognition of both the Port of Miami's growth and its commitment to accommodate additional passengers, Ethel Blum, author of "The Total Traveler by Ship", bestowed the seaport with her annual "Golden Anchor Award."

Much of the growth at the Port of Miami can be attributed to its proximity to the Caribbean—unquestionably the most popular cruising area in the world. But it was also the wisdom of port officials by recognizing the potential inherent in its geographical location and actively nurturing the growth of a fledgling young industry that today generates billions of dollars annually. Last year, more than 2.75 million cruise

passengers passed through the Port.

But things were not always that way. In the late 1950s and early '60s, only a handful of ships plied the waters between South Florida and Cuba. And while these voyages were taken for pleasure to a certain degree, they still were regarded primarily as a means of transportation. But the Cuban Revolution ended American access to Havana's popular casinos, nightlife and beaches, and with them the cruise trade.

Then, in 1966, Ted Arison and Knut Kloster, two pioneers of modern day



cruising, teamed up to form Norwegian Caribbean Lines, introducing the *Sunward* on short cruises to the Bahamas. By 1970, NCL had three ships sailing each week for the Bahamas and Caribbean. Other Norwegian shipping interests noting the success of their fellow countryman, Kloster, also decided to enter the business. And in 1970, Royal Caribbean Cruise Line offered its first cruise from the Port of Miami aboard the brand new *Song of Norway*.

In 1971, Arison and Kloster parted ways only to have Arison re-enter the business the following year with the introduction of the *Mardi Gras*, flying the flag of Carnival Cruise Lines.

Those three lines formed the nucleus of the Miami-based cruise industry, which by the early '70's had reached a milestone, becoming the first port to accommodate more than one million passengers annually. Ironically, it was the jet aircraft, which only a dozen years earlier had threatened the very existence of cruise travel, that proved to be a key element in the rapid growth of the industry



future of their industry, it's with good reason. Even with the 12 percent annual growth rate cruising has enjoyed during the last four years, less than five percent of the vacationing North American public has ever taken a cruise. Industry officials

estimate the potential market at somewhere between 30 and 40 million people a year.

The economic benefit of the cruise industry to the Miami community is easily measured—one billion dollars directly,



September 27, 1988

Dear IAPH Colleagues:

Topics for Critical Issues Working Session Selected

The 16th World Ports Conference of the International Association of Ports and Harbors—April 22-28, 1989 in Miami, Florida, U.S.A.—promises to be one of the most important and stimulating meetings of our organization in many years.

We cordially invite your participation and believe it will prove particularly valuable from a professional standpoint.

The latest developments in electronic information systems, an in-depth review of critical port issues throughout the world, maritime labor issues, the status of the Panama Canal, World Trade Financing and the impact of intermodal transportation on ports will highlight the 16th IAPH World Ports Conference, in Miami, Florida, April 22-28, 1989.

The program now being developed by the Port of Miami is designed as the most comprehensive presentation of current and critical port, maritime and transportation issues ever presented under the sponsorship of IAPH. To assure that the subjects to be addressed are of the highest interest to the world maritime community, a questionnaire was distributed to all Association members. More than 125 responses were received. As a result, a **Critical Issues Working Session** will cover the following topics, selected by IAPH members as most important: **Ship design and its Impact on Ports; Port Maintenance; Port Financing; The Impact of Intermodal Systems on Ports.**

In addition, three Working Sessions will be devoted to a close review of the developments and issues within the three IAPH regional divisions, namely, Africa/Europe, The Americas and the Pacific.

In response to a world-wide request for information on Electronic Information systems as applied to ports, a full Working Session will be devoted to presentations and demonstrations of electronic customs clearance, electronic data exchange and operations control. A special demonstration of the advanced electronic cargo clearance system employed by the Port of Miami will be part of this Session.

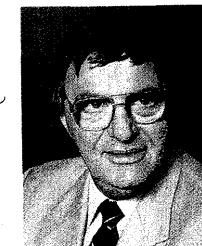
The increasing involvement of ports in labor practices will also be part of the Miami Conference.

We hope that you are making plans now to attend this most significant event.

Sincerely,

Carmen J. Lunetta

Carmen J. Lunetta
Conference Chairman
Port Director, Port of Miami



\$2.5 billion indirectly every year. Some 25,000 to 30,000 jobs have been created in Greater Miami as a result of the seaport's operation.

It's no wonder the Port of Miami's commitment to the cruise industry goes far beyond facilities expansion. Promoting the Caribbean Basin Initiative as well as its own Puerto Amigos Program, which provides technical aid to island nations in developing and expanding infrastructure to support cruise business, it assures continued growth of passenger shipping originating from the Port of Miami.

New port facilities in the Caribbean will open up new destinations for the cruise industry, and at the same time, help these nations gain economic independence from external forces. The Port believes our hemispheric destiny and the ultimate success of Miami's cruise industry is inextricably tied to the well-being and freedom of these nations.

The new ship construction now underway underscores the confidence cruise lines have in the continuing growth of passenger cruising as a value oriented vacation mode. And with this construction, cruise lines have clearly made the determination to market their products as alternatives to traditional land-based vacation.

Consider the fact that when a passenger pays for a cruise, he also receives (more than 80 percent of the time) his air-fare from cities throughout the United States and Canada. Add too, the fact that a cruise package contains all meals, entertainment, child care services, and the opportunity to visit numerous and varied ports-of-call throughout the Caribbean. Clearly, cruising is a viable and exciting alternative for the growing number of Americans who take an annual vacation.

Are there limits to the growth of passenger cruising? No, especially when one considers that some 93-95 percent of the American people who take a one-week vacation every year have never taken a cruise.

As well, the Port of Miami continues to be in the forefront of the move to repeal recently enacted tax laws which prohibit corporations and trade associations from taking tax deductions for meetings held aboard cruise ships. Repeal of these laws will ultimately yield tremendous economic benefits to the cruise lines, as well as the Greater Miami community.

With nine cruise lines operating 22 ships at the Port of Miami, and more to come, the future of the cruise industry at America's southernmost seaport continues to be bright.



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It means at present in calculating customs duty on an article imported into India one has to see over 800 items in place of 22 items as is the practice in developed countries.

Efficiency demands customs duty should be levied section-wise only i.e. broadly under twenty-two head.

Re-construction of Administrative Set-up of Indian Ports:

Efficiency at Indian Ports can improve considerably and the nation can have full advantage of its 3,600 kilometres of coast-line, if all the existing ports, major and minors, are brought by an Act of Indian Parliament under the Control of one body, namely: Indian Ports Board which should be

vested with all powers of administration, operational, setting up of new ports improving the facilities of existing ones, dredging, navigational, construction of channels, waterfront facilities and all other works necessary for quick-turn-round of vessels, discharge/loading/receiving/handling over cargo to shipmaster as well as importer/exporter with least delay without cumbersome formalities. Over and above this, the Board be accountable to Indian Parliament and its yearly budget be approved by it.

This is desired as at present Indian ports are top heavy because each major port numbering ten only are autonomous Trusts and the rest 113 minor ports are under the control of State Governments in which they are situated. At present besides ten major ports twenty-eight ports handle steamer traffic and rest sailing vessels.

In plain words, the berthing facilities as well as that of loading, discharging and storing of all ports in India combined are less than that of New York or Tokyo or Hamburg.

These suggestions are to streamline the administration, cut down avoidable expenses, and simplify the procedures at ports.

Bombay Port — Its Structural Problems

By Dr. (SMT.) Lakshmi Sivaraman*

(Reproduced from 'INDIAN SHIPPING' Vol. 40 No. 5, Journal of Indian National Shipowners' Association)

A Port is a shore-based installation for the transfer of goods from and to ships. It is essentially the point at which goods in transit are transferred from one media of transport to another. Port in Latin means 'gateway to its hinter land'. Ports are gateways for a country's international trade and for passengers.

The port as a meeting place of different modes of transport, presents a picture of being a complex unit comprising of a multitude of components, each performing its own role in effecting the transfer of goods from sea to land and vice versa. The complexity of these operations assume truly gigantic proportions, especially in the case of a port like Bombay.

The Bombay port in spite of undertaking future developmental plans incurring huge capital expenditure, the question remains as to the capacity and efficiency of the port.

In recent years, the port has been plagued by persistent congestion, inflicting heavy losses on the economy as a whole.

* Research Staff, Department of Economics, University of Bombay, Kalina.

While a large number of factors have been held responsible for this situation, serious doubts have been expressed about the ability of the port to cope with the projected volume of traffic in the near future. The Nhava Sheva proposal lends another dimension to this controversy.

In the above context we shall discuss some of the structural problems faced by Bombay Port.

Traffic Problems

One of the factors which affect traffic at Bombay Port is the berth occupancy rates. The total time a ship spends in Port can be classified as pre-berthing time, service time and post-berthing time. In almost all cases the pre-berthing time is large in magnitude. The main reason for this large magnitude is the non-availability of berths. An analysis of the berth occupancy rates at the port revealed phenomenally high — as high as 100 percent in some cases, and in the range of 85-95 percent in a large number of cases due to which virtually no dredging was possible (see Table for berth occupancy figures).

Periodical dredging is necessary from the view point of maintaining the required minimum depth in the dock basin. The BPS/BPX and Harbour wall berths are susceptible to excessive siltation since they are aligned against the tidal currents. The figures also highlight a very important factor with reference to turnaround time.

Berth Occupancy at the Dock

Dock	1982-83			1983-84			1984-85			Average for 12 months		
	Jan.	July	Dec.	Jan.	July	Dec.	Jan.	July	Dec.	1982	1983	1984
Indira Dock	84.86	90.07	77.66	84.66	82.46	81.08	86.38	89.80	84.16	83.38	83.01	79.98
Victoria Dock	81.59	85.38	84.76	76.01	75.85	86.35	68.78	87.66	68.12	81.58	63.85	76.17
Princes' Dock	91.59	90.70	85.07	84.95	94.43	89.27	82.41	90.74	82.05	89.13	87.71	81.00
Butcher Island	76.67	86.53	84.61	82.96	85.04	91.44	78.94	65.31	84.23	81.56	83.13	77.43
Pir Pau	67.66	77.51	49.43	68.90	50.51	38.96	38.77	24.70	91.71	69.38	51.86	51.05

Source: Research and Planning Cell, Bombay Port Trust, Port Performance Indicators 1982, 1983, 1984.

Moreover not all time spent at a port is productive service time. A large element of it is unproductive. What is of possible interest here is that if the unproductive time is reduced, the intrinsic capacity of the port could be increased, provided of course that connected facilities have unutilised capacities. Needless to add that this solution would be purely temporary of short term because the volume of traffic cannot be expected to be constant.

The ideal berth occupancy percentage is in the region of 60-70 percent. This would provide some breathing space before the berth is ready to accept fresh cargo. A major bottleneck could occur if the inland delivery system is too slow, or inadequate. Transit sheds should be cleared fast enough so that warehousing does not interfere with the rapid turnround of cargo. The transference and storage of cargo are too slow or inadequate and will increase the ships detention time. Hence it is necessary to minimise unproductive time⁽¹⁾.

While the main theme of traffic is to minimise pre-berthing time its counterpart for the ships cargo handling is the maximisation of output in as short a time as possible, that is to minimise and control unproductive time.

Cargo handling operations in a port like Bombay are very complex, but, what adds to the complexity is the rare matching of demand and supply of cargo-handling equipment which results in a great deal of unproductive service time.

The service time distribution itself depends on the nature of cargo, requirements of receiver, the operational set-up at the berth, port regulations, the working intensity and productivity/capacity of labour and mechanical equipment.

We mean by working intensity, the actual amount of equipment, shifts, and the number of gangs allotted to a particular job. Productivity means actual productivity labour and mechanical equipment.

Cargo cannot be unloaded if there is no space to discharge due to non-clearance of previously discharged cargo. We must consider the fact that there is very limited space available for unloading and manoeuvring and that if the cargo processing and transfer operations are not properly coordinated bottlenecks could easily arise.

Methods of cargo handling differ according to each commodity. In many cases output of a gang was far in excess of the datum⁽²⁾ (in some cases by over 200). The port interest must determine new norms from time to time considering the fact that the technology of port operation is dynamically changing and faced with multiple objectives such as speed, efficiency and safety. The impact of such policy will be two-fold.

- (i) It will bring about a reduction in turnround time.
- (ii) It will lead to a cost reduction.

Labour

Another important factor is the level of labour force necessary to meet fluctuations in demand. It is almost impossible for any port to maintain a labour force capable of handling peak outputs at various times. For all practical economic purposes, the labour force ought to be pegged to a level necessary to meet average demand. In practice it has been found useful to keep the level at about 10-15 percent above the average.

The utilisation of handling equipment and their capacities are crucial elements in the determination of loading and discharge rates. This aspect has an important bearing on labour productivity as well as the transfer system. The storage factor is of considerable importance in this con-

nection.

In Bombay most of the cranes are old either by age or by design. Equipment utilisation at the port is also very high. This is obvious once again due to the fact that their capacities are so low that in order to process a given amount of cargo, the time consumed is very high.

This phenomenon has another serious repercussion. Other work facilities will have to be put up with still lower capacity equipment (a three-ton crane is supplied in place of a fifteen-ton crane) or simply wait till the equipment becomes free. It is also very easy to visualise frequent mechanical breakdowns under such conditions. Ship sizes have increased rapidly and their designs have been modified in the last few decades with the primary objective of reducing transportation costs.

If the handling capacity is virtually static, service time will increase and any benefit desired from modernised ships will be negated. The same holds true if interrelated subsystems fail to function efficiently. A case in point is the storage and transfer system.

Storage System

The port provides transit sheds and open storage accommodation for two main reasons; a) To act as a buffer between ship discharge and delivery (for imports) and receipt of cargo and loading (for exports); b) To allow time for administrative formalities to be carried out.

The notion of a store as a buffer is an important one. An efficient buffer allows the activities on either side of it to be carried out without much interruption.

