

Ports & Harbors



Port of Miami

(Top) The passenger terminal in the foreground and downtown Miami; and (Bottom) A pleasure boat.

November 1987
Vol. 32, No. 11



The Publisher

**The International
Association of
Ports and Harbors**



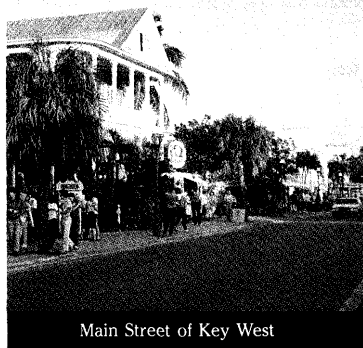
PORT OF MIAMI HOSTS THE 16TH CONFERENCE OF IAPH IN APRIL, 1989



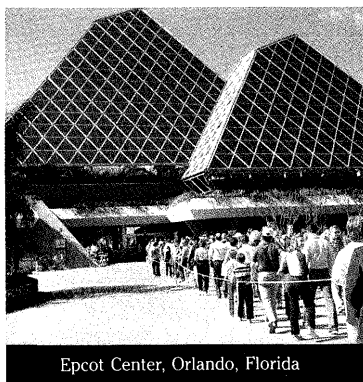
NORTHWEST

Official Carrier for
the IAPH Conference '89

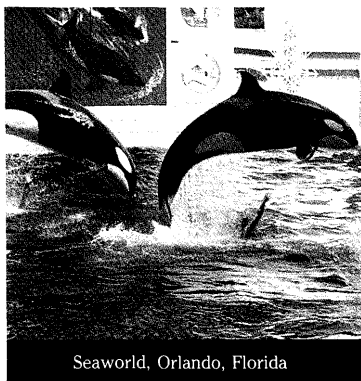
Ms. Lori Goodman, PR and Marketing Assistant, Port of Miami,
Promotes her port as venue for the IAPH Conference in 1989.



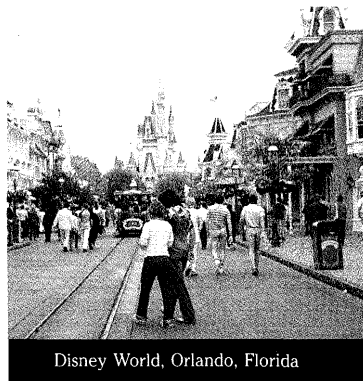
Main Street of Key West



Epcot Center, Orlando, Florida



Seaworld, Orlando, Florida



Disney World, Orlando, Florida

HIGHLIGHTS OF THE CONFERENCE

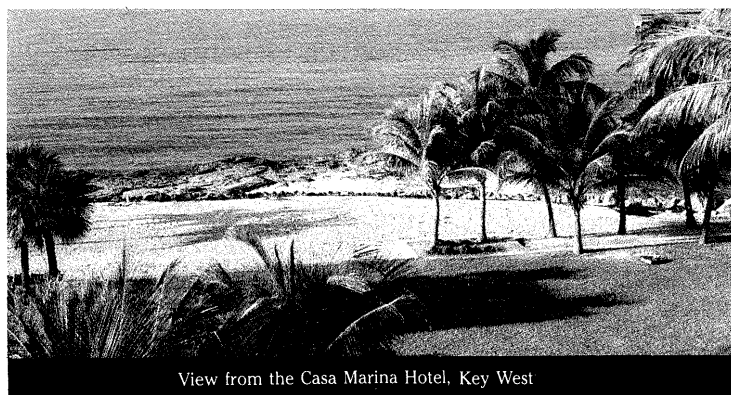
**From the invitation address delivered by
Mr. C.J. Lunetta, Director, Port of Miami,
at the IAPH Conference in Seoul (May 1, 1987)**

- (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 22-29, 1989!
You can be assured that your visit will be
a memorable one.**



View from the Casa Marina Hotel, Key West

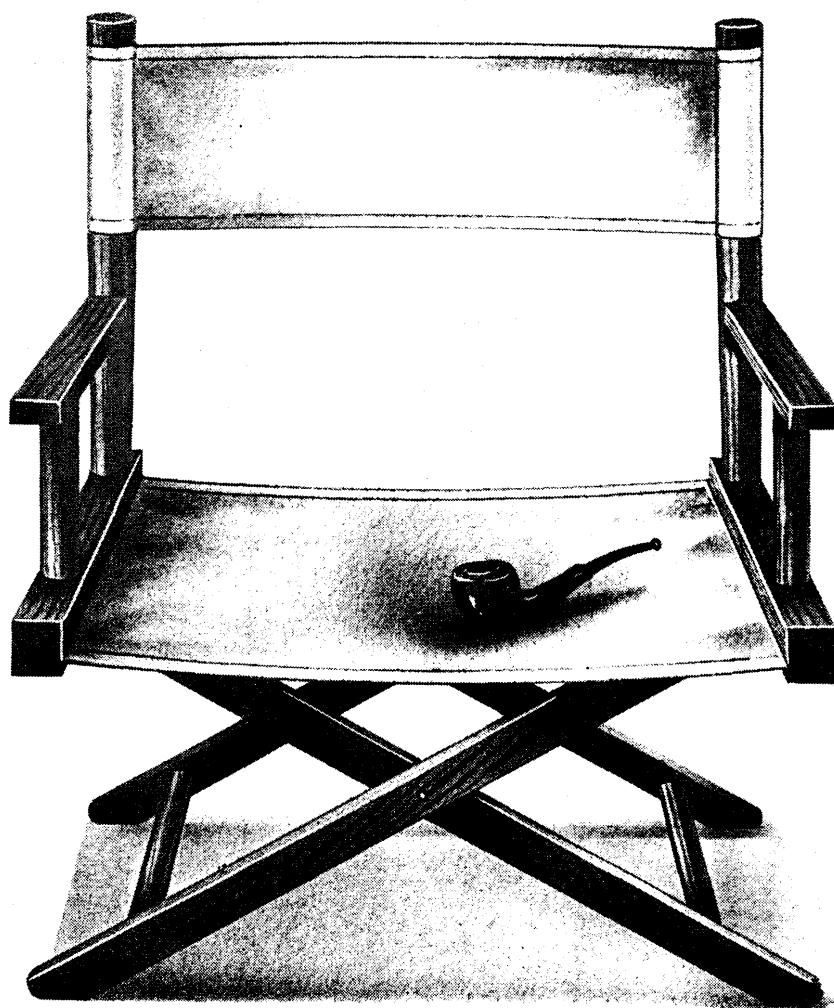
Photographs by Mr. Toru Akiyama

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 Authority, Singapore
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 Sei, Administrator, Korea Maritime
 and Port Administration, Korea
Conference Vice-President:
 C.J. Lunetta, Port Director, Port of
 Miami, U.S.A.