Operations at a transit shed are more difficult than that of a normal warehouse and demand strong management control. Shed planning takes into account the latest information on fresh arrivals, a careful control of shifting, sorting and consolidation as delivery proceeds.

Congestion in storage areas has two important consequences (a) ship discharge/loading will have to be slowed down and/or, (b) the cargo will have to follow an alternative, probably expensive route.

At Bombay Port, warehousing has recently emerged as one of the major bottlenecks. Almost all sheds have transit sheds attached to them and are coordinated with a centralised warehousing system.

The port allows consignees five days (excluding the general landing dates), after which uncleared goods are despatched to the central warehouse. If the goods are not cleared within a stipulated time period (usually two months) they are auctioned off.

A sizeable portion of cargo lying uncleared in the dock comprised of goods confiscated by the Customs. During 1983-84, 2,339 packages were confiscated and lying in the warehouses inside the docks and 3,611 packages were lying at the close of the year in the warehouses hired to customs⁽³⁾.

Further, Bombay at all times has been regarded as a gateway to the west. Being a major port it took to containerisation⁽⁴⁾ earlier and quicker than the other major Indian Ports. Presently more than a million tonnes of containerised cargo is handled at Bombay Port.

This can grow threefold and further rapid growth is contingent upon the provision of facilities, particularly a container freight station.

Conversion of 12 B Indira Dock was undertaken purely as a short term measure. The capacity of the park and equipment is therefore limited.

In Bombay for example, apart from priority berthing facility, makeshift arrangement were hastily put together to cope with the increased container flow.

As traffic increased steadily, lack of storage space for containers has further aggravated the problem. Thus provision of container handling facility by the port authorities is a must whether it is at the present site or an alternative site.

Problem of Shippers

Shippers problem is recognised by shipowners with particular reference to high freight rates and deficiency in shipping services.

There are two basic reasons why freight rate levels (which are the main cause for concern) may be too high; the shipowners may have set their profit margin too high, or the operating costs may be too high.

It is also possible that the freight rates applicable to particular countries, or to particular commodities may be unduly high because of an inequitable apportionment of the charges for a complete round voyage; one leg of a voyage may be contributing more than the total freight revenue for the round voyage (and so subsidising shipments on the other leg), or the shippers of certain commodities may be paying more than their fair share of the total (and so subsidising the shippers of other commodities).

From the point of shipping services port terminals play a far more crucial role in ocean transportation than in the case with any means of transportation such as roads or railways. The efficiency and economics of shipping services are very much dependent on these terminal facilities. The shippers have always maintained that these problems are, in large measure, attributable to bottlenecks at ports.

As for shipowners apart from the timely availability of a berth, a modern shipowner requires several facilities and services to be provided by the port authorities, such as necessary draft, pilotage, handling equipment, labour, transit sheds and warehouses, bunkers, water, etc.

The efficiency of the service is very much dependent on the availability and quality of these facilities. By and large, he has little control over them, since ports are mostly owned and operated by public authorities.

In other forms of transport like roads and railways, the terminal facilities are under the direct control of the transport agencies since they themselves own and operate them. In contrast to this, shipping lines are perpetually dependent on the authorities providing the port services.

Here the views of the shipowners as presented by the National Shipowners Association ⁽⁵⁾, may be summarized as follows:

As regards coordination in the deployment of shore labour and dock labour for cargo handling operations in Bombay port, the Port Trust authorities have stated that a representative of the Bombay Dock Labour Board, meets the Deputy Manager of Bombay Port Trust who is in charge of the Docks concerned, daily to coordinate in the matter of allotment of gangs.

This arrangement is reported to have functioned satisfactorily and practically eliminated any discrepancy in the allotment of gangs by the Port Trust and the Dock Labour Board.

In addition, it was also reported that a working group of the representatives of Bombay Port Trust's Dock Department, the Shipping Companies and the stevedores has been formed to keep a watch over the working of vessels.

This is also reported to have enhanced coordinated efforts in allocating both shore and dock labour.

However, the Indian National Shipowners' Association, Bombay have brought to the notice of the committee various areas in which, in their view, there is lack of coordination between different departments of the Port Trust itself. The Association has pointed out that there is no proper coordination between the following departments of the port trust, and as a result the efficiency of port operations is often adversely affected:

(1) Labour Department that supplies shore labour and shed labour.

(2) Crane Department, which is in charge of supply, repair, maintenance and shifting of cranes.

(3) Mobile Gear Department which is in charge of supply of tractors, Forklifts, mobile cranes etc.

(4) Chief Inspectors Office, which is in charge of supply of heavy cranes, heavy lifts, etc.

(5) Sanitary Department, which is entrusted with the job of keeping the wharfs, ships and quays clean.

There is also lack of co-ordination between the officers in charge of the sheds and officers in charge of the docks department in regard to allocation of shed space to the shippers. It was also stated that mobile gears, such as forklifts, tractors, trollies, etc. are not provided in time and necessary repairs to the cranes are not carried out in time.

In view of the above difficulties, the Association has stated that the clients of the port are required to approach each department separately for removal of any difficulty pertaining to the particular department. As they are required to run from pillar to post daily to ensure normal cargo handling operations the efficiency of operation suffers hampering quicker turnaround of vessels.

The Association has also pointed out that the cumbersome formalities and paper work insisted on by the customs authorities, and have called for revolutionary changes in the customs procedure.

Thus the above discussion clearly pinpoints some of the grave problems faced by Bombay Port which obstruct the smooth functioning of the Port. It is also well known that there is very little scope for further development of the present dock system. Hence it is recommended that future development plans be in terms of a satellite port at Nhava-Sheva⁽⁶⁾ where, natural depths of water of about 45 feet will be available.

(1) Service time at a berth can be clearly categorised as (i) productive, (ii) unproductive. Productive when cargo is worked and unproductive when it remains idle.

(2) A datum is a norm which stipulates the amount of cargo that can be processed by one gang working in one shift under normal circumstances. The datum differs according to the commodity, shift, and the line-route for which the cargo is processed. A gang handling output more than the amount stipulated by the datum is entitled to a premium payment. The datum was prescribed in 1950's.

(3) Subbarao V.V; Optimisation of Port Systems, unpublished Ph.D. thesis, 1982.

(4) Refer for container projections, Containerisation by Dr. (Mrs.) Lakshmi Sivaraman published in 'Indian Shipping' Vol. 39, No. 7-8, 1987 Page 31-35.

(5) Report of the Committee to Review the Decasualisation Schemes and Allied Matters in the Major Ports (February, 1976, Government of India, Ministry of Shipping and Transport).

(6) Refer "Nhava Sheva Port — A Brief Over View", by Dr. (Mrs.) Lakshmi Sivaraman, published in "Indian Shipping" Vol. 39. No. 9/1987.

International Maritime Information

WORLD PORT NEWS

1989 Environmental Congress in Hamburg

The Hamburg harbour — for Germany gateway to the world — will celebrate its 800th birthday in 1989. The Freie und Hansestadt Hamburg is organizing on the occasion of this jubilee, an International Environmental Congress (Sept. 11 - 15, 1989) for the exchange of information regarding the ecological challenges at present being placed on the leading harbours in the world.

Hamburg's long history has seen the development of the City into the most important commercial and trading centre in West Germany.

In Hamburg, as in other conurbation areas, this has resulted in serious environmental problems. Hamburg however is presenting itself as a city where steps are being taken to develop solutions to the various environmental problems which exist. This applies for example to the rescue of the river Elbe, the disposal of dredged sludge and the collection of old oil and oil residues in ships for the protection of the North Sea.

We are dealing here with problems which know no borders, and international solutions are required. As such the problems and the attempts to find solutions to them in Hamburg may set an example to the other large harbours in the world.

The Ministry for the Environment in Hamburg intends to hold this conference therefore under the slogan, "THE HARBOUR — an ecological challenge."

Congress Themes

The planned International Environmental Congress is open to all ecological themes regarding harbours lying in an estuary.

The following subjects have been planned for inclusion:

1. Harbour and Ecology: showing the development of harbours and rivers as waterways and the ecological results,

the description and evaluation of the ecological consequences of harbour expansion, levels of water pollution and the special problems faced by harbour cities.

2. Attempts to find solutions to the environmental problems by means of planning: showing the environmental demands being placed on old harbour areas by the present-day conditions, concepts and measures undertaken to reduce emissions, the ecological effects of harbour and waterway planning as well as

3. Technical environmental protection measures in harbours and their waterways: with reference to the disposal of oil and chemical residues, the clearing of contaminated sites, and the handling and disposal dredged sludge with a high pollutant burden.

Specialists in the field of science, harbour planning and organization should present papers for discussion and evaluation relating to the finding of solutions to harbour related ecological problems.

For further information, please contact:

Freie und Hansestadt Hamburg,
Umweltbehörde

z.H. Herrn Baudirektor Rolf Quistorf

Steindamm 22, 2000 Hamburg 1
Tel. (040) 2488 - 3160 or 3158

Port Training Program In Apr. in New Orleans

The International Program for Port Training and Management (IPPPM), an intensive two-week training program for upper-level maritime executives, will be conducted April 3-14, 1989 in New Orleans. The program features lectures, group discussions, and field investigations designed to sharpen participants' practical skills and strengthen their conceptual understanding of port operations, planning, and management.

Class work entails 80 hours of instruction in 20 different courses: con-

tainer terminal equipment, maintenance, and management; cargo handling; dredging; port environmental considerations; ship types, size, and characteristics; cargo transfer, labor relations; overview of cargo transportation; political and community relations; port accounting and finance; port administrator functions and management techniques; marketing; computerization; economics and engineering; personnel management; port planning; international funding; preparing for port investments; working with governing boards; and site visits to waterfront facilities.

Instruction is in English. The faculty is comprised of public and private sector maritime officials from throughout the United States; international experts from the World Bank; the staffs of the Port of New Orleans, the University of New Orleans, and Louisiana State University's Ports and Waterways Institute; and practitioners from the local maritime industry.

The fee is \$1,500 in U.S. dollars. Financial assistance for foreign participants may be obtained from the U.S. Department of State's Agency for International Development.

Contact: Richard O. Baumbach, Jr., Director, IPPPM, SURS/LUTAC, University of New Orleans, New Orleans, LA 70148, U.S.A. Telephone: (504) 286-6519. Telex: 58-7496. Cable: CENTROPORT. (AAPA Advisory)

Gulf Agro-Industrial/ Transshipment Meeting

Announced in London at the conclusion of a conference steering committee that included representatives of insurance, shipping, agribusiness and government, the conference will be held February 13 - 15, 1989 at the World Trade Center, Fujairah, United Arab Emirates under the patronage of H.H. Sheikh Hamad bin Mohammed Al-Sharqi, Ruler of Fujairah. Entitled the "Gulf Agro-Industrial/Transshipment Roundtable," the conference will

focus on investment and trade prospects for inter-related development of shipping and agro-industrial enterprises.

The conference is being organized in cooperation with the Agri-Energy Roundtable, a U.N.-accredited, non-governmental organization comprised of international food and energy companies and other organizations seeking improved Third World agriculture. AER is chaired by former U.S. Senator Jennings Randolph, who is also the founder of the U.S. Institute of Peace.

The three-day conference will be chaired by Sheikh Saleh bin Mohammed Al Sharqi, chairman, Fujairah National Group. The agenda will reflect Fujairah's strategic potential with regard to advancing the goals of food and transport security in the region. The agenda will also highlight the economic development potential of Gulf regional cooperation in agro-industrial ventures, and research and development.

Topics will include: port development and agro-food handling/distribution techniques; sea-air transshipment; debt-equity swaps for agro-industrial projects; desert agriculture technology; sea water farming and technology transfer; renewable energy and agriculture; and development linkages to East/Southern African and Southeast Asian port infrastructure.

New Publications

British Ports Federation

The Structural Design of Heavy Duty Pavements for Ports and Other Industries

The Structural Design of Heavy Duty Pavements for Ports and Other Industries has won recognition worldwide as a standard reference work for heavy duty pavement designers. It was conceived out of the previous inadequacies of existing paving design data available to port engineers and their consultants.

Until 1982 expensive paved areas in ports had been based on or extrapolated from design formulae intended for highways or airport runways and they have often failed in service or been overdesigned, with a resulting cost penalty.

The second edition has been pro-

duced because the original printing of the first edition sold out. Like the first edition, it combines an explanation of design principles, an assessment of the damaging effect of plant, examples and 45 design charts. It is the result of six years research and development including close collaboration with U.K. ports and it allows the engineer to proportion the courses in a heavy duty pavement, or to check the residual lift of any existing pavement, taking into account the following:

- Life required for pavement.
- CBR of subgrades.
- Damaging rating of plant.
- Degree of plant channelisation.
- Dynamics, including braking, accelerating, cornering and uneven surface.

The manual may be used to design all types of pavements serving ports and other areas subject to heavy mobile and static loadings.

The most important changes to the technical content of the second edition of the manual are firstly the inclusion of granular base information in the design charts and secondly the chapter on Design Examples has been rewritten to be more concise and more easily understood. Also, changes have been made to the way in which proximity factors are calculated, resulting in lower factors in most types of pavement. Finally, a simplified load classification index assessment method is presented.

Several articles and technical papers have been produced describing or relating to the first edition of the manual and copies of some of these are available on request. A new format for the design charts and a number of other factors has allowed production costs and the selling price to decrease whilst retaining the essential design accuracy.

Price: £51.25 or US\$97 inclusive

To: British Ports Federation
Commonwealth House
1-19 New Oxford Street
London WC1A 1DZ

The New, Revised Edition of the BPF Evaluation of Echo Sounders for Hydrographic Surveying in Ports

The new, revised edition of the *BPA Evaluation of Echo Sounders for Hydrographic Surveying in Ports* is the result of comprehensive research among both echo sounder users and system suppliers.

This evaluation considers a number of echo sounding systems in relation to a variety of port needs. It follows that many of the applications relate very closely to other areas of inshore hydrography.