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110,296,000t
This is the amount of the
confidence in us.

We at the Port of Yokohama have rendered excellent services to ships from all over the world with 128 years' tradition and ripe knowledge, since its opening in 1859. And the port has ranked first in Japan about the amount of trade value for many years. We provide the unified arrangement of tugboats, pilots, and line-handling, and have introduced the effective computer system. Furthermore, the port has far fewer entry and exit restrictions. Seeing is believing. We are sure that you will note the Port of Yokohama as soon as you use it once.



PORT AND HARBOR BUREAU THE CITY OF YOKOHAMA
NO. 2, YAMASHITA-CHO, NAKA-KU, YOKOHAMA 231 JAPAN. PHONE: 045-671-2888

When you know
all the facts
about our port...
We'll both
do more business



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**DID
YOU
KNOW?**

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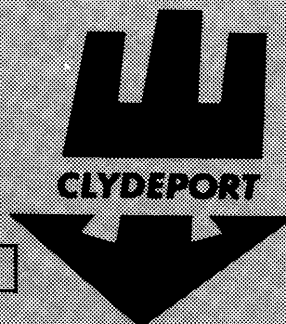
One World Trade Center, 64E
New York, NY 10048
(212)466-8333



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BP Finnart Oil Terminal

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GREENOCK
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Dry and Liquid Bunks

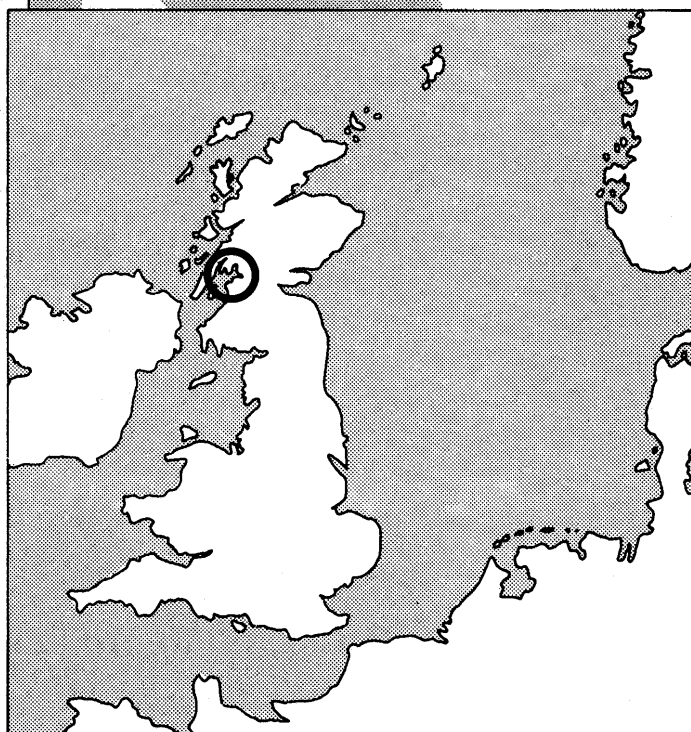
GLASGOW

General and Project Cargoes
160 Tonnes Heavy Lift Crane
Dry and Liquid Bunks
Granary

HUNTERSTON
Ore and Coal Terminal

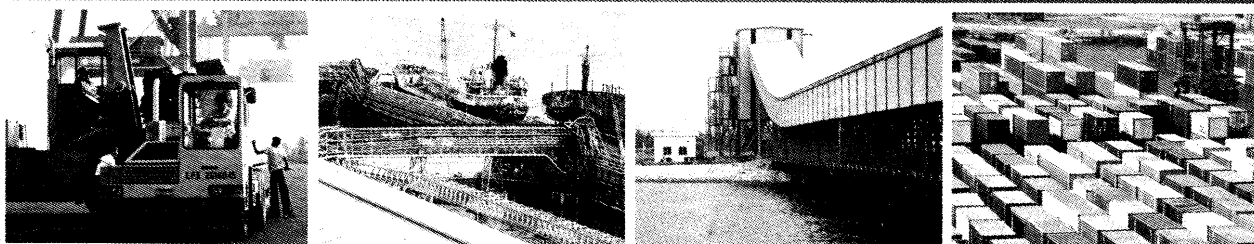
ARDROSSAN
2 RO/RO Terminals
Dry and Liquid Bunks
Project and General Cargoes

Firth of Clyde



Marketing Department
CLYDE PORT AUTHORITY
16 Robertson Street
GLASGOW G2 8DS
Scotland
Telephone: 041-221 8733
Telex: 776446 "CPAGLW G"
Fax: 041-248 3167

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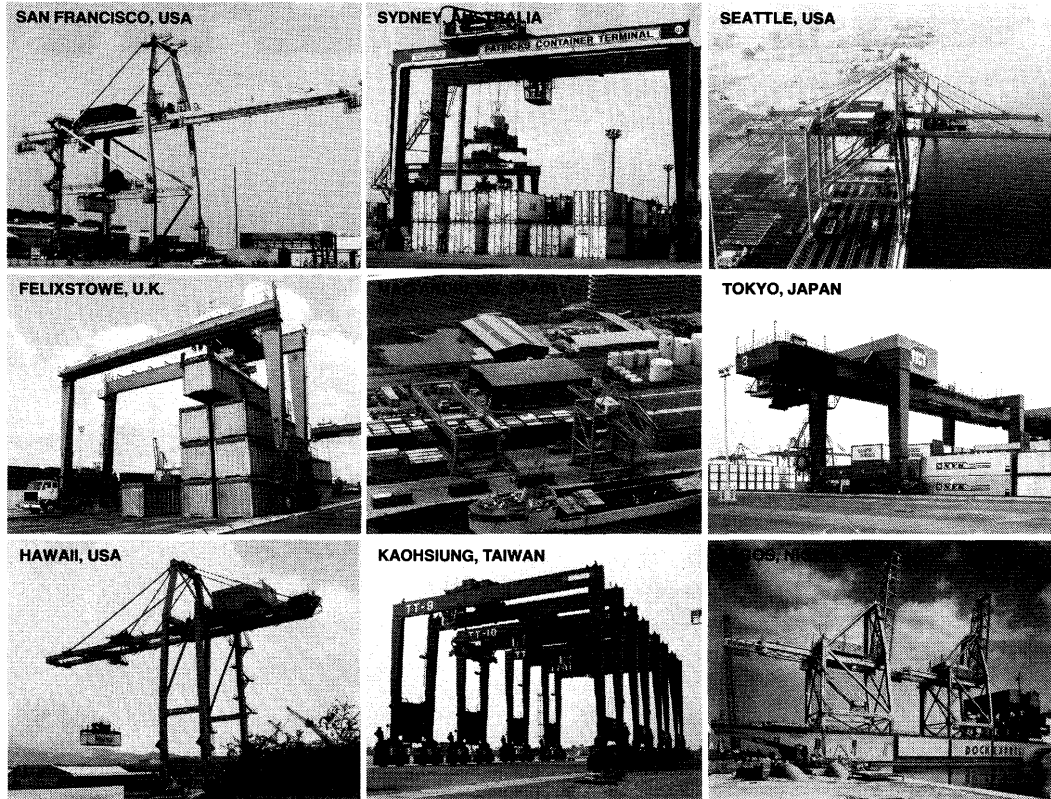
We deliver the edge in turnaround time — with smoother container traffic, specialized wharves, a full-fledged dry bulk terminal, advanced material handling equipment and computerized services.

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IAPH ANNOUNCEMENTS AND NEWS

Award Scheme

IAPH Essay Contest '88

How could the efficiency of your port be improved? Your answer could win the "Akiyama Prize" (a silver medal and US\$750 in cash) plus an invitation, including travelling costs and hotel accommodation, to attend the 16th Conference of IAPH, April 22 — 29, 1989, in Miami, U.S.A.

Mr. C. Bert Kruk, the Chairman of the Committee on International Port Development, has announced the

conditions for entry to the 1988 Award Scheme.

The IAPH Award Scheme is an essay contest held for personnel of developing ports which are IAPH members. It was first introduced by IAPH in 1979 and is administered by the Committee on International Port Development.

The First Prize Winner (Akiyama Prize Winner) will be invited to the Conference to receive a silver

Conditions for Entry to the IAPH Award Scheme 1988

1. Suggestions regarding how the efficiency of your port (or ports in general) could be improved should be presented in **English, French or Spanish**, typewritten, and submitted to the Secretary-General, the International Association of Ports and Harbors, Kotohira-Kaikan Building, 1-2-8, Toranomon, Minato-ku, Tokyo 105, Japan.
2. The suggestions may cover any aspect of the administration, planning or operations of ports, such as improving productivity or the utilization and maintenance of equipment and storage areas, reducing delays and damage to cargo, etc. **An attempt should be made to quantify the benefits which would result from the suggested improvements together with the costs (if any) involved.**
3. Entry texts should not exceed 20 pages excluding a reasonable number of appendices containing tables, graphs or drawings. The paper size must be A4 (21.0 x 29.7 cm). Entries may be made either by individuals or small groups of persons employed by IAPH member organizations, and should be the original work of the entrant(s). Those which are the result of official studies or otherwise sponsored projects will not be eligible.
4. Entries will be judged by a panel of experts appointed by the Chairman of the Committee on International Port Development of IAPH. The panel will give greater merit to papers identifying and evaluating specific improvements than to entries covering a wide range of improvements in general terms.
5. The First Prize for the winning entry will consist of:
 - 1) The Akiyama Prize (a silver medal plus US\$750 or the equivalent in local currency); and
 - 2) An invitation, including travelling costs and hotel accommodation, to attend the 16th Conference of IAPH, to be held from April 22 to 29, 1989, in Miami, Florida, U.S.A.
6. In addition to the First Prize, Second, Third and Fourth prizes of US\$500, US\$400, US\$300 will be awarded to the next best entries.
7. Additional prizes of US\$100 each will be awarded to any other entries judged by the panel to be of a sufficiently high standard.
8. The winning entry may be eligible for publication in the "Ports and Harbors" magazine.
9. At the decision of the panel, a bursary may be awarded to any one prize winner (subject to agreement of the employer).
10. The closing date for receipt of entries is 1st September, 1988.

Notes

- 1) The decision on the winner of the 1st Prize, named the "Akiyama Prize" will be made no later than 1st January, 1989 in order that the winner or the leader of the winning group entry can be notified in sufficient time to allow him or her to be able to accept the invitation to attend the 16th Conference in Miami.
- 2) In order to meet this timetable, all entries must be received by the Secretary-General no later than 1st September 1988. Failure to meet this deadline may render entries invalid for consideration.

medal from the IAPH President in front of all the delegates present at the Plenary Session.

Of considerable significance is the undoubted fact that this recognition by IAPH has served to provide not only the recipients themselves but also their colleagues at their respective ports with a real incentive to step up their research activities and to make their work more productive.

The past recipients of this top prize have been:

- Ms. Daphne Phinopoulos, Cyprus Ports Authority invited to the 11th Conference in Le Havre/Deauville, France, in 1979)
- Mr. Carlos Canamero, ENAPU, Peru (invited to the 12th Conference, Nagoya, Japan, in 1981)
- Dr. Josip Kirincic, the Port of Rijeka, Yugoslavia (invited to the 13th Conference in Vancouver, Canada, in 1983)
- Mr. D. Nunkoo, Mauritius Marine Authority and Mr. M. Meletiou, Cyprus Ports Authority (invited to the 14th Conference in Hamburg, Germany, in 1985)
- Mr. Jose Paul, Cochin Port Trust, India (invited to the 15th Conference in Seoul, Korea, in 1987)

The "Akiyama Prize"

The Akiyama Prize honours Mr. Toru Akiyama, one of the Founders and former Secretary-General (1967-1973) of IAPH, who played a key role in the establishment and later development of the Association and is currently Secretary-General Emeritus of IAPH and Honorary President of the IAPH Foundation. To recognize Mr. Akiyama's numerous achievements, at the 13th Conference of IAPH in 1983 in Vancouver, Canada, IAPH commended him with a specially commissioned bronze relief and a scroll of honor, and further named the first prize in the IAPH Award Scheme the "Akiyama Prize". The funds from which the prize is provided come from money Mr. Akiyama personally donated to IAPH for this purpose.

Award Scheme Posters

As in the former cases, an English version of the poster (A1 size, three colors) describing the conditions for entry to the Award Scheme 1988 is included in this issue. Members in French- or Spanish-speaking countries will receive additional posters prepared in those languages.

Memorandum of Agreement with CCC Exchanged

In his recent communication to the Head Office, Mr. F.L.H. Suykens, General Manager, Port of Antwerp and IAPH Liaison Officer with CCC, announced that the CCC/IAPH Memorandum of Agreement had been concluded and exchanged between the two organizations at Antwerp City Hall, being witnessed and attested by Mr. G.R. Dickerson, CCC Secretary-General, and Mr. Suykens representing IAPH.

It is hoped that IAPH member organizations will take note of the spirit of the document and try to establish even more concerted and effective measures for the betterment of Customs services by taking added initiatives in and jointly with every business sector, public or commercial, engaged in transport.