During the work over 50 ports throughout the world were consulted to ascertain the type of equipment employed and the problems associated with it; 22 manufacturers were approached for information on existing equipment and plans for the future; 15 demonstrations were attended in the U.K. and mainland Europe and a number of experts were consulted in the subjects.

The evaluation also reports on the present status of swath sound systems, heave compensation systems, future trends in the design of echo sounding equipment and the reliability and maintenance of equipment at present in service and it prepares a statement of requirements for echo sounding systems for use in ports.

Price: £51.25 or US\$97 inclusive

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Drug Trafficking and Drug Abuse

New guidance has been published by the International Chamber of Shipping (ICS) to assist shipping companies, masters and officers in their efforts to combat drug trafficking and drug abuse.

"Drug trafficking is big business, with enormous sums of money at stake and a complex international network of criminal activity," the ICS Secretary General, Mr. Chris Horrocks, said.

"Merchant vessels can unwittingly find themselves being used to carry illicit drugs to consumption areas. These guidelines are designed to give practical advice to shipping companies and masters on avoiding this situation and on the action to be taken if drugs are discovered on board. They also deal with the related problem of drug abuse, brought more sharply into focus recently by the connection between intravenous drug users and the spread of the AIDS virus."

The new guide, entitled *Drug Trafficking and Drug Abuse — Guidelines for Owners and Masters on Recognition and Detection* is available from Witherby & Co., Ltd., 32-36 Aylesbury Street, LONDON EC1R 0ET at a price of £7.50 (inclusive of surface mail) or from marine booksellers.

The Americas

Québec: Deep-draft Access to the Seaway

The steady flow of 100,000 dead-weight tonnes (dwt) and more vessels to the St. Lawrence Stevedoring bulk cargo terminal this summer has underlined the Port of Québec's growing role as the deep-water transshipment link to the St. Lawrence Seaway.

"We have handled five ships of this size since spring and several others in the 75,000 to 100,000 dwt class," said Mr. Marc Dulude, Director of Marketing for the Port of Québec, as the 106,850 dwt *Patman* docked at the St. Lawrence terminal. The Cypriot-flag ship drew 14.9 meters of water before unloading operations began.

The *Patman's* cargo of iron ore was transhipped to smaller, Seaway barges for delivery to U.S. steel mills on the Great Lakes. Approximately 1.5 million tonnes of iron ore from South America and Africa will follow the same route this year.

"The Port of Québec provides reliable, deep-draft access to the Great Lakes/St. Lawrence Seaway," points out Mr. Dulude. "While other transshipment ports for bulk products such as minerals and grain moving to and from the U.S. and Canadian Midwest have been increasingly affected by fluctuating water levels, the St. Lawrence River at Québec City offers shippers a steady deep-water option at a competitive cost."

The North-American continent-wide draught in 1988 severely curtailed shipping on the Mississippi River system, which required emergency intervention to keep channels open.

The maximum draft for vessels calling at the Port of Québec was increased in 1988 from 15 to 15.5 meters and possibly more during high or "spring" tides. It is estimated that the larger bulk carriers load 100 additional tonnes of cargo for every extra centimeter of draft. "Bulk shippers also benefit from complete intermodal access to all terminals at the Port of Québec and year-round navigation," said Mr. Dulude.

Given the growing cargo volumes at the St. Lawrence Stevedoring Ter-

minal, which also handles coal and other mineral concentrates such as copper and nickel, investments to increase handling speed are currently under consideration. "We plan to complement the deep-water advantage with a modernization of the bulk terminal in 1989," concludes the Port's marketing director.

A similar upgrading program was recently completed at the Port of Québec's export grain elevator, which is operated by Bunge of Canada. More than \$20 million was invested to increase handling speed, build a facility for self-unloading barges and improve equipment for rail-car discharge. Like the St. Lawrence Stevedoring bulk terminal, the Bunge elevator is a deep-water, transshipment point between Seaway and ocean-going vessels.

MTO Chooses Québec As Regular Port of Call

The Montréal-based chartering firm Marine Trade Overseas (MTO) has chosen the Port of Québec as a regular port of call to load general cargo such as lumber, asbestos and granite for export principally to Europe (Italy) and North Africa.

Port of Québec General Manager and Chief Executive Officer Ross Gaudreault welcomed the new service at its inauguration on board the Spanish flag vessel *Liria*. "MTO's decision to call on a regular four to six week schedule is a major attraction for additional cargo. The Port of Québec is no longer dependent on 'spot' shipping," he stated. "This is an important step forward in our marketing program."

The availability of regular service is a key factor in drawing general cargo to a port, as exporters which do not generate sufficient volume on their own to justify chartering a vessel, seek to benefit from consolidated shipments. Clients with cargo to any destination on the route from Québec City to Italy can potentially be served by MTO.

MTO will load at the Québec Stevedoring Company's general cargo terminal. It is the first time in ten years that regular calls, as opposed to spot or "tramp" shipping, are available at the Port of Québec.

MTO's *Liria* loaded 5,000 tonnes of granite for Italy and 2,500 tonnes

of asbestos for Morocco. Granite will be the principal cargo carried by the company.

The strong international market for granite is reflected in statistics at the Port of Québec, which will handle more than 100,000 tonnes of the product for shipment to Italy and Japan in 1988, as compared to only 11,000 tonnes in 1987.

Used as a finishing material in prestigious construction projects and urban landscaping, granite from the province of Québec has developed a worldwide reputation for the vast range of colours in which it is available. There are some thirty quarries in the province with a large concentration at Rivière à Pierre, near Québec City.

Granite producers exporting via the Port of Québec include Columbia Granite, Polycar, Dumas/Voyer and Granite Lacroix. Regular vessel calls are also attracting shipments from Rock of Ages in Vermont and Nelson Granite of Vermillion Bay, Ontario, on Lake Superior.

The Port of Québec's geographic proximity to many quarries combined with the ongoing marketing efforts of the Québec Stevedoring Company played a major role in prompting MTO to make Québec City a regular port of call.

Mr. Failor Takes Office As Chairman of AAPA

Mr. Gary L. Failor, general manager and seaport director for the Toledo-Lucas County Port Authority, took office as chairman of the board of the American Association of Port Authorities (AAPA) for the 1988-89 activity year.

Mr. Failor officially accepted the position at the association's annual convention in San Francisco, California.

The AAPA represents virtually all of the United States port authorities, as well as the major port agencies of Canada, South America, Central America, and the Caribbean.

"The focus of the organization this year is on education and legislative involvement," Mr. Failor said as he took office. "AAPA's foundation is derived from representing all of the major ports in the Western Hemisphere. Our foundation is made stronger by

the sharing of information and by being a watchdog and advocate on legislative affairs. I intend to make sure that we keep a strong, effective association this year."

Positive Step Toward Container Problem

Waterfront management and labor wrapped up their opening round of contract negotiations with an agreement to take a two-pronged approach to one critical issue, a set of rules on the handling of cargo containers.

The action came after three days of talks on a new master contract between the International Longshoremen's Association, AFL-CIO, and waterfront management groups on the East and Gulf coasts. Negotiators for both sides labelled the session positive and said further bargaining on other issues would be scheduled as soon as practical.

The ILA and management agreed to seek a stay of an August court decision against the Rules on Containers — a contract provision adopted in 1969 in return for ILA acceptance of technological advances — while the case is appealed to the Supreme Court of the United States. The parties will ask that the stay include legal protection during the court review.

The port management associations agreed to keep the rules in effect until that request is decided or until a procedural stay now in effect expires.

At the same time, the ILA and management will move to attract container-packing work—the activity covered by the rules—by negotiating on a system of competitive, union-staffed Container Freight Stations. Management and labor in each port will work out particulars and report back for uniform conditions.

ILA President John Bowers and Mr. Anthony J. Tozzoli, spokesman for the management groups, hailed the accord.

"This is a very positive step that will help resolve a troubling issue. It also is a very encouraging way to get our master-contract negotiations under way," Mr. Bowers and Mr. Tozzoli said in a joint statement. Mr. Tozzoli also is president of the New York Shipping Association.

The two leaders said their overall goal in the negotiations is a new master contract that will benefit both labor

and management.

"We're going to continue to face some very complicated issues as we work to address management's need for greater competitive ability and labor's need to preserve work opportunity. But we intend to make every possible effort to resolve them in a calm and expeditious manner," Mr. Bowers and Mr. Tozzoli said.

Participating on the management side in the negotiations are the Carriers Container Council, the Boston Shipping Association, the Council of North Atlantic Shipping Associations, the Mobile Steamship Association, the New Orleans Steamship Association, the NYSA, the Southeast Florida Employers Port Association and the South Atlantic Employers Negotiating Committee.

Long Beach Launches Pier J Expansion Project

The Port of Long Beach recently launched its Pier J expansion project with a big splash, literally, when the first five-ton boulder was shoved into 50 feet of water, laying the cornerstone of the long-awaited facility. The \$150 million, 147-acre addition is on the seaward side of the pier.

A boulder the size of a Toyota, with the letter "J" painted broadside, sent a plume of spray soaring into the air as the expansion, the initial project in the Port's 2020 Plan, was officially introduced. The 2020 Plan will provide for the projected cargo handling needs of the ports of Long Beach and Los

Angeles into the 21st Century.

The Pier J expansion will allow for the creation of four new berths and two container terminals in addition to deepening and widening the main channel. This will be the largest container terminal expansion on the West Coast in recent years, and will enlarge the Port, the City, County, and State of California by nearly one-quarter square mile.

Trade with the Pacific Rim is booming, and boxed cargo levels are growing at a phenomenal rate. One of the world's 10 busiest container ports, exports through the Long Beach harbor shot up 43% in fiscal 1987-88.

Expected cargo throughput at the San Pedro Bay complex by the year 2020 is estimated at over 197 million metric tons, including 11.7 million boxes, nearly quadruple today's levels.

According to Port Executive Director Joseph F. Prevratil, Long Beach has been the leading West Coast port since 1980. "Pier J is the cornerstone of our future," said Mr. Prevratil. "The economic benefits to our City and County in terms of increased trade, payrolls, transportation, new customers and facilities are enormous. Long Beach truly has 'The Most on the Coast'."

Added Harbor Commission President George F. Talin, Sr., "The Pier J expansion will enhance our image as 'The International City' and will reinforce our position as the premier harbor complex in the world."

Construction of the Pier J expansion is scheduled to begin in October. The first terminal is targeted for completion in March 1992.



Pictured in traditional ribbon-cutting ceremony at Pier J Expansion Project in the Port of Long Beach recently are, from left, Harbor Commission President George F. Talin, Sr., and Commissioners Louise M. Duvall, C. Robert Langslet, David L. Hauser and Joel B. Friedland.



President Reagan Named Honorary Port Pilot

President Ronald Reagan has been presented with the Port of Long Beach's Honorary Port Pilot Award in ceremonies following his signing of the Omnibus Trade and Competitiveness Act of 1988 in the Port of Long Beach.

He thus becomes the first U.S. President to receive the honor since Dwight D. Eisenhower accepted the title in 1954.

Long Beach Harbor Commission President, Mr. George F. Talin, Sr. made the presentation during ceremo-



Omnibus Trade Act Signed at Long Beach

President Ronald Reagan recently visited the Sea-Land container terminal at the Port of Long Beach to sign the Omnibus Trade and Competitiveness Act of 1988 and to speak on maritime and other matters before 2,500 port employees, dock workers and maritime and government officials. Shown sharing the dais with President Reagan are, from left, Congressman Glenn M. Anderson, Long Beach Mayor Ernie Kell, Senator Alan Cranston, Harbor Commissioner C. Robert Langslet, Harbor Commission President George F. Talin, Sr., Sea-Land Service President Jackson A. Baker, Port Executive Director Joseph F. Prevratil, Sea-Land Corporate Chairman Alex J. Mandl, Senator Pete Wilson, ILWU Local 13 President John Pandora, Harbor Commission Vice President Louise M. Duvall, U.S. Trade Representative Clayton B. Yeutter, and John Gulickson of the White House staff.

nies held at the Sea-Land container terminal.

Port Executive Director, Mr. Joseph F. Prevratil, noted that only 60 dignitaries have been named for the prestigious honor during the 34 years of its existence. The title has been reserved for those in governmental service or the maritime industry who have in a significant manner contributed to world commerce. The list includes, besides the two Presidents, an impressive array of world and national figures including Heads of State, Prime Ministers, Ambassadors, Senators, Congressmen and global business leaders.

In making the presentation of the ship's clock which accompanies the selection, Mr. Talin noted that President Reagan has long been a proponent of increased U.S. exports. The trade bill which the President signed in Long Beach reflects President Reagan's untiring efforts to promote American exports.

The Port of Long Beach was the first West Coast harbor to receive both the Presidential "E" and "E-Star" awards for excellence in export efforts. During the past year, containers filled with American exports rose 28 percent via the Port of Long Beach.

LA, Keelung Fete Sister-port Agreement

A Chinese lion dance punctuated the official September 6th signing ceremony of a sister-port agreement between the Port of Los Angeles and the Port of Keelung (Taiwan).

Los Angeles Mayor Tom Bradley, Los Angeles Harbor Commission President Ira T. Distenfield, Keelung Port Director Vice Admiral Pen-Chi Cheng and Taiwan Assemblyman Ya-Ching Li participated in the ceremony, which took place at the Harbor Department's administrative headquarters.

The agreement promises an exchange of trade, technology and culture, signifying the sister-port relationship between the ports that was originally signed two months ago in Taiwan by a Los Angeles delegation headed by the Mayor, Port Commissioner Jun Mori and Port Executive Director Ezunial Burts. In keeping with tradition, the Los Angeles ceremony was held during a reciprocal visit by a 25-member

Keelung group.

The Port of Keelung is one of Asia's busiest ports, featuring expanding container traffic facilities and modern passenger terminals. One of the many cities that the Port of Keelung serves is Taipei, the capital of Taiwan.