The CCC/IAPH Memorandum of Understanding, which was originally adopted by the Association at its Seoul Conference as Resolution No. 4, reads as follows:-

MEMORANDUM OF UNDERSTANDING BETWEEN THE CUSTOMS COOPERATION COUNCIL AND THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS

RECOGNIZING that offences against Customs laws, particularly drug smuggling, are prejudicial to the economic, social, fiscal and security interests of States and to the interests of all parties involved in legitimate international trade, and that such offences may involve the use of a variety of transport modes and handling facilities,

NOTING that the escalation in drug trafficking has caused Customs authorities to increase their surveillance and controls,

AWARE that such increased controls could result in additional expense and costly delays to port operators, and port users engaged in legitimate trade,

BELIEVING that increased co-operation between port operators and Customs authorities could significantly assist those authorities in the gathering of information and other aspects of combating Customs fraud, in particular drug smuggling,

BELIEVING ALSO that such co-operation would be of benefit to all parties in legitimate trade including port operators and their users and customers,

THE CUSTOMS CO-OPERATION COUNCIL and THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS have agreed as follows:-

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

Hajime Sato
Secretary General
The International
Association of
Ports and Harbors
(Signed at Seoul)

G.R. Dickerson
Secretary General

The Customs Cooperation
Council
(Signed at Brussels)

Witnessed and attested by
Fernand L.H. Suykens
General Manager
Port of Antwerp
IAPH Liaison Officer with CCC
(At City Hall, Antwerp)

IAPH Observes 32nd Anniversary

By Kimiko Takeda

November 7, 1987 is the 32nd anniversary of the foundation of IAPH. It was in November 1955 in Los Angeles that our Association came into being.

The 30th anniversary of the Japan Port and Harbor Association held at Kobe in 1952 provided the impetus for the eventual formation of our organization. Three years of hard work followed, culminating in the holding of our Inaugural Conference at the Hollywood-Roosevelt Hotel in California.

The second Conference took place four years later, and the IAPH Conference soon became a biennial event. The past 32 years have witnessed 15 such gatherings held at various venues throughout the world. The last one was held in Seoul, Korea, from April 25 to May 1, 1987, while the next is scheduled for April 1989 in Miami, Florida, U.S.A.

Mr. Wong Hung Khim of Singapore currently serves as President. Before his elevation to this position at the 15th Conference in Seoul, Korea, sixteen individuals had previously occupied the post.

Before the elevation of Mr. Hiroshi Kusaka to the post of Secretary General at the Seoul Conference, three people had served in this position. They were the late Mr. Gaku Matsumoto (1955—1967), Mr. Toru Akiyama (1967—1973) and Dr. Hajime Sato (1973—1987).

The Association's Board of Directors currently numbers 83 members from as many as 77 countries. The Directors' efforts are backed up by those of a 21-member Executive Committee, six Technical and three Internal Committees as well as a group of Legal Counselors.

IAPH cooperates closely with a number of international organizations including ECOSOC, IMO, UNCTAD and CCC, from which it has been granted NGO Consultative Status. Our organization has made a positive contribution to their programmes and has on occasion submitted recommendations stemming from the proposals of our Technical Committees, through specially appointed Liaison Officers.

The Seoul Conference provided the setting for a particularly historic initiative when it appointed a full-time IAPH European Representative. The IAPH Secretariat Staff in Tokyo will now be able to enjoy the valuable assistance of their colleague in London, Mr. A.J. Smith, on an exclusive basis, whereas Mr. Smith used to provide his services as IAPH Liaison Officer with IMO within his capacity as Secretary of the British Ports Association. Mr. Smith has already begun directing his efforts to exploring new avenues for strengthening IAPH's presence in the international maritime scene in Europe.

IAPH has been engaged throughout the past three decades in a constant search for ways to contribute to the development of world ports and port-related industries. Whatever achievements the Association may have made during this time have been brought about in no small measure by the dedication with which our worldwide membership has involved itself in the Association's activities.

Since its establishment 32 years ago, IAPH has developed a keen awareness of the need to adjust the scope and emphasis of its endeavors to cope with the changing structure

of the world economy. This sensitivity to external circumstances will remain one of the hallmarks of our organization.

An enduring strength of our organization has been the global nature of the cooperative links forged among its members. The Association has found, moreover, that IAPH activities have not only led to the valuable exchange of business-related information and services among its members but have also fostered deep friendships that have had enormous impacts on the personal lives of those concerned. Thus, as we celebrate our 32nd anniversary, we at IAPH renew our allegiance to the ideals of our predecessors, confident that the international ties of friendship and cooperation made possible by our organization will be the firm foundation for effective action to further the progress of ports and maritime industries on a truly world-wide basis.

IAPH Regular Members in 1956

Africa/Europe Region

Liberia	Freeport of Monrovia
Sweden	Port of Helsingborg

The Americas

Canada	National Harbours Board (Ottawa)
	Pacific Coast Association of Port Authorities (Vancouver)
Peru	Port of Callao Authority
U.S.A.	Port of New Orleans
	Board of Harbor Commissioners, Hawaii
	Port of Long Beach
	Port of Los Angeles
	Port of Oakland
	Port of San Diego
	San Francisco Port Authority
Venezuela	Administracion General de los Servicios Portuarios Nacionales (Caracas)

Asia/Oceania

China (Taiwan)	China Merchants Steam Navigation Co., Ltd. (Taipei)
	Kaohsiung Harbour Bureau
	Keelung Harbour Bureau
	Taiwan Navigation Co., Ltd. (Taipei)
Japan	Fukuoka Prefecture (Karita)
	Hiroshima Prefecture
	Japan Port and Harbor Association (Tokyo)
	Japan Reclamation Association (Tokyo)



IAPH Meetings

(Conferences and Executive Committee Meetings)

(16th) 1989 April 22-29 Miami



(1st) 1955 Nov 7-10 Los Angeles

(4th) 1965 May 10-14 London



1972 May 2-5 Lisbon



(8th) 1973 May 7-12 Amsterdam-Rotterdam

1962 Mar 7 Taipei



(5th) 1967 May 8-13 Tokyo

1952 Oct 9-11 Kob



(2nd) 1959 June 22-25 Mexico City



(6th) 1969 Mar 3-8 Melbourne



1960 May 19-20 Honolulu

(3rd) 1963 May 1-4 New Orleans



1966 Feb 13-16 Los Angeles

1968 Jan 16-20 New Orleans

(7th) 1971 June 6-12 Montreal



1978 April 16-17 Mombasa

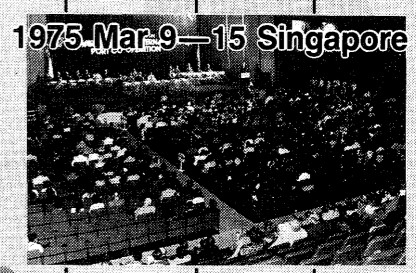


(11th) 1979 May 12-19 Le Havre

1970 Feb 10-12 Singapore

1974 Mar 27-28 Auckland

(9th) 1975 Mar 9-15 Singapore



1964 Feb 26-27 San Francisco

1976 April 25-27 Curacao

(10th) 1977 April 24-30 Houston



1973 Jan 16-17 San Juan

1982 May 6-7 Aruba

(13th) 1983 June 4-11 Vancouver



1984 May 23-24 Glasgow



(14th) 1985 May 4-11 Hamburg

1986 May 10-11 Auckland

(15th) 1987 April 25-May 1 Seoul

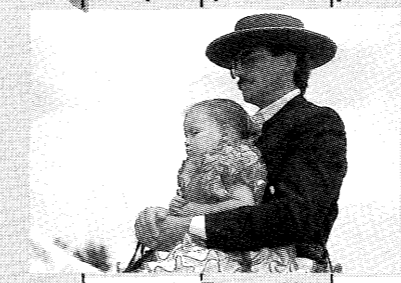


1980 April 21-May 2 Brisbane

(12th) 1981 May 23-30 Nagoya



(17th) 1991 Spain



Note: Those Italicized Are Executive Committee Meetings.