ACES Makes Debut At the Bi-state Port

A computerized Automated Cargo Expediting System (ACES), which will speed shipping transactions at the bi-state port, was recently unveiled at the World Trade Center by the Port Authority of New York and New Jersey, the Port Community Working Committee, and General Electric Information Services (GEIS). Based on electronic data interchange (EDI), the new system enables maritime shipping executives to speedily and efficiently transmit and exchange cargo information at reasonable cost.

The initial phase, involving steamship lines, terminal operators and custom house brokers, is expected to result in a more expeditious flow of ocean cargo through the Port of New York and New Jersey. Later, the system will be expanded to include rail and motor carriers, as well as freight forwarders and key federal regulatory agencies. The system is expected to be placed in operation this summer and to serve over 400 firms in the maritime trades.

Customarily, maritime transactions are handled by transfers of official documents by mail or messenger with repeated follow-up by telephone. Such an arrangement often results in lengthy delays in the cargo pipeline. These inefficiencies, coupled with the fact that inter-industry communications have become increasingly cumbersome and time-consuming, clearly indicates the need for an electronic cargo information system like ACES. Such a system is especially useful at the New York-New Jersey Port with its high volumes of general cargo.

Mr. Frank N. Caggiano, Assistant Director of the Port Authority's Port Department, stated at the unveiling: "The Port Authority saw the need to bring together the various members of the port community so that they could choose the best system for electronically transmitting information to each other. Acting as organizer and

catalyst, we helped put together a Port Community Working Committee (PCWC) representing the four sectors of the industry—terminal operators, steamship carriers, custom house brokers and the Port Authority. Representatives of each of these interests have an equal voice in the development of system requirements and in the selection of a vendor for implementation."

In 1986, the Port Authority retained Arthur Andersen and Company to assist the PCWC with a cost-benefit analysis and evaluation of various potential systems. Each system was measured against the daily needs of the members using it. After extensive analysis, the committee determined that an on-line system requiring a centralized computer and sophisticated software would not be acceptable because of reasons of security and cost effectiveness. It was also decided that an on-line system was not required for the port community's immediate needs. Instead, the committee designated functional specifications for a new system that would use an EDI technology in concert with an electronic mailbox system.

Once the functional specifications for the system were defined, the Port Authority issued a request for proposals to a list of vendors recommended by the committee for implementation of the project. The vendor was required to adapt the structure of existing EDI software to the highly specific needs of the bi-state port. After reviewing the proposals, GE Information Services was selected.

"We're very pleased to have played a major role in helping the Port Authority make ACES active and effective," said Mr. Ronald Banaszek, Eastern Area Manager for GEIS. "While we view our adaptable EDI system and extensive network as a powerful pair, our value as an EDI vendor also lies in our proven ability to introduce new users to an EDI system in a cost-effective period of time. We've worked long and hard to put them to work for the users of ACES."

ACES, as an EDI system, uses standardized formats. Thus, it will allow communication between computerized systems that vary widely in terms of cost and sophistication. This will be carried out via a software program and telecommunications capabilities pro-

vided by GEIS which will also be responsible for programming and disseminating information among the various trading partners in the ACES community. Mr. Banaszek noted that both large corporations with mainframe computers and small organizations with microcomputers will be able to share equally in the system.

(Via Port of New York-New Jersey)

National Port Week

The maritime industry will celebrate National Port Week in the New York-New Jersey Port on Wednesday, October 5, 1988 with a ceremony at the base of the Statue of Liberty on Liberty Island to be followed by a harbor tour aboard the Circle Line vessel *Miss Liberty*.

This year the annual event will focus on the new initiatives being taken by the Port's leaders in labor, management and government to improve the industry's competitive position.

Mr. Anthony J. Tozzoli, President of the New York Shipping Association; Mr. John M. Bowers, President, International Longshoremen's Association; and Ms. Lillian C. Liburdi, Port Department Director of the Port Authority will be honored for their contributions to the Port.

National Port Week is celebrated annually by Presidential proclamation in recognition of the importance of this country's ports to the national economy.

Massport Acquires Army Base Property

The former Boston Army Base property in South Boston, a portion of which has been leased by the Massachusetts Port Authority (Massport) from the U.S. Government for over 30 years, was recently acquired by Massport for \$3,375,000. The August 11th, 1988 sale of the 35.6-acre site (17.5 acres land and 18.1 acres water rights) resulted from an offer unanimously authorized by Massport's Board and extended to the U.S. Government Services Administration in July of 1987.

The Summer Street facility, which is adjacent to Massport's Conley Terminal in South Boston, was originally constructed as a U.S. Quartermaster

Depot and general cargo terminal in the early 1900s. Since the 1950s, it has been used to handle bulk cargos, berthing of naval vessels, and storage of noncontainerized commodities. The property includes three multi-story warehouse buildings, one one-story structure, and ten accompanying berths that total approximately 4,800 feet in length.

Current tenants include Port Terminals (a warehouse operator), Allied Plywood (an import plywood operation), and Coastal Cement (a cement and cement products importer). The site also houses one million square feet of covered storage space as well as Massport's Black Falcon Cruise Terminal, a passenger cruise facility dedicated in May 1986.

In keeping with Massport's commitment to Boston's working waterfront, the site will be analyzed to determine what other marine-related uses would be compatible with its location and physical characteristics. In addition to its South Boston facilities, Massport also owns and operates Moran Container Terminal and Mystic Pier in Charlestown, the Boston Fish Pier, the East Boston Piers, the Tobin Memorial Bridge, Logan International Airport, Hanscom Field, and a number of other waterfront and development properties in the Boston area.

Portland: Marine Cargo Rising at Record Rate

Cargo volumes are booming for the Port's Marine Department through the first five months of 1988.

With containerized cargoes, forest products, grain and dry bulk shipments leading the way, the Port is well ahead of its record-setting 1987 cargo figures.

Through May 1988, the Port has recorded significant increases over the 1987 January-May levels for total tonnage (29 percent), grain tonnage (34), and containers (19).

Container cargoes have shown solid increases for both exports and imports, resulting from increased steamship capacity.

One of the fastest growing cargo segments has been breakbulk lumber, which is up 116 percent for 1988 over 1987. The breakbulk lumber figures reflect the continued strong demand for lumber in Japan and Australia and

the success of services begun in 1988 to reach those markets — Pacific Commerce Line to Japan and Pacific Australia Direct Line to Australia.

Another forest product, log exports, also remains well above 1987 levels with 251,936 tons for January through May 1988 as compared with 172,109 tons for the first four months of 1987, a 46.4 percent improvement.

Dry bulk shipments are also climbing with volumes running 71 percent above their 1987 levels, 214,346 tons in 1987 to 125,477 tons.

Grain shipments have surpassed the 2 million-ton mark for 1988 with China, Egypt, Japan and the Soviet Union among the biggest buyers.

Auto imports and exports are up 14 percent for 1988 over 1987 despite lagging overall import sales.

(Portside)

Charleston: Time Saved Through ORION

Shippers often express strong interest in a seaport's first-inbound and last-outbound calls by ocean carriers.

Such schedules help the shipper maintain tighter control over total shipment transit time.

The Port of Charleston responds to that interest through its cooperative efforts with a number of ocean carriers who schedule first-inbound and last-outbound calls at Charleston.

In a recent 30-day period, the U.S. Customs Service's official record of trade vessels entering and leaving the Port of Charleston shows that 78 ocean carriers made a total of 213 calls. In 35 of those calls, Charleston was the first-inbound port-of-call from a foreign port. Conversely, Charleston was last-outbound port for 64 calls.

The first-in, last-out calls at Charleston included service to and from European and Scandinavian countries, Central and South America, the Far East, Africa and Australia.

At Charleston, an ocean carrier's first-inbound call can mean receipt of goods by the consignee days (or even weeks) ahead of schedule. He might otherwise have to wait out a seaport operation where cargo is held up for long periods of time before moving inland.

An exporter who might not have a shipment ready in time for sailing at

another port often can move his goods to Charleston to be loaded on a last-outbound vessel several days later and not have lost total transit time.

Whether it's a first-in or last-out call, the Port of Charleston makes sure that total transit time is not lost in port.

At the Port of Charleston, the entire waterfront community has for five years benefited from time saved through ORION, the computerized documentation system which electronically links brokers, forwarders, carriers and agents to the Ports Authority, U.S. Customs and the U.S. Department of Agriculture. The system controls, schedules and expedites documentation and cargo clearances through the Port. On import cargo, U.S. Customs estimates it clears nearly 80 percent of the inbound cargo before the ship arrives at the Port. On export cargoes, the inland carriers can save valuable time control costs by using the system to schedule arrival times at the Port.

Excellent intermodal connections, loading and off-loading expertise, and the right equipment to handle each shipment assure shippers their cargoes will not be held up at the Port of Charleston.

Tacoma, Kaohsiung Sign Sister-port Agreement

The 20th largest container port and the third largest container port in the world pledged cooperation as sister ports in Tacoma, Washington, U.S.A., during a three-day visit by a four-man delegation of the Kaohsiung Harbor Bureau.

A colorful sister-port signing ceremony took place August 30, 1988 at the Port of Tacoma Administration Building. The two ports agreed to exchange information concerning organizational systems, port management and physical port development, such as in technological applications in harbor engineering and cargo handling.

"Trade opportunities between Tacoma and Taiwan are expected to be strengthened by this agreement," said Port of Tacoma Commissioner Pat O'Malley. "We look forward to long years of friendship."

Taiwan is Tacoma's second largest trading partner, accounting for 16 percent of its dollar volume last year, or \$2.5 billion. Total trade tonnage



Champagne toasts were offered to conclude the signing of the Cooperation Agreement between the Ports of Kaohsiung and Tacoma on August 30, 1988.

between the two ports amounted to 824,000 metric tons in 1987.

Leading exports from Taiwan include apparel, footwear and audio/video equipment, while Tacoma sends American-made automobiles for Taiwan's luxury car market, cigarettes, grain and apples.

The Kaohsiung delegation included Admiral C.Y. Yuan, director of the Kaohsiung Harbor Bureau; Mr. Li Yao-Ching, chief of the Harbor Management Department; Mr. Liou Rong-Yuh, chief of stevedoring and warehousing; Mr. Liu Jih-Feng, section chief of the business department.

Admiral Yuan said Kaohsiung considered their new sister port to be a very important relation. "It will serve Tacoma well to benefit from Kaohsiung's experience in expansion by studying our planning methods," he said. In turn, he indicated the Taiwanese could profit from studying the use of computers in Tacoma.

Revitalization of Jack London Square

The \$100 million revitalization of Jack London Square took two big steps forward in August with the dedication of the spanking new central plaza and the laying of the cornerstone for the Port of Oakland headquarters building.

On August 16, Councilman Leo Bazile joined with the Board of Port

Commissioners in the ceremonial start of work on the seven-story, 177,000 square foot structure. Located between Clay and Washington Streets and affording a sweeping view of the Inner Harbor Channel, San Francisco Bay and the Golden Gate, the new building is scheduled for completion in October 1989.

There followed a festive dedication of the central plaza. Built on top of a recently completed 300-car underground garage, the plaza and an adjoining food marketplace will serve as a focal point for the entire six square block development. The 30,175 square food marketplace, known as the Pavilion, will house 32 speciality shops that will serve both fresh and prepared food. Construction on the Pavilion will start in September.

Water Street II, a four-story, 86,800 mixed use retail and office building whose anchor tenant will be New York Life Insurance Company, began construction in June. Work on Water Street I, a 10,500 square foot retail building, and Water Street III, a 5,300 square foot retail structure, will start later this autumn.

The entire five-building development is a joint venture between the Port and a private partnership called Portside Associates, with Mr. Robert Carey and Mr. Glen Isaacson as managing partners. The \$40 million construction cost has been financed by Bankers Trust

Company of New York.

Other projects planned include a 1,000-car garage to be constructed adjacent to the new Port headquarters. The 350,000 square foot building will include 14,000 square feet of retail on its first two floors. It is also planned to construct a second plaza covering 42,200 square feet of open space on the west side of the development.

(Port Progress)

Puyallups Settle Land Claims with Tacoma

The Puyallup Tribe of Indians have voted overwhelmingly to accept a \$162 million settlement that would end land claims to parts of the Port of Tacoma. The settlement also ends any land claims to parts of the cities of Tacoma, Fife and Puyallup, Washington, U.S.A., as well as to private property such as is owned by the Union Pacific and Burlington Northern Railroads.

The 319-to-162 vote ends a long legal battle and clears the way for further development at North America's sixth largest container port.

The settlement agreement will clear the title to thousands of acres of private and public lands whose ownership has been in question. It will also provide for a cooperative approach for all governments in the area to work together on economic development and fisheries-related issues.

The settlement will be funded by the Port of Tacoma, the local governments in Pierce County (Washington State), private businesses, and the federal and state governments.

The land claims arose out of treaties signed more than 100 years ago that gave the Indians title to a reservation along the Puyallup River which flows into Commencement Bay at Tacoma. The Indians renewed their claims in 1984, using the judicial process. Four years of negotiations produced the successful vote and avoid what could have been a lengthy and expensive court case.

"It's been a long time coming, but now we'll be working on the same side as the tribe to get the necessary (monetary) allocations from the state and federal governments," said Mr. John McCarthy, port commissioner and attorney, who has been involved with the negotiations for all four years.

Africa/Europe

Port of Copenhagen in profile

The Port of Copenhagen has the status of a proprietary institution, comprising the parent company — The Port of Copenhagen Authority — and its wholly-owned subsidiary, The Copenhagen Free Port & Stevedoring Co. Ltd., which is generally referred to under its Danish designation "KFS".

In accordance with the stipulations of Act No. 109, passed by the Danish Folketing on 29 April 1913, with subsequent amendments, and Act No. 237 of 12 May 1976, The Port of Copenhagen Authority is subject to the supervision of the Ministry of Transport.