Japan Shipowners' Association (Tokyo)
 Japan Warehouse Association (Tokyo)
 Kanagawa Prefecture
 Kobe City
 Kokura Port Authority
 Mie Prefecture (Yokkaichi)
 Ministry of Finance (Tokyo)
 Ministry of Transportation (Tokyo)
 Nagasaki Prefecture
 Nagoya Port Authority
 Nippon Express Co., Ltd. (Tokyo)
 Osaka City
 Otaru City
 Petroleum Association of Japan (Tokyo)
 Port of Dokai Authority (Kitakyushu)
 Shizuoka Pref and Shimizu City
 Tokyo Metropolitan Government
 Yokohama City
 Philippines Manila Port Service
 Viet-Nam Directeur de Port de Commerce, Saigon

	1956 Nos of Members	1987 Nos of Members	Membership Units
--	---------------------------	---------------------------	---------------------

AFRICA/EUROPE	2	60	173
AMERICAS	11	52	138
ASIA/OCEANIA	29	117	302
Total	42	229	613

The Americas

(52)

Argentina	(1)
Bahamas	(1)
Brazil	(1)
Canada	(11)
Colombia	(1)
Ecuador	(1)
El Salvador	(1)
Haiti	(1)
Honduras	(1)
Mexico	(1)
Ned. Antilles	(2)
Panama	(1)
Peru	(1)
Puerto Rico	(1)
Trinidad & Tobago	(1)
USA	(26)

(11)

Canada	(2)
Peru	(1)
USA	(7)
Venezuela	(1)

AMERICAS
1956
Nos of Members

AMERICAS
1987
Nos of Members

Africa/Europe

(60)

Algeria	(1)
Belgium	(1)
Benin	(1)
Cameroon	(1)
Cyprus	(1)
Denmark	(4)
Djibouti	(1)
Ethiopia	(1)
Finland	(1)
France	(8)
Germany/W	(2)
Ghana	(1)
Iceland	(1)
Ireland	(4)
Israel	(1)
Italy	(1)
Ivory Coast	(1)
Kenya	(1)
Liberia	(1)
Mauritius	(1)
Mozambique	(1)
Netherlands	(5)
Nigeria	(1)
Norway	(3)
Portugal	(1)
Spain	(3)
Sweden	(3)
Tanzania	(1)
Turkey	(1)
UK	(4)
USSR	(1)
Yugoslavia	(1)
Zaire	(1)

(2)

Liberia	(1)
Sweden	(1)

AFRICA/EUROPE
1956
Nos of Members

AFRICA/EUROPE
1987
Nos of Members

Asia/Oceania

(117)

Australia	(16)
Bangladesh	(2)
Burma	(1)
China, ROC	(4)
Fiji	(1)
Hong Kong	(1)
India	(8)
Indonesia	(2)
Iran	(1)
Japan	(38)
Korea	(4)
Kuwait	(2)
Malaysia	(10)
New Zealand	(10)
Oman	(1)
Pakistan	(2)
Papua New Guinea	(1)
Philippines	(2)
Qatar	(1)
Saudi Arabia	(1)
Singapore	(1)
Solomon Islands	(1)
Sri Lanka	(1)
Tahiti	(1)
Thailand	(1)
UAE	(3)
Yemen	(1)

(29)

China, ROC	(4)
Japan	(22)
Philippines	(1)
Thailand	(1)
Viet-Nam	(1)

ASIA/OCEANIA
1956
Nos of Members

ASIA/OCEANIA
1987
Nos of Members

IAPH Abidjan Meetings: Mr. Moulod to Host Mid-term Meetings; Mr. Smagghe to Serve As Coordinator

At the invitation of Mr. Lamine Fadika, Marine Minister, the Ivory Coast, the mid-term meetings of Exco and other Committees will take place in Abidjan in the last week of April, 1988. Mr. J. M. Moulod, Director General of the Port of Abidjan, will host the meetings.

In order to best prepare and organize the planned meetings in Abidjan, Mr. Jean Smagghe, Director General of the Port of Le Havre Authority, who is currently the Chairman of the IAPH Ship Sub-Committee, has recently confirmed his willingness to serve as Coordinator with the Port of Abidjan, in accordance with the request earlier made by the Secretary General. The Tokyo Head Office has long felt it important for the meetings of IAPH in French-speaking countries to be supported to a significant extent by French members, who certainly have a great influence on our IAPH endeavors.

Mr. Smagghe, who had visited the Port of Abidjan heading the mission from Le Havre early this year, kindly made it known that he and his staff in the Port of Le Havre would be willing to assist the Tokyo Secretariat in liaising with the host port in Abidjan so as to facilitate the communications among the members involved, Exco, the committee members attending the Abidjan meetings and the Secretariat in Tokyo. Secretary General Kusaka is grateful for the cooperation pledged by Mr. Smagghe and is most relieved with this back-up facility in making the necessary arrangements for the forthcoming Abidjan meetings.

Guidelines for Fund Administration

As previously reported, this matter was raised at the Seoul Conference but was not finalized, and at the request of the Executive Committee, the Secretary General has been working on this newly-suggested scheme in consultation with the Finance Committee.

The Executive Committee, at its meeting by correspondence called on September 30, 1987, adopted guidelines concerning the administration of funds.

The Exco at the same time endorsed the first disbursement from the funds apportioned in the budget for 1987 and 1988 for activities to be primarily carried out by the Committee on Legal Protection of Port Interests (Chairman: Mr. Paul Valls, Port of Bordeaux, France). It is intended that the major programmes included will share the costs for the IAPH representation to the technical meetings of IMO and UNCTAD by Mr. Andre Pages.