The Port of Copenhagen, operating as a commercial port, bases its activities and planning on the following main objectives:

1. to provide a full range of modern facilities and advantages for the Port's maritime traffic, while offering the Port's users and the business community in general the highest levels of efficiency and service, on reasonable, competitive terms,

2. to maintain and increase the volume of traffic so as to retain its status of base port,

3. to achieve a return on investment at the level required to ensure efficient operation of Port facilities, while at the same time maintaining a satisfactory level of self-financing,

4. to contribute, via appropriate use of port land sites, towards promoting development of commercial activity, housing and recreational facilities in

Copenhagen,

5. to maintain stable employer/employee relations, while ensuring satisfactory conditions, motivation and an opportunity of personal development for the Port's employees.

The Port of Copenhagen's status as a base port enables it to play a major role in meeting the requirements of the overseas line conferences. The main feature of the base port system is that freight rates for cargoes to or from any base port in a specific region are the same, irrespective of which base port is used for cargo handling.

The Port's status as a base port represents a major advantage for its customers, who are exempt from charges for the preliminary freight stage. The status is obviously also a factor of major importance to the Port, as it can thus compete on more equal terms with other base ports.

The Port of Copenhagen, however, exerts no direct influence on its status, as the international line conferences act independently when fixing freight rates and deciding which ports are to be classified as base ports.

While the main factor taken into account when according a port the status of base port is the volume of cargo available, emphasis is also placed on the level of service and the fees charged by a specific port.

(The Annual Report 1987)

Bordeaux: Work Begins For Norsk-Hydro Plant

Started last March, the preparation of the site for the future Norsk-Hydro plant, undertaken by the Port of Bordeaux, is advancing rapidly. Eleven days after the announcement made in Oslo, the first soundings began and

were followed by dredging works, with the object of delivering a first parcel, (approximately 1/3), of the 40-hectare site to be reclaimed, by the end of September. The objective has been attained.

This is what the Board of Directors of the Norwegian multi-national company came to see on the 20th September, that same Board who had made the decision to opt for the Ambes site, on the 10th March, to be exact.

Welcomed by the Port of Bordeaux Management and the representatives of the local Public Services and Communities, the 14 strong delegation, arriving from Oslo was led by Mr. Torvild Aakvaag, President of the group, assisted by Mr. Finn A. Hvistendahl, President of Norsk-Hydro Azote.

It may be recalled that a long period of suspense preceded the Scandinavian management's decision, in spring, the Gironde site having been in competition with other possible locations in France (Nantes, in particular), as well as in Germany. The efforts devoted, at the time by the Local Government and Public Services (Regional Council, General Council, the Ambes Town Council, the Urban District Council, the Chamber of Commerce and Industry), to win the deal, should also be remembered.

Each contributed to promoting the site and highlighting the increasing consumption of fertilizers in Greater South West France, which correlates to the increase of land areas under culture, particularly grains and oil seeds, as well as the geographical location of the estuary and its proximity to Spain, where import quotas should shortly be lifted.

The Norsk-Hydro decision involves an investment of some 900 million francs, which covers the construction, scheduled for delivery in July 1990, of the plant capable of producing 500,000 tons per annum of ammonitrates and employing 120 people.

Le Havre: Car Ferry Traffic Up in 1987

The car ferries running out of Le Havre to the United Kingdom and Ireland notched up an overall increase of 7% in the number of passengers carried during 1987, plus a rise of about 20% for freight. The operating com-

Key Figures for the Port of Copenhagen Group

(DKK 1,000)	1983	1984	1985	1986	1987
Turnover	149,317	173,322	177,996	193,278	211,234
Primary operating result	-1,315	10,485	12,831	14,621	5,612
Result before extraordinary items	-8,819	3,805	7,617	25,155	14,796
Result for the year	-16,534	6,457	62,773	316,329	3,243
Total assets	445,994	419,291	493,103	743,202	738,807
Net capital, 31st December	145,138	111,230	188,054	497,955	504,786
Key Figures					
Profit ratio	(1) -0.9%	6.0%	7.2%	7.6%	2.7%
Return on investment	(2) -2.0%	0.9%	1.5%	3.4%	2.0%
Net capital/Total assets ratio	(3) 32.5%	26.5%	38.1%	67.0%	68.3%
Return on net capital	(4) -10.9%	4.4%	56.4%	168.2%	0.7%

panies are P&O European Ferries and Irish Ferries.

The total number of passengers rose from 818,000 in 1986 to 878,000 last year. There were slightly fewer travellers on the Irish route (169,400, a drop of 4.4%), but many more on the United Kingdom service (709,000, up 10.45%). In all, the Britain Terminal handled 136,800 cars, 12,400 caravans and 3,800 coaches, while the Ireland Terminal took care of 29,300 cars, 600 caravans and 720 coaches. The figures confirm the notable recovery in the traffic with the United Kingdom, while that with Ireland was held at a level comparable with previous years.

The freight figures turned in by the two companies show a total of over 1.9MT, accounting for more than 20% of the port's general cargo trade in 1987. This was an absolute record, well above the 1.6MT that have been the norm for many years now, with peaks of 1.7MT in 1982 and 1984. In all, 74,344 lorries and 2,293 TEU containers were carried aboard P&O European Ferries vessels and 3,362 lorries on Irish Ferries boats. Traffic with the United Kingdom showed a very significant rise of 22.5%, standing at 753,056 tons inwards (up 150,000 tons) and 1,024,222 tons outwards (up 170,000 tons). In contrast, the traffic with Ireland dropped off by 8.7% to 68,425 tons inwards and 69,045 tons outwards.

(Port of Le Havre Flashes)

Training Courses in Port of Marseilles

During 1987, 93 trainees from 23 different countries attended training courses organised by the Marseilles Port Forum and Training Institute.

Inter-company seminars and courses in Marseilles

- Prevention of industrial accidents during port activity,
- Safety organisation in an oil port,
- Port activity and economic development,
- Port management and planning,
- Management and the personnel function,
- The personnel function in port activity,
- Spare-time nautical activities and local development,
- Organisation of containerized cargo transit through a port.

International seminar

- Use of dispersants in combating oil pollution.

Inter-company training courses in Marseilles

- Management of ore ship loading operations,
- Advanced training in the management of a harbour-master's office,
- Advanced training in financial control and responsibility,
- Advanced training in financial management and responsibility in a port,
- Port security,
- Training of port officers in port security,
- Operation and port statistics,
- Port operation and management of human resources,
- Advanced training in pilotage,
- Port planning and development,
- Advanced training in electrical networks maintenance,
- Advanced training in equipment maintenance.

* * *

Within the framework of the contract signed with the National Office for the Cameroon Ports, the Port of Marseilles Authority has organised and worked up, mainly at Douala, 18 sessions on computer training which were attended by 250 people.

Internal training

Two seminars organised for management personnel were attended by 450 people.

For port personnel as a whole, there were three two-day sessions on general information in which 48 people participated.

Technical assistance in training

One of the PMA's training experts has been seconded to the Gabonese Department of Ports and Roads to set up the Gabonese Port Training Centre.

Israel State Railways, Ports Authority Merge

The Knesset (the Parliament of Israel) decided recently to merge Israel Railways with the Ports Authority into a Ports and Railways Authority. Prior to that decision, Israel Railways were State-owned, whereas the Ports Authority was operating as an independent State corporation. The merger is in-

tended to utilize the professional and financial resources accumulated at the Ports Authority in order to provide an impetus for the further development of rail services for both cargo and passengers.

The Authority is preparing a master plan for development of a network of modern rail services in Israel at a fast pace on a national and metropolitan scale.

The expanded Authority is headed by a 17-member board, of which ten members represent the public of users and the other seven various government ministries.

Mr. Zvi Keinan, former Chairman of the Ports Authority, and Engineer Shaul Raziel, former Director General of the Ports Authority, will retain their respective positions in the new corporation.

The current and future projects concerning Israel Railways include:

- Completion of tracks and purchase of rolling stock for carrying 2.5 million tons of coal annually from the Port of Ashdod to the new power station under construction 42 km to the south near Ashkelon.

- Renovation and improvement of rail services on the existing tracks, starting with the Naharia-Haifa-Tel-Aviv shore line, which will be supplemented with modern, fast, airconditioned "express" trains running at a high frequency.

- Planning the course of a track along the Tel-Aviv-Ben-Gurion Airport-Jerusalem line, ensuring a fast and convenient link between the coastal region, the airport area and the inland Jerusalem District.

- Operation of a metropolitan train network in the Tel-Aviv and Haifa areas for relieving the load of motor traffic and providing millions of passengers annually with fast and convenient transportation.

- Planning a railroad between Nahal Zin in the Negev and Eilat, the southern port of Israel on the Red Sea coast. Extending along a 170 km stretch, this line will link the Negev in the south with the central parts of the country.

- In 1987/88 Israel Railways carried about 7 million tons of cargo, and the implementation of the projects being planned is expected to double this quantity within five years. The Israeli ports handled over 16 million tons of cargo in 1987/88, including 9 million

tons through the port of Ashdod, 6 million through Haifa and 1.2 million through Eilat. The merger of Israel Railways with the Ports Authority is expected to contribute a great deal to the economic development of the country and improve its transport and foreign trade facilities.

Port of Hamburg: Restrained Optimism

In spite of all the problems besetting ports in general and German ports in particular, the Port of Hamburg successfully maintained its position during the first six months of 1988, and in some important areas even showed growth. This despite the fact that transport between Germany and the Dutch ports is cheaper, despite the border crossing; prices to and from these ports at the mouths of the Rhine are kept down by competition.

In this connection, Mr. Helmut F.H. Hansen, Speaker of the Board, Port of Hamburg — Marketing and Public Relations, explained: "With the increase in the EC community quota by 40 percent in 1988 and again in 1989, and the 'adjustment measures' adopted in addition, the liberalization of cross-border road transport, with the exception of cabotage, has become a practical reality. While the partial liberalization of Para. 22 a (Special agreement of the road-haulage law (GüKG) has afforded the German ports a certain competitive improvement, competitive parity in land transport to and from the ocean ports in the Antwerp/Hamburg range will not be achieved until the route across the 'blue border' — directly to the sea — is as free from tariff regulations and the like as is the route west."

The Port of Hamburg naturally does not rely exclusively on competitive performance in transfer and warehousing. "Our successes up to now in making the Port a logistics and distribution centre are a reason to continue to support and develop this area of service. Hamburg fully satisfies the requirements involved. After all, it is simply the continuation and further development of a tradition very closely bound up with the harbour workers and warehouses," Mr. Hansen emphasized.

Looking ahead to future develop-

ment, Mr. Hansen explained: "Obviously it is at present impossible to say with certainty whether the second half-year will go as well as the first. However, since the prognosis for the general economic situation in the near future is positive, and growth — albeit somewhat slower — is expected, 1988 as a whole should turn out similar to the first six months. We expect growth to come largely from import traffic, while looking for only very slight increases on the export side. To sum up: The Port of Hamburg is facing the near future with 'restrained' optimism."

New Export Systems To Boost Gothenburg

In the re-structuring of its transport systems, the leading Swedish forest product exporter STORA is building its export flows to the U.K. and the Continent around services to be provided by Tor Line and the Port of Gothenburg.

STORA, with its base in mid-Sweden, is active in the fields of sawn wood, pulp and paper. For its North European markets, the company has relied on direct shipments from Lake Vänern ports. Beginning next January, the cargo will be moved from the Port of Karlstad, on Lake Vänern, to Gothenburg by special shuttle vessels. At Gothenburg's Älvsborg terminal, the cargo is to be transferred to Tor Line vessels, to make use of the frequent sailings offered by the company's ro/ro vessels.

Together, the two specially designed shuttle vessels will load and unload six days a week, at Karlstad and Gothenburg respectively. The vessels will each have a crew of three and a capacity for

28 twelve-metre trailers.

About two thirds of the cargo will be loaded onto Ro-Lux units at Karlstad and remain on these units until it reaches the British or Continental port of destination. The remainder is to be taken to the port by rail and loaded onto Ro-Lux cassettes there.

New Terminal

At Gothenburg, a new facility is now being created for STORA at the Älvsborg ro/ro terminal. A shed covering 10,000 square metres will be erected in the western part of Älvsborg (to be used mainly for preparing units of products fed by land). Also the Tor Line cargo terminal will move to Älvsborg later this autumn. Tor Line and Vänern shuttle vessels will have exclusive access to three berths here. The passenger arm of the company, Scandinavian Seaways, will remain on its present location at the eastern part of the adjacent Skandia Harbour.

Initially, the STORA cargo flow through Gothenburg will amount to some 350,000 tonnes per annum. About one third of the cargo will be fed to the port of Gothenburg by rail, two thirds by shuttle vessels. However, there is a potential for an increase of the STORA volumes via Gothenburg within a couple of years. This is true marketwise as well as technically.

The STORA distribution system will make use of Tor Line's frequent sailings to U.K. and Continental ports. Calls at Terneuzen will be added, as well as calls at a Thames port.

The STORA contract will lead to a Swedish Kronor 100 million (£10 million, US\$15 million) investment program for Tor Line, including the reconstruction of two ro/ro vessels and



The STORA contract calls for a special terminal to be built at Gothenburg's Älvsborg Harbour (to the left of the twin roll on, roll off ramps in the picture).

a new cargo handling system. In addition, the Port of Gothenburg is investing some SwCr 25 million (£2.5 million, US\$4 million) in a quayside terminal for STORA.

'Strategically Important'

Port of Gothenburg president, Mr. Göran Wennergren, said the STORA contract is strategically important one for the port.

"Ports must become more integrated into the industrial process. This means that we have to be as good as other links in the transport chain in terms of timing and handling quality," Mr. Wennergren said.

The STORA contract was placed after extensive investigation of possible transport system layouts.

Apart from being a prestige contract for Tor Line and the Port of Gothenburg, it provides a solid platform for future development. Also, there is the possibility of a spin-off effect regarding return cargo, especially in the Gothenburg-Karlstad relation.

The new transport system will be commissioned in January 1989. One of the effects of the system is that the Port of Gothenburg share of Sweden's forest product exports to the U.K. and the Northern Continent will probably double in a few year's time.

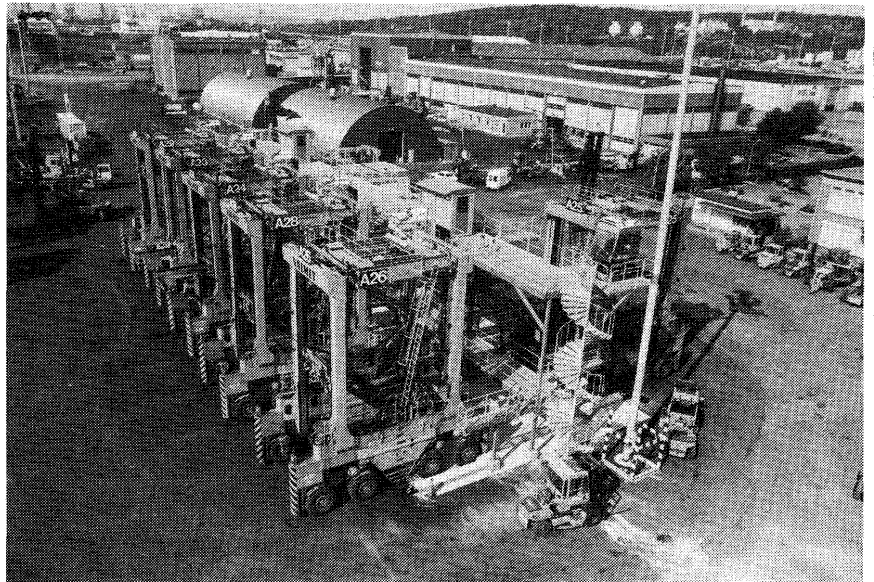
Transit Traffic Stable In Port of Amsterdam

Transit cargo in the Port of Amsterdam was more or less stable (-1.2%) in the second quarter of 1988, compared to the year-earlier period. Because of a disappointing first quarter, transit tonnage in the port declined by 8.7% to a total of nearly 14 million tonnes in the first half of the year, according to the Amsterdam Port Management.

The number of ocean-going ships also declined to 1,991 (2,266), while total gross tonnage fell back to 15.0 (15.7) million tonnes.

There was a slight (0.9%) increase in the general cargo tonnage in the port, with 1.3 million tonnes being handled in the 1988 first half.

The cargo category "other ocean-going transport" (which includes fertilizers, sand and gravel) continued to climb, gaining 31.6% to 913,000 in the first half of 1988, compared to the same 1987 period.



The new straddle carrier stable at Gothenburg's Skandia Harbour holds ten machines and is equipped with outlets for fuel, water, and electricity.

For Easier Access and Maintenance

A straddle carrier 'stable' has been commissioned by the Port of Gothenburg at its Skandia container harbour. The open-air facility holds ten straddle carriers and is meant to facilitate access and maintenance.

Straddle carriers are designed around a given inner measure, and the outer measure should add as little as possible to that. This leads to compromises in the field of driver cab accessibility and certain maintenance operations.

The Port of Gothenburg straddle carrier stable has two platform levels, the upper one giving direct access to the driver cabs of the Port's Valmet straddle carriers, which all have a three-high container stacking capacity. The lower platform is used for engine maintenance, etc. Spiral staircases connect the platforms to the ground.

Fuel, water and electricity outlets are fitted to all stalls, including engine and cab heating facilities. The construction is located close to the main canteen/changing room complex at Skandia and is meant to be used during breaks as well as for night parking.

One detail that usually becomes a problem with straddle carriers is keeping cab windows clean. The new arrangement at Gothenburg's Skandia Harbour facilitates this important safety measure.

The straddle carrier stable at Skandia was designed by the Port's own engi-

neers and cost about Swedish Kronor 3 million (£0.3 million, US\$0.5 million) to build, fully equipped. Another two similar facilities are already planned for commissioning in 1989.

ABP's Half-year Profits Up by 59% to £21 M.

Associated British Ports Holdings PLC announced pre-tax profits of £21.2 million for the half-year ended 30th June, 1988, an increase of 59% on the £13.3 million for the first half of 1987. Port services contributed £11.0 million, and property activities £10.8 million, before interest.

Earnings per share increased from 10.3 p to 16.1 p. The interim dividend is raised from 2.5 p to 3.5 p per share.

Port Services

Profits from the ports sector of the business rose from £9.4 million to £11.0 million, after severance costs of £3.3 million. Commenting on the port services business, the Chairman, Sir Keith Stuart, said:

"The majority of the Company's ports continued to perform well despite reduced exports of coal and grain. There have been many encouraging developments, particularly at Southampton."

The port of Southampton has gained several new trades in 1988, and two

major British shipping lines, P&OCL and Ben Line, have joined ABP to run Southampton Container Terminals Limited.

At Immingham, the high level of business has led ABP to undertake a general expansion of capacity. Additional quay space has already been provided in-dock and ABP's (No. 2) Bill, which received its second reading in the House of Commons on 23rd June, provides for the expansion of riverside capacity at the port. This development has been opposed by interests associated with the British coal industry on the grounds that the new facilities will be used to import coal. In fact, ABP intends to use them for a wide variety of cargoes, both exports and imports.

In South Wales all the Company's ports are now contributing to profits. Investment continues at Plymouth on the new passenger terminal and at Ayr on expansion of coal export facilities. Parliamentary approval has been received for the construction of a new lock entrance at Barrow to accommodate the latest design of submarine constructed by VSEL.

The Company's two most recent acquisitions at Teignmouth and Colchester have already proved to be excellent investments, and have seen good levels of activity over the period.

Property

Profits from property activities, including Grosvenor Square Properties, increased sharply from £4.4 million to £10.8 million. Property turnover increased from £7.9 million to £30.0 million.

The Chairman commented:

"Our property activities have been expanding rapidly, both at port locations and in many other parts of the country, as reflected in the profits achieved in the first half of 1988."

At the ports, there are now substantial developments underway or being planned, including projects at Southampton and Plymouth. Construction has started on Phase I of an 83 acre retail and entertainment centre at St Andrew's Dock in Hull.

Elsewhere, the Company is increasingly involved, through Grosvenor Square Properties, in retail, office and business developments. The London Pavilion, Piccadilly Circus, was officially opened by the Prime Minister,

Associated British Ports Holdings and Subsidiaries Group Results

The 1988 half-year unaudited results are as follows:

	Unaudited		Audited
	6 months to 30 June 1988 £m	6 months to 30 June 1987 £m	Year to 31 December 1987 £m
Turnover			
Port services	82.6	78.8	158.1
Property	30.0	7.9	37.8
Other	0.4	0.4	0.8
Total	113.0	87.1	196.7
Profit before interest and taxation			
Port services *	11.0	9.4	19.3
Property	10.8	4.4	19.3
Other	0.2	0.3	0.4
Total	22.0	14.1	39.0
Interest payable (net)	(0.8)	(0.8)	(0.9)
Profit on ordinary activities before taxation	21.2	13.3	38.1
Taxation (estimated)	(7.1)	(4.4)	(12.3)
Profit attributable to shareholders	14.1	8.9	25.8
Dividends	(3.1)	(2.2)	(6.6)
Earnings per share	16.1p	10.3p	29.6p
Dividends (net) per share			
Interim	3.5p	2.5p	2.5p
Final			5.0p
			7.5p
Absorbing	£3.1m	£2.2m	£6.6m
* After deducting payments in respect of voluntary severance of	£3.3m	£3.8m	£6.0m

The results for 1987 are an abridged version of the full accounts for that year which received an unqualified report by the Auditors and which have been filed with the Registrar of Companies.

The Rt Hon. Margaret Thatcher, on 22nd July. Among the more important office projects in London, construction work has begun on the refurbishment of Aldwych House, and on the Tower Bridge Road scheme. Westcourt House has been sold, and contributed usefully to first-half profits.

The Company's most important new project is the Buchanan Centre, a large shopping scheme in the centre of Glasgow, which is now a joint venture with Bredero Plc. Terms have been agreed to let a 250,000 sq. ft department store in the development to the John

Lewis Partnership.

Prospects

On prospects for the year as a whole, Sir Keith Stuart commented:

"We have achieved a strong performance in the first half of 1988. As I indicated at the time of the 1987 Annual Report, it would be unrealistic to expect that the rate of increase in profit achieved in 1987 can be repeated in 1988 as a whole. Nevertheless, I am confident that the results for the year will show a further satisfactory advance."

Asia/Oceania

Brisbane: Another Cargo-handled Record

For the fifth year in succession, the Port of Brisbane has managed to smash its own cargo-handled record.

The increase over the previous year of 7.5% pushed the total cargo throughput to an all-time high of 14.2 million (mass) tonnes — up a million tonnes on 1986/87 figures.

Industry experts have estimated value of the goods to enter and leave the port at more than \$5,000 million.

Releasing the results, the Minister for Water Resources and Maritime Services (Hon. Don Neal, M.L.A.) said the continuing growth of trade — in both volume and value — indicated the healthy state of the regional economy.

Mr. Neal reminded people that in the past ten years, the Port of Brisbane Authority — with the support of private enterprise groups — had invested \$250 million in new port facilities.

The commitment had secured Brisbane's future as a major trading centre, he said.

He added: "Since 1982/83, the Port of Brisbane has seen total trade increase by 58%."

Mr. Neal said the trade record reflected the development of new direct services to South East Asia, improved trading links with New Zealand, and a reversal in the trend to centralise cargo through Sydney.

In 1987/88, the number of containers through Brisbane increased 13.7% to 118,600 TEUs.

Despite a serious downturn in the grain sector as a result of drought, total bulk trades' figures were well up with a 51.6% increase in coal and 6.7% in oil.

Because of the continued improvements in trade growth, the Port of Brisbane Authority had been able to hold general harbour dues at the 1983 level.

Mr. Neal said: "If one takes inflationary and other pressures into account, the real value of charges per tonne now is 60% less than 1983.

"All trade indicators suggest an optimistic future for the Port of Brisbane," he added.

Mr. Neal described the 1987/88 figures as "very satisfactory" — but added a note of caution.

He said: "The Port now has cargo facilities which are second to none, but unless certain operational practices are improved, the Port of Brisbane and the region it serves will be restrained from developing to the full potential.

"Our efforts in satisfying present and future customers must be allowed to proceed if all those who benefit from the Port are to prosper," he added.

(Brisbane Portrait)

Geelong Offers Lowest Rates in SE Australia

Geelong has again confirmed its claim to have the lowest statutory charges of all south-east Australian ports.

An August 1988 survey of the Ports of Sydney, Melbourne, Geelong, Portland, and Adelaide revealed that Geelong's statutory charges for general, bulk and grain cargo handling are as much as half that of other ports.

The wharfage charges for most cargo is at least 52 cents per tonne less than other ports and slashes capital city rates by half.

Tonnage charges in the Port of Geelong are considerably less than all other south-east Australian ports: the savings on using Geelong can be as high as 3.44c per D.W.T. per day.

Wharfage and tonnage charges have been held at well below the rate of inflation during the past five years, resulting in real-term decreases for port users. Wharfage charges for grain were not increased from 1982 until the 1987-88 financial year.

Marketing Manager for the Authority, Mr. Martin Shirley said the latest survey results confirm Geelong as Victoria's premier specialist bulk and general cargo port.

He said the port's substantially lower charges when added to its reputation for industrial harmony and quick turnaround time for road transport is rapidly gaining the attention of new manufacturers and shippers.

"Our prices are among the most competitive in Australia and our continual monitoring of other ports will ensure they remain so," Mr. Shirley said.

The Authority is working closely

with other Victorian and Australian ports on evaluation of the Economic and Social Commission for Asia and the Pacific (ESCAP) pricing model proposal, the outcome of which would be a more realistic and justifiable pricing structure which accurately reflects all port costs.

The examination will involve a comprehensive re-evaluation of all port assets and the basis for charging-out to port users.

The review hopes to address the current imbalance in many ports between the under-recovery of costs associated with the provision of facilities for ships and an overconcentration in revenue raising from charges levied against cargo.

(Portside)

Fremantle Harbour Upgrading Work to Begin

On April 26 Premier Peter Dowding announced a major upgrading of Fremantle Harbour as part of the State Government's new economic strategy. It is proposed to deepen the approach channel and a portion of the Inner Harbour to cater for vessels drawing up to 12.5 metres. This improvement will meet the anticipated needs of the port for the next twenty years.

The dredged material will be utilised in a concurrent reclamation project to develop a port-related small boat harbour and commercial/industrial land area on the northern side of the North Mole. Subject to final environmental and Government approval, construction of sea walls will commence in September 1988 and dredging early in the New Year. The deepening should be completed in early July 1989.

Serviced blocks in the newly created sub-division should be available for lease early in 1990.

Relating planning is aimed at:

- improving the Inner Harbour navigational aids;
- redesigning the road traffic patterns in the North Quay area to improve container reception and delivery; and
- redesigning the rail track layout to increase container stacking areas and improve road/rail grain handling at the Co-operative Bulk Handling's North Fremantle silo.

Administrative planning includes input to the Federal Government's

Waterfront Strategy, and the adoption of recommended practices. Authority EDP staff are co-operating in efforts to provide standardised shipping information and documentation.

(Port of Fremantle)

Fremantle's Trade Continues to Improve

Figures recently released for the 10-month period ending April 30, 1988 show marked improvements in many of the Port's trading activities.

"The Port of Fremantle's cargo trade continues to improve and is currently handling 60% by value of the State's imports and exports," said the Authority's Chairman and General Manager, Mr. Trevor Poustie at a recent customer/client function.

"Most importantly we are handling cargo quicker. The alongside hours for commercial ships have been reduced over the last 12 months by 15% which demonstrates that we have productivity and efficiency improving at a steady and impressive rate," he said.

Mr. Poustie pointed out, "The total tonnage of cargo moved through the Port so far exceeds 16.2 million tonnes, which is up by 1.8 million tonnes or an improvement of 12.5% over last year."

The trend towards containerisation continues to rise in the Inner Harbour where 82,900 containers (twenty foot equivalent units) have been handled.