The "Guidelines for Fund Administration" reads as follows:-

1. Submission of Annual Project Proposal

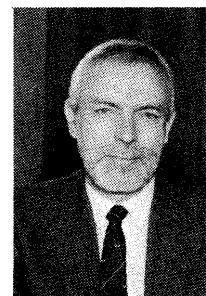
The Chairman of a Technical Committee may submit an annual proposal of the Committee's activities to the



Mr. Fadika



Mr. Moulod



Mr. Smagghe

The provisional schedule for the meetings as suggested by the Secretary General is as follows:

- Sunday, April 24:** Arrival of Delegates
 - Monday, April 25:**
 - Morning: Technical Committees
 - Afternoon: Technical Committees
 - Tuesday, April 26:**
 - Morning: Technical Committees
 - Afternoon: Membership Committee/Technical Committees
 - Wednesday, April 27:**
 - Morning: Finance Committee/Technical Committees
 - Afternoon: Constitution and By-Laws/Technical Committees
 - Thursday, April 28:**
 - Morning: Executive Committee
 - Afternoon: Executive Committee
 - Friday, April 29:**
 - Morning: Executive Committee
 - Afternoon: Technical Visit/Excursion
 - Saturday, April 30:** Departure of Delegates
- Further details of the meetings will be announced upon confirmation from the respective Technical Committee Chairmen as to whether or not their Committees plan to meet in Abidjan.

Executive Committee in advance of its regular meeting. Any such proposal will include a statement of expenses to be incurred in implementing the proposal.

2. Allocation of Funds

The Executive Committee, in its sole discretion and power, will determine the amount of funds to be allocated for the proposal in consultation with the Finance Committee and the affected Technical Committees.

3. Disbursement of Funds

Disbursement of funds under the Technical Committee Financial Support will be made by the Secretary General in accordance with the disbursement schedule included in the proposal. All disbursement will be made directly to the organization to which the individual(s) contemplated to implement the project belongs.

4. Administration of Funds by the Receiving Body

The recipient organization may disburse funds to the individual(s) who will implement the project as wholly or partly a natural extension of the individual's normal duty with that organization.

5. Reporting and Settlement of Accounts

It will be the responsibility of the recipient organization to account for the expenditure of the disbursed funds. As soon as a funded project has been completed, but in no event later than six weeks after the disbursement, the

(Continued on Page 14, Col. 2)

Chairmen of COPSEC Sub-Committees Meet in Paris

Mr. J. Dubois, Chairman of the Committee, in his recent communication to the Head Office, announced that a meeting of the Chairmen of sub-committees of COPSEC had been held in Paris on 9th September.

Major items discussed at the meeting were:-

- The definitive terms of reference and membership of the Sub-committees
- Projects to be proposed
- Short and long-term working programs
- The liaison/coordination with inter-governmental, international and national institutions

Mr. Samuels Elected Exco Member, Ms. Davis Named Legal Counselor

At its meeting by correspondence held on September 30, 1987, the Board approved the election of Mr. Neil Graham Samuels, Chairman, the Port of Geelong Authority, as an Exco member to fill the vacancy created by Mr. Colin Jordan, who had resigned as General Manager, the Port of Melbourne Authority.

The same Board meeting approved the appointment of Ms. Algenita Scott Davis, Counsel to the Port of Houston Authority, as Legal Counselor to fill the vacancy created by Mr. J. L. Wells, who had resigned as Chief Dy. Executive Director, Port of Los Angeles.

IAPH Surveys Status Report

1. Marine Accidents/Incidents in Port Areas/Channels and Approaches

The Head Office is in receipt of 65 replies from members, while including several entries involving more than one incident reports from a single port. The replies are now being compiled by the Head Office for submission to the technical committees for further scrutiny and consideration.

It is planned to attach to the projected report a very informative survey by Lloyd's entitled "Reported Serious Casualties in Port by Country", which was extracted from "Lloyd's Databank", at the request of this Office.

2. Sister Ports Affiliation Survey

Nearly 90 replies have been received by the Head Office to this date, though they include cases where a single port has submitted more than one entry. Considering the fact that this Office is still receiving replies, the closing date will have to be postponed by a few weeks. It is expected that a preliminary report will be made available towards the end of this year.

As a by-product of this survey, the Head Office has been asked to intervene or act as an intermediary party for a couple of ports, Japanese and overseas, for match-making and preparatory studies.

Membership Notes:

New Member

Associate Member

Department of Maritime Studies, University of Wales Institute of Science and Technology (UWIST) [Class D] (U.K.)

Address: Aberconway Building, Colum Drive.

Cathays Park, Cardiff CF1 3EU

Office Phone: 0222 42588

Telex Number: 497368 UWIST G

Senior Lecturer: Dr. B.J. Thomas

Bursary Recipients

The following individuals have been awarded IAPH Bursaries by the Chairman of the IAPH Committee on International Port Development (Mr. C.B. Kruk, Director, TEMPO, Port of Rotterdam) since the previous announcement:-

Full bursary (Sep. 08)

Mr. Garudin Muyua, Assistant Traffic Superintendent, Sabah Ports Authority, Malaysia

Full bursary (Sep. 21)

Mr. Mwakajila, Tanzania Harbours Authority (to attend the PACT 02 course at the Port of Rotterdam)

Partial bursary (Sep. 24)

Mr. M.J. Kurian, Secretary, Cochin Port Trust, India (to attend the Port Training Course on Port Operation and Management, at Le Havre, under the auspices of IMO London)

Guidelines for Fund

(Continued from Page 13, Col. 2)

organization will submit to the Chairman of the Technical Committee involved a statement of expenses. It will also be the responsibility of the organization to verify that the funds were appropriately spent. A statement of expenses to be submitted to the Chairman of the Technical Committee must be accompanied by a report on the project. Such report will describe the actions taken and their assessment. Upon receipt of such report, the Chairman of the Technical Committee will transmit the report to the Secretary General for compilation and further report to the Association.

6. Funding in a Transitional Period

Despite the above, the Chairman of a Technical Committee, if and where a project requiring disbursement of funds arises before or after the normal budgeting period, can ask for funding by submitting a request to the President, after consulting with the Vice President in the region and obtaining his support for the project and acknowledgement of the need for funding. The proposal shall be firstly considered by the President in consultation with the Secretary General, and later by the Executive Committee for approval.

7. Indemnity of the Association

IAPH will under no circumstances be liable to any party in the event of any personal injury or loss of life. The recipient organization will not hold IAPH responsible for any such occurrences, and will defend the Association against any claim(s) or action(s) arising out of the funded project.

Maryland Trade Mission

Sixth from left: Hon. William Schafer,
Governor of the State of Maryland
Second from left: Mr. D. Wagner,
Maryland Port Administrator



Visitors to the Head Office

Mr. Peter J. Rimmer, M.A., Ph.D., Dept. of Human Geography, Research School of Pacific Studies, The Australian National University, visited the Head Office on September 1, 1987, during his two-week study and research stay in Tokyo, and discussed the recent trend concerning port and urban development in Japan with Mr. R. Kondoh, Dy. Secretary-General. Mr. Rimmer, the editor of the "ASEAN-Australian Transport Interchange," has been associated with the Head Office during the last several years in connection with his research work on the transport-oriented urban development in big cities in the region.