This represents an increase of 3,800 on last year's figures to date. Present indicators show a decrease in the number of empty containers handled and a rise in other categories, particularly outwards traffic, which is enjoying an increase of 11.8%. Based on the year's figures to date, the Port of Fremantle container traffic may break the 110,000 mark this year for the first time.

Mr. Poustie continued, "In addition to cargo trade, the passenger/cruise trade has been active.

"The Authority has been investigating the cruise market and in the near future, with the support of airlines and shipping companies, we may see the reintroduction of a regular fly/cruise schedules between Fremantle and our nearer South East Asian neighbours," Mr. Poustie added.

(Port of Fremantle)

Preliminary Report on Waterfront Problems

The Inter-State Commission's (ISC) Preliminary Report on Waterfront Reform establishes the basic agenda on which an integrated industry plan will be developed to tackle Australia's waterfront problems.

Senator Robert Ray, Minister Assisting the Minister for Transport and Communications, said this when releasing the report which presents the ISC's preliminary findings based on the evidence so far presented to the Commission.

"I welcome the Commission's preliminary findings," Senator Ray said, "as they give a useful statement of the issues which the ISC regards as important, and provides everyone with an indication of the direction in which the ISC is heading in the development of detailed reforms.

"The Commonwealth Government will now closely examine the ISC's preliminary report, to see what steps should be taken between now and the Commission's final report, to facilitate the development of an appropriate blueprint for reform to deliver an efficient and reliable waterfront."

The task of delivering a more productive and reliable waterfront, Senator Ray said, is a major priority on the Government's micro-economic reform agenda.

"Success in improving the efficiency of the waterfront will have major implications for Australia's trade performance, industrial development and future employment levels.

"That is why the Government is committed to developing a sensible package of reforms covering all the necessary issues."

A second round of public hearings will now be held by the ISC prior to the production of its final report.

"There is still a long way to go before an integrated industry plan can be formulated, and the coming months will be a crucial period of intense activity.

"A lot of effort and commitment is still required from everyone involved with the waterfront, and so I urge all interested parties to closely examine this preliminary report and take full advantage of the Commission's second

round of public hearings.

"I especially encourage our exporting and importing interests to make their detailed views known to the Commission.

"The recent National Wage Case decision provides the labour relations framework for stevedoring employers and unions to commit themselves to a thorough and comprehensive modernisation of stevedoring awards and associated matters, such as training/retraining, acquisition of skills, career paths and work patterns.

"This opportunity enables the stevedoring industry to build immediately on their current negotiations within the Waterfront Strategy framework on employment/deployment issues, to formulate an award blueprint based on the needs of an efficient industry.

"State Governments will have a critical role in these reforms, and the Commonwealth looks to them for a continuing responsible and constructive approach.

"There will need to be much co-operation between our Governments, and the Commonwealth is prepared to play its part to achieve essential waterfront improvements."

Since the establishment of the Waterfront Strategy a number of measures have been initiated to improve waterfront efficiency. These include:

- union initiatives in forming stevedoring joint ventures;
- container depot productivity schemes;
- some significant port management improvements; and
- the prospect of improved industry communications through the work of the National Communications Working Party.

The Minister also announced the release of two papers and accompanying brochures produced by the Bureau of Transport and Communications Economics. One deals with the structure and operation of the harbour towage industry, while the other outlines the economic significance of the waterfront. For convenience these papers have also been incorporated in the ISC's Preliminary Report.

**Inter-State Commission:
Preliminary Report**

**Summary of Preliminary Findings for
Proposed Waterfront Strategy**

The Commission has identified seven main elements to be developed in its proposed waterfront strategy. These include:

1. Effective Management and Well-motivated Workforce

— Greater emphasis upon developing normal company employment for the stevedoring workforce, with a movement away from the present industry-based arrangements.

— More effective stevedoring management to be encouraged against a background of fewer, more highly skilled employees, less direct supervision and better trained middle management.

— Better training, skills and career path development through improved job classification structures and multi-skilling, to increase mobility between sectors and levels within the industry.

— Development of effective productivity arrangements recognising the different circumstances applying between smaller and larger ports.

2. Strengthening the Influence of Exporters and Importers

— Establishment of a 'peak' body with a national co-ordinating role for shipper interests including importers, exporters and air freight shippers.

— Education of importers and exporters to improve shipper understanding and performance in relation to their waterfront activities.

— Upgrading of consultative arrangements between port authorities and user interests.

3. Increased Industry Transparency and Accountability

— Greatly improved performance indicators and statistics through agreement on a small set of comparable and consistent indicators, focussed upon major aspects of port and waterside operations, utilising existing information systems and possibly integrated with the development of the electronic communications network.

— Improved communications and documentation with the development of a national electronic communications network and greater standardisation and simplification of documentation.

— Greater degree of public accountability by organisations in a natural monopoly situation with a greater role for the Trade Practices Commission and possibly special accountability requirements, such as filing of agreements and rates.

4. Improved Industrial Relations and Dispute Settlement Procedures

— Rationalisation of union structures, in line with current ACTU proposals and Federal Government industrial relations legislation. Also revision of employer representation, by review of the AEWL constitution to ensure representation only of employers of waterside labour and employers of port authority labour.

— Greater emphasis on safety in training and management development and adoption of risk management policies.

— Reassessment of the role of Conciliation and Arbitration Commission with development of mechanisms for representation and recognition of interests wider than those of the immediate parties to a dispute.

5. Ensuring Market-oriented Provision of Infrastructure and Services

— Integration of bulk loading facilities as integral parts of the resource industry being serviced to overcome unsatisfactory performance by some independent bulk cargo authorities.

— Review by port authorities of arrangements with towage operators, the possible establishment of a national pilotage service and the examination of anomalous practices in the provision of towage and pilotage services.

— Abolition of gangway watchmen and rationalisation and contracting out of security services by port authorities.

— Greater commercial orientation in all facets of port authority operations (provided their monopoly powers are not abused) and proper economic and financial evaluation of port investment proposals on a State basis.

— Revision to the structure of light dues charges to make them more equitable.

— State Governments and their authorities should approach, in a systematic manner, the planning of land-side access to ports and the interconnection with efficient transport services.

— Anomalies in regulatory and fiscal

practices by government agencies should be avoided (such as sales tax exemptions, import restrictions and customs practices).

6. General Removal of Anti-competitive Practices

— Examination of the present 'approved' container depot scheme with a view to 'freeing up' the current position in liaison with the Trade Practices Commission.

— Improved depot efficiency, single union representation in individual depots (WWF on-wharf and FSPU and TWU off-wharf) and greater involvement of freight forwarders and non-vessel-operating common carriers in depot operations.

— More pro-active role for port authorities in improving performance of other waterfront sectors through shorter term, performance-oriented port leases, changing port pricing principles and enhancement of competition within ports.

— Vertical and horizontal integration by shipping operators is not undesirable provided markets are contestable.

— Monitoring of the level of competition in ocean shipping, which is directly correlated to the competitiveness of the waterfront, is needed by the Trade Practices Commission and the proposed shipper body to ensure cost savings on the waterfront are passed on to shippers.

— Relaxation of institutional arrangements, which act as constraints to prevent market forces influencing costs to users and resource allocation, will improve waterfront responsiveness.

— Increasing role for the Trade Practices Commission in the waterfront industry.

7. Management of the Proposed Strategy

— Establishment of a body to manage implementation of the strategy in liaison with governments, government authorities, unions and employer associations.

— Also oversight work of two new bodies:

- Importers and exporters representative body including air freight shippers which will be responsible for matters currently dealt with by the Australian Shippers' Council and liaison with other shipper bodies.
- Stevedoring industry employer/

employee body which will be responsible for training, introduction of new job structures, multi-skilling and matters currently dealt with by SIRC.

— Members of the new body to be chosen for their expertise rather than representational interests and new body to have life of five years, although a continuing need is envisaged for the importer/exporter and stevedoring industry bodies.

Responsible for Commercial Activities

It is always interesting to read about a certain date in history and find out what happened that day. Sometimes there are events that change the world and others that are pretty mundane.

From 1 October such examples would be: in 1913 the original Union Steam Ship Co., Ltd. was wound up and a new company of the same name was formed.

In 1958, India changed to the metric system and in 1963 Nigeria became a Republic within the Commonwealth. None of these examples have anything to do with South Port New Zealand Limited, except on that date, 1 October 1988, the Port Company will take over all the commercial activities of the Southland Harbour Board.

The Company

South Port New Zealand Limited is a public listable company registered in 1988 under the Companies Act 1955.

Because of the provisions of the Port Companies Act 1988, the Southland Harbour Board and other specified local authorities must hold shares that have at least 51% of the voting rights at any general meeting of the Board.

That is not to say, however, that South Port New Zealand Limited is merely the Southland Harbour Board with another name. The Company is a separate commercial entity charged with the task of getting on with the efficient and successful management of Bluff Harbour and the facilities at Halfmoon Bay, Stewart Island. It is accountable to the Harbour Board only in the same way as any company is accountable to its shareholders.

The Port Companies Act 1988 requires South Port New Zealand Limited to have a minimum of six directors,

only two of whom may be Harbour Board Members.

Why a Company?

In recent years there has been a growing recognition that the major Harbour Boards in New Zealand were carrying out very significant commercial activities fettered by the constraints of the local authority nature of the Harbour Boards and an out-of-date empowering Act which provided no clear accountability or performance criteria.

The purpose of the reform has been to separate the commercial from the non-commercial activities of Harbour Boards. The commercial activities are now managed as separate commercially accountable businesses free from outdated legislative controls.

Corporate Objectives

The principal objective of the Company is to be a successful business managing the financial assets and liabilities of the Company on a prudent basis.

The Company will provide, operate and maintain efficient, economic and safe commercial port facilities for the benefit of shareholders, port users, employees and the community.

The Company will investigate investments which over their life can be expected to yield a return at least equal to the Company's cost of capital including an acceptable commercial profit.

The Company will provide a fair, equitable and safe work environment for all of its employees.

Commercial Activities

The Port Companies Act 1988 requires that all the property and rights of Harbour Boards that deal with:

- commercial shipping,
- the shipping and unshipping of goods or passengers,
- the packing and unpacking of goods,
- such items as dredges and breakwaters that contribute to the commercial operations of the ports be taken over by the Port Companies.

In Bluff this means that South Port New Zealand Limited now owns and manages the Island Harbour facilities, the cold stores, mobile plant fleet, the tugs and other floating plant, all

weather package handling facility, Syncrolift, the Town Wharf and the Tiwai Wharf.

The Company is not statutorily responsible for matters relating to safety and good navigation. These remain the responsibility of the Southland Harbour Board although the Board and the Company have agreed that the Company will administer these matters on the Board's behalf.

(The Bluff Port Sider)

Preparing for New Wellington Port Co.

The Establishment Unit for the Wellington Harbour Board's port company has been working since March 1988.

The Unit's report, issued in June, reconfirms most of what the Board had been through in establishing Port of Wellington Limited early in 1988. The guidelines for the company envisaged by the Unit are substantially the same as those agreed by the Board in March 1988, with some minor refinements.

One of the main tasks of the Establishment Unit was to come up with the value of port assets. Principles similar to those used in setting up State Owned Enterprises were followed, with the assistance of consultants Arthur Young.

The procedures followed have been confirmed by a Ministry of Transport letter which outlined the approach to be taken. The Board was in fact already following such approach.

The proposal provides for a 6 percent internal rate of return over a 15-year period. To achieve the 6 percent rate of return a small increase of charges on top of inflation has been proposed. While this is regretted, it should be remembered the Board has not increased charges for several years. The increase might have been larger but for recent significant cost-cutting in the Port of Wellington.

The memorandum and articles of association have been prepared, and are based, with minor modifications, on the model proposed by the Ministry of Transport.

The draft Statement of Corporate Intent, the key policy document for the port company, has been written. This includes areas such as objectives, nature and scope of activity, targets and div-

ident policy. The Statement is to be updated each year by the company and provided to shareholders, that is the Board, which can comment and request changes.

The Port Companies Act provides considerable protection for the Board, allowing it to come back to the company at any time to question the Statement of Corporate Intent. The objectives of the Act, however, that is to promote ports as successful businesses, must always be pursued.

The Establishment Unit spent a great deal of time on the question of the equitable transfer of staff to the company, which the Unit regarded as very important. Its view reflects past Board policies, such as on voluntary severance and restructuring, which will be continued.

The Establishment Unit's report was substantially accepted at a Board meeting on June 22. The report is available for public comment and will shortly be sent to the Minister of Transport for his approval. (*Beacon*)

Self-automated Cranes Commissioned at S'pore

By Lau Foon Wah & Thor Hock Loo
Cargo Systems Department

The commissioning of two new 'post-Panamax' container quay cranes on July 20 marks PSA's move towards semi-automated crane operations. These cranes are larger and faster than the existing fleet, aimed at maximising

the productivity in container handling and reducing the fatigue of the quay crane operator.

When container loading/discharging commences, the crane operator will manually carry out one cycle of operations. The computer system will 'learn' from the crane operator. During this 'learning cycle' the computer will scan the stacking profile of the containers on the ship's deck and locate the various co-ordinates for trolley travel.

The computer will then take over the repetitive function of moving the spreader along the optimal path and come to a stop at the final landing position.

The operator needs only to perform the final landing and locking/unlocking of the twist-lock.

The computer sequences the crane spreader movements based on the planned discharge/loading sequences worked out by the computerised ship planning system, which can be amended by the wharf Traffic Assistant.

The computer system is made up of a Microvax II computer, a Programmable Logic Controller (PLC) and electronic sensors on board the crane. The computer sends signals to the PLC which will control the spreader movements based on the signals from the electronic sensors on the trolley position, the hoisting length, the spreader sway, and so on.

The system is jointly developed by PSA and Mitsubishi Heavy Industries and will be commissioned in October this year. (*PSA News*)

ADB to Help Philippine Feeder Ports Project

The Asian Development Bank has agreed to provide technical assistance to the Philippines for a Feeder Ports Project. The technical assistance grant of \$500,000 will be financed from the Japan Special Fund.

Feeder ports are an integral part of the country's maritime transport which plays a dominant role in economic development because of the Philippines' archipelagic nature.

Rehabilitation of feeder ports is an essential strategy in the Government's development plan to alleviate poverty in rural areas. Generally located in isolated areas, these ports function as fishing harbors and as terminal points for passenger and cargo ferries. They link isolated communities to the rest of the country and provide them access to markets in population centers.

Despite their importance to the economic development of the rural areas, most feeder ports are dilapidated, neglected, or in need of basic berthing facilities and sheds. They are often unmanned so that cargo and passenger throughput are unknown, a situation which makes the preliminary survey and formulation of a feeder port project a priority in the Government's effort to provide an efficient maritime infrastructure in rural areas.

National feeder ports master planning has been carried out by the Government and 150 major feeder ports have been identified for improvement

Visitors to Head Office

(Continued from Page 9, Col. 2)

Office, Pohang Iron & Steel Co., Ltd., and Mr. Jeong, Gong-Il, Vice-President, Theyoung Engineering Co., Ltd., visited the Head Office. The purpose of their visit was to study the current situation as regards the vessel traffic services in Japanese ports in view of the projected introduction of VTS system into Korea.

The visitors were met by Secretary General Kusaka and his staff, with whom they exchanged views on the VTS systems. The meeting was also attended by Dr. Yoshio Fujino, President, Japan Maritime Signals, who is an Associate Member of IAPH and is currently serving on the Marine Safety Sub-Committee, COPSEC.

During their study and research stay in Japan, the Korean party visited the Port of Yokohama, where the party was guided to the Yokohama Harbour VTS Station. The party also visited the Tokyo Bay Traffic Advisory Service Center in Yokosuka located at the entrance of the Bay.

Correction

With reference to Professor Baudelaire's article entitled "Privatisation of Port Activities Within the Context of Port Public Responsibilities" appearing in the September issue of this journal, there were a few parts inappropriately printed.

— Page 31 — left hand column —

The sentence "Australia is currently unfavourably" (2nd paragraph of 5.1 Public service constraints) should have appeared as a footnote with reference to "in the interest of the nation" (the 8th line of the first sentence of 5. A public body, to what purpose?).

— Page 35 — right hand column —

R.P. Douglas (B.P.A) was omitted from the Acknowledgments section. His name should have been listed after R.O. Goss (Professor, UWIST)

— Head Office

and development. From this list, a number of feeder ports in the Visayas and Mindanao located in the southern part of the country, have been suggested for Bank assistance.

The Bank will therefore provide the Government with consulting services to 1) review project preparatory work on feeder ports carried out under the Nationwide Feeder Ports Development Program, 2) determine the scope of an implementation plan for a feeder ports project, 3) undertake preliminary designs, engineering studies and cost estimates for selected ports, 4) suggest institutional strengthening of agencies which will manage and operate these ports, and 5) consider the environmental impact of the project. In selecting feeder ports for rehabilitation and development, the study will also consider the provision of adequate access roads between the feeder ports and their hinterlands.

Port Rashid, Dubai: A Major Distribution Hub

Based on a trading history that stretches back centuries, Dubai is firmly established as the Middle East's commercial capital.

As a major business centre, Dubai boasts excellent communications, and some of the world's leading hotels, banks and insurance companies. In addition it has a burgeoning manufacturing base, a vibrant Free Trade Zone and Port Rashid — the region's premier cargo hub.

And Dubai's ideal location — at the entrance to the Arabian Gulf, liberal business climate and traditional mercantile skills further enhance Port Rashid's position as a key freight gateway.

Coupled to which Port Rashid has a hard-won reputation for flexibility, straight-forward customs formalities, easy documentation and round-the-clock working. This makes the port an ideal transshipment point for a wide range of regional destinations.

As such, transshipment is a critical element of the port's highly-developed freight business. Around 50% of all cargo discharged at Port Rashid is ultimately destined to points outside Dubai. Moreover the port aims to further develop its already extensive



Mr. Khalid Khalifa Al Jallaf, assistant director general for Port Rashid affairs.

relay capability.

In part this is made possible by Port Rashid's regular dedicated and common carrier services. These connect an extensive range of ports in the Gulf, Indian subcontinent, Red Sea and East Africa — giving carriers a variety of on-shipment possibilities.

At the same time, colourful dhows reload cargo in Dubai creek and nearby Hamriya from boxes originally discharged at Port Rashid for destinations as far off as Zanzibar.

Port Rashid's 35 deepwater berths are perfect for handling any type of freight. And in addition to containers-bulk cargoes, livestock and cars are among the many items off-loaded at the port for re-export.

As carriers reduce the number of direct calls in the Gulf, Port Rashid has emerged as a natural distribution point from which to serve the region.

Excellent storage facilities, an assortment of land and all-water feeder links and cheap distribution costs are why many major international companies are choosing Dubai as their Middle East warehouse.

In addition Port Rashid is served by over 120 deepsea shipping lines linking Dubai with all the world's major trading areas. And with around 50% of all freight landed at Dubai destined for on-shipment, Port Rashid acts as a strong and reliable physical distribution hub.

A large network of feeder routes have sprung up with Port Rashid as their

base. This enables carriers to serve a number of marginal trades not requiring a dedicated service, and feed in top-up cargoes to support traditionally low revenue earning homebound legs from the Middle East.

In addition to a regular number of local shuttle services to a full range of Gulf ports, carriers now directly connect destinations as far afield as Mombasa, Hodeidah and Colombo via regular relay links over Port Rashid.

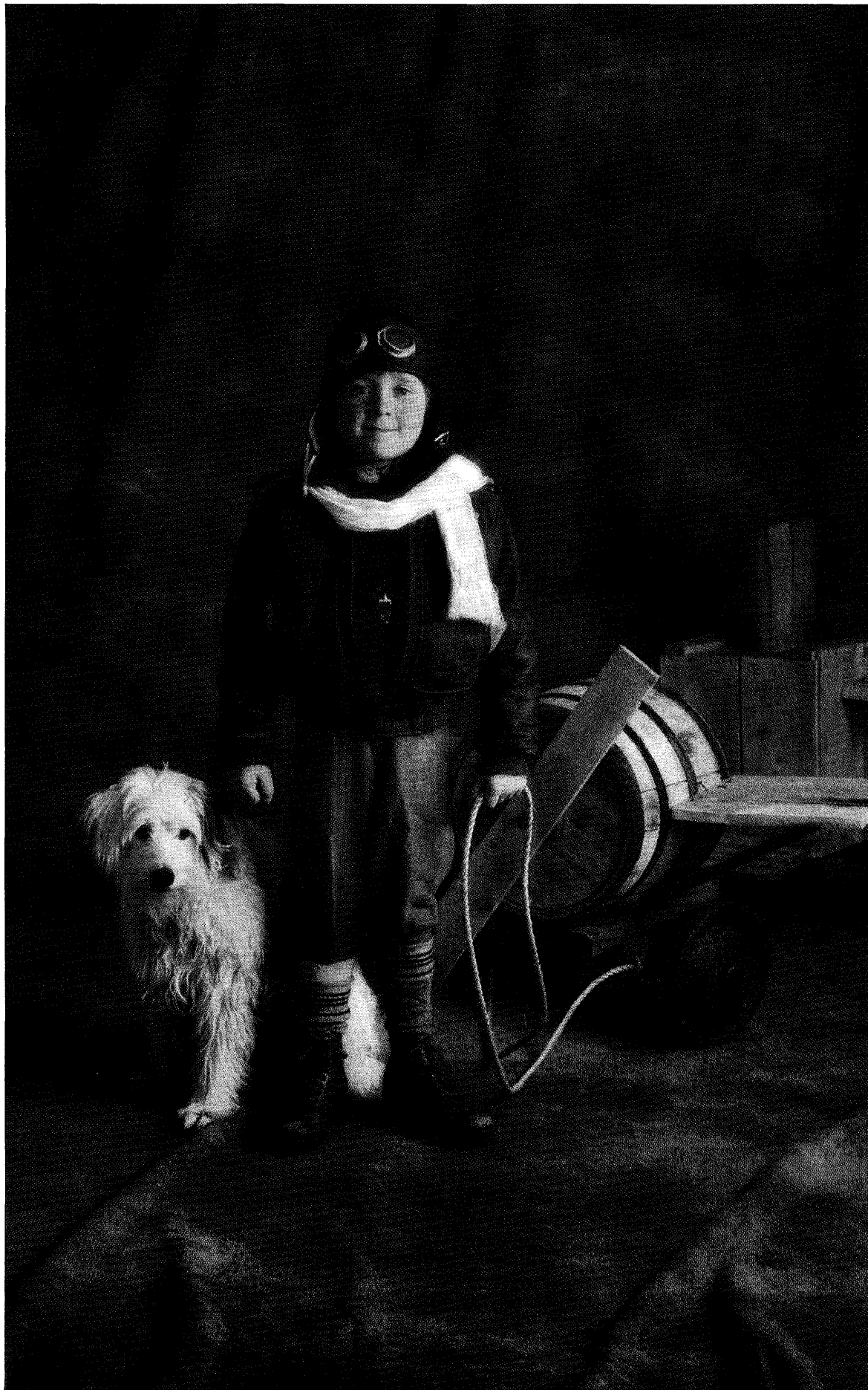
To provide a credible regional distribution service, good storage facilities are essential. The Port Rashid Authority offers shippers 60 days free open storage and reduced rates thereafter. In addition the Duty Free Storage Area is available to firms wishing to re-export freight from the United Arab Emirates. In any case all cargoes arriving at the port are clear of any storage charges for at least 20 days.

Six container freight stations (CFS) within Port Rashid's perimeter fence handle a growing number of LCL boxes. Much of this traffic is consigned to local merchants. And the contents of stripped containers often find their way down to Dubai's famous creek to be reloaded onto dhows. These may sail as far as the Indian subcontinent or even East Africa.

The success of the CFS operation has brought wide-ranging benefits to local consignees, many of whom lack full depot facilities. LCL shipments aid cash flow, and reduced storage costs boost profitability.

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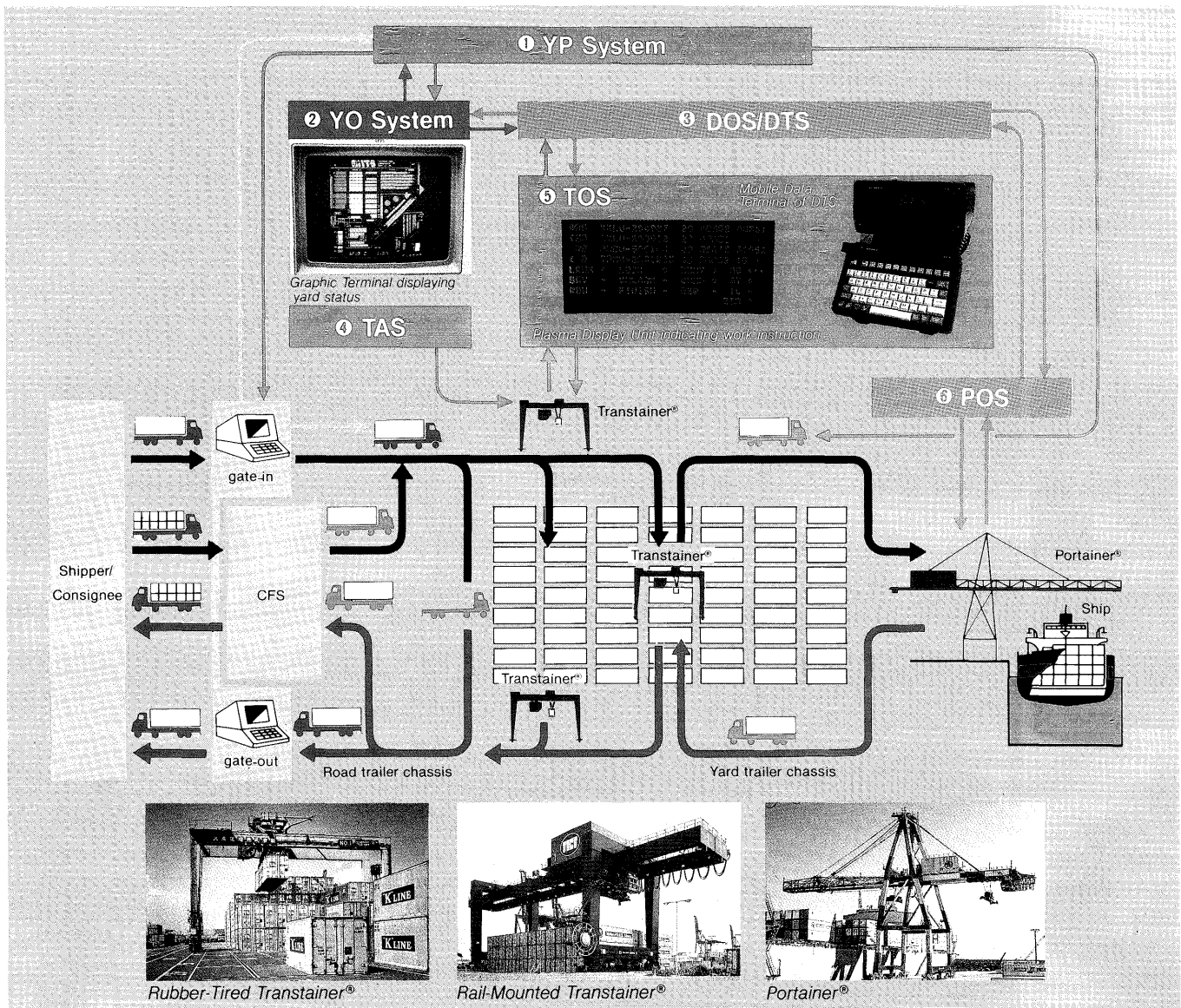
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