On 22 September, 1987, at a Tokyo Hotel, a reception commemorating the twentieth anniversary of the establishment of the Tokyo Office of the Port of Bremen was held, with the participation of more than 150 resident business leaders. Dr. Wemer Maywald, Member of the Executive Board of Bremer Lagerhaus Gesellschaft, in his speech emphasizing the yearly visit to Japan of the Bremen delegation, stated that trade with Japan during the last twenty years has been increasing steadily.

Noting that the traffic volume at Bremen Port has markedly increased in 1987, especially that involving containers and automobiles, he continued, that the Port's computer systems which are linked with a vast variety of business interests in Europe have been an unquestionable

driving force element behind the Port's attainment of such a large volume of traffic.

On 28 September in Tokyo, a reception was held, under the hostship of the Hon. William Schafer, Governor of the State of Maryland. It was attended by representatives of resident business circles. The reception was given by the State of Maryland Far East Trade Mission comprising some twenty members encompassing trade development, transport, banking and commercial sectors of the State of Maryland. Among the mission members were Mr. J.E. Randall Evans, Secretary of Economic and Employment Development; Mr. R. Trainor, Secretary of Transportation, Mr. D. Wagner, Maryland Port Administrator, and leading representatives from banking and in trading and shipping businesses.

In Japan, the Mission visited Nagoya Port, with which the Port of Baltimore is affiliated as a sister port, and Kawasaki City, with which the City of Baltimore is involved as a sister city. The Mission was scheduled to proceed to Kaohsiung, another sister port, in Taiwan.

Mr. R. Kondoh met Mr. D. Wagner and expressed thanks for the Port's cooperation with the Association's activity noting the recent appointment of Mr. R. Green, Deputy Port Administrator, as a member of the Finance Committee.



Port of Bremen Mission

Second from left: Dr. Wemer Maywald, Member of the Executive Board of Bremer Lagerhaus Gesellschaft
Far left: Mr. S. Tsuyama, Tokyo Representative of the Port

OPEN FORUM

Electronic Data Interchange and Ports

By J. Raven

IAPH Reporting Expert for CCC (*Address at FIATA Facilitation Forum — Antwerp, September 15, 1987*)

I have to begin by explaining what I'm not going to say and whom I'm not going to say it for.

I'm not going to describe, or even list, current and planned port-based EDI (electronic data interchange) systems. This would take ten minutes of tightly-packed acronyms.

Nor am I going to speak on behalf of IAPH. I assist the Association in certain facilitation matters, but am, in no sense, its spokesman, so what you are going to hear from me is an expression of personal opinion, made slightly more reputable by a fairly close knowledge of IAPH activities and objectives.

What, then, am I going to say? In the short time available to me just a few words about the ports as natural centres for major international trade EDI systems, with short comments on customer requirements, public policy and the wider facilitation implications of EDI.

If forwarders are the focal point of trade data interchange then ports are the crossroads. Massive information flows from shipping companies, rail, road and waterway carriers, container operators, importers, exporters, Customs, banks and, of course, forwarders, pass through the port and interface with its own information systems.

These flows are increasingly concentrated in time and space. Intensive investment in container systems — vessels, boxes, handling and operational control equipment — have forced a fierce tightening of origin to destination schedules. Information handling habits and resources have had to be adapted to service this acceleration.

These trends have been accentuated by concentration of major container flows at a relatively small number of ports.

Similar forces had been at work, several years earlier, at international airports. High-speed air transport and rapid cargo-throughput growth had, in response, produced a number of important EDI schemes at London, Paris, Frankfurt and Brussels.

When, ten or fifteen years ago, attempts were made to produce parallel arrangements to handle maritime traffic at, for example, London and Le Havre/Marseilles, a number of practical difficulties appeared. Shipowners were more numerous and less disciplined than airlines. Traffic was much less regular. Funding was more difficult. Air agents were smaller in number and more familiar with data-processing than the general body of surface forwarders. Air freight participants were much more closely knit, and worked in closer physical proximity than relatively amorphous port communities.

Several successful port-based EDP systems were, in fact, produced but these were unable to accommodate the vital Customs clearance functions which had been the core and

catalyst of airport developments.

Today we are in very different circumstances. The shift to container traffic has gone much further. Customs in many countries are, themselves, integrating maritime and airfreight EDP systems. Hardware has become cheaper and more versatile. Suitable software has been developed. The general body of traders, forwarders and carriers is much more familiar with computer techniques and eager to extend in-house systems to include a range of external communications. We have a whole new technical and commercial resource in numerous active, export Value Added Network suppliers.

The time has clearly come for ports to move and be moved into the central position in international trade EDI development.

Their positions as neutral — often public — organisations, usually well-connected to their commercial communities by port consultative committees, added to their close working contacts with Customs, give them particular strategic advantages as hosts and base points for international trade EDI systems.

What do the ports and their customers want out of those systems?

They want a reduction in the volume of information required, a better fit between the points at which each item is required and the operational convenience of the party supplying it, a cut in the total number of procedural checks and interchanges, and a simplification of the whole procedural obstacle course. They want fewer errors, less repetition, higher cost-effectiveness and much improved management control.

They do not want the relatively temporary relief of EDI practices which would simply plaster twentieth century techniques over nineteenth century procedures, stimulate extra demands from statisticians or bureaucrats and, by just missing real standardisation, enforce the employment of a new and very expensive level of office staff or Value Added Network Suppliers to man continuing interfaces.

They particularly want harmonisation, if not unification, of Customs and port clearance procedures, so that the physical movement of goods in and out of port should not be subject to two separate set of computerised complexities.

Above all, they want to be assured that EDI will not erect new barriers within traditional trading communities. The old paper system creaks, but it is universal. No-one who can read and write is disqualified. But anyone locked into a major computer system has to ask himself, at a certain point in his investment, how far he can afford to communicate with suppliers or customers who will not or cannot comply with the conditions for direct computer-to-computer communication.

Ports are highly competitive and seldom in any position to dictate their customers' arrangements. Even today it is just not practicable for some ports to introduce the simple discipline of a compulsory standard shipping note. So they are at the receiving end of any major mismatches and incompatibilities in the information flows which they have to accept, interpret and utilise.

Insensitive, piecemeal computerisation would intensify rather than reduce this interfacing work-load.

These are some major commercial needs. What about the influence of public policies?

We have to take proper account of Customs enforcement as well as facilitation. Illegal drug traffic is quite rightly an issue of acute public concern, and this concern could have important practical consequences for port managers. There will be little point in backing up and servicing rapid through-movement operations by expensive EDI arrangements if, in practical fact, Customs are obliged by public opinion, reflected in Departmental instructions, to open up and search a growing proportion of containers.

Concern at drug smuggling, compounded by bans on arms and alcohol, already produces acute sub-optimisation of container movements through several Middle East ports. Elsewhere in the Third World, containers are often still treated as general cargo by national Customs authorities, and illicit drug traffic is easily invoked to delay or suppress less rigid clearance techniques.

This gives us a foretaste of the problems which could be set for ports generally if facilitation ignores the claims of enforcement and public anxiety at drug abuse intensifies.

Ports are bound to be at the sharp end of any violent reaction towards harsher enforcement practices. IAPH have just signed a Memorandum of Understanding with the Customs Co-operation Council to combat drug smuggling and will seek to bring this to focus in all the members' computer projects. EDI could be a major help to enforcement if port-based systems are constructed so that they improve the supply of relevant information to administrations, are designed to show up that key index to smuggling — the unusual or exceptional in any consignment — and are operated by people who see the need to work consistently and actively with anti-drug forces.

Another important element of public policy, reflected in this Conference, is the interest and support of the EEC Commission for EDI in general and for the use of international standards in particular.

This is almost bound to be highly beneficial in all aspects of intra-Community trade, but its value in fully international trading will depend on the ways in which the Commission can manage its standardisation policy.

If the Community were to take too narrow a view of standardisation needs, or were to issue directives or take initiatives which imposed standards in Europe before they had sufficiently wide acceptance elsewhere, very serious stresses could be created in the world's trading systems.

Some EEC ports, for example, may have over 50% of their container traffic with the Far East, where even a USA/EEC standard, which is still far from implementation, may have little or no validity. Furthermore IAPH membership includes ports in many developing countries and these, unless well informed of EEC developments, and given appropriate advice and assistance, may well install or extend computer systems without any regard for standardisation policies.

Such incompatibilities will be a problem for ports, but

an even greater problem for traders, forwarders and carriers, who have to build at least two, often very many more, ports into their movement and communication networks for every single consignment.

This suggests that the EEC Commission should time its EDI strategies so that they can be supported by effective and powerful international standards negotiations with all major trading partners, and extend its development and aid policies to follow and fit in with Community EDI advances.

Fortunately the Customs Co-operation Council, with its world-wide membership of over 100 Customs authorities, and its very active Permanent Technical Committee, can link EEC EDI policies to truly international practice, through the powerful links, already noted, between Customs and port clearance procedures.

The current IATA/ICC discussions on interface standards are a useful precedent, and we may well envisage similar discussions between the Council and IAPH, possibly in some triangular arrangement with the ICS.

The progress of new EDI consultative organisations, such as the recently formed International Data Exchange Association, with adequate user-representation could also promote essential compatibility between national, sectoral and regional EDI systems.

But these are just reservations. I have to end on a more positive note of welcome for the EDI philosophy. Properly applied it can transform port management and rid it of so many chores and kinks which block it off from fully effective operations.

It could face up to and overcome the folly of the documentary credit/negotiable bill of lading "system," which clogs the world's ports with innumerable consignments, awaiting the physical movement of pieces of paper through the leisurely and costly intricacies of the banking system and the chaos of postal communications.

It could enforce the adoption, in sea transport, of a sensible standard marking system, allied to the maritime equivalent of the uniquely numbered airwaybill. It could revolutionise the monitoring and control of dangerous goods.

By linking all participants, it could consolidate export and import transactions into a single commercial function and so give arm's length traders the same advantages of integrated control as those currently enjoyed by multinationals.

Finally we should look at what might be possible if ports can shift into positions of eminence and advantage in broadly based international EDI systems. Every trading community prospers and operates according to the quality, volume and availability of essential information. Only part of this need will be met by classical EDI systems which are concerned, almost exclusively, with transaction information. But every business also needs information about markets and opportunities. Every manager needs to link opportunities and markets to profitable, successful transactions by sensible well-informed decisions.

Ports have — or have privileged access to — much very valuable trading information. They can easily exploit their vast spread of commercial and operational contacts to enlarge and improve this resource.

A basic port-based EDI system can readily form the core of an infinitely wider and more valuable computerised information resource which could attract input as readily as customers and irrigate the expansion and prosperity of entire trading and transport communities.

International Maritime Information **WORLD PORT NEWS**

The Role of the Port Authority in Ship to Ship Transfer of Liquefied Petroleum Gas in Port Areas

The publication of this important paper was realized by the good offices of ICS, OCIMF and SGITTO. This office expresses its sincere appreciation to them for their co-authorship.

In recent years the movement of liquefied petroleum gas (LPG) in large fully refrigerated liquefied gas carriers has developed significantly, and in certain parts of the world has outpaced the provision of suitable terminals able to receive large vessels and/or fully refrigerated LPG cargoes. Nonetheless in order to retain the advantages gained from using large gas carriers, ship to ship (STS) transfer of LPG has been evolved and is now a well established practice in many parts of the world, and guidelines have been produced covering initial arrival of the ships, transfer of cargo and safety procedures (see reference 1).

Although this paper does not specifically address the STS of liquefied natural gas (LNG), in principle the recommendations and guidance offered for LPG may be considered equally relevant to similar operations involving LNG.

Whereas the transfer of cargo between oil tankers normally occurs offshore, transfer of LPG offshore may be unsuitable, particularly when ships of dissimilar size are involved and/or when floating storage vessels are employed. Various schemes for STS transfer of LPG within harbour limits have therefore been developed and are worthy of detailed consideration. The introduction of such operations will be of benefit to the port, but may also affect existing port users. It is therefore important to ensure high standards of safety which should involve the use of

well found ships and equipment, responsible shipowners and the full advice and support of the Port Authorities.

It is the purpose of this paper to review those areas where a Port Authority without previous experience of such operations may become involved with and wish to influence the initial development to ensure that adequate safety standards are established.

The Role of the Port Authority

Where an STS transfer operation is envisaged within the jurisdiction of a Port Authority, the permission of the authority must be obtained by the operator of the transfer. The granting of such permission should however be preceded by detailed discussions between the operator and the authority and, if appropriate, shipowner and local authorities. These discussions should draw on the technical expertise of the operators and the local expertise of the Port Authority to develop fully and safely the operational requirements and contingency plans for the proposed transfer.

Thus a Port Authority in seeking the necessary assurances, and the operator in providing any required information should jointly review and discuss:-

1. Harbour Bye-Laws and Regulations

As a first step it will be prudent to assess whether STS transfer of LPG may be permitted within the framework of the Port Authority's Bye-Laws and existing port regulations. Only then will it be possible to decide whether such an operation is feasible and if so, how it may be accomplished.

2. Designated LPG Transfer Location

In carrying out its assignment of the location to be designated for LPG STS transfer the Port Authority should be aware of normal marine

and safety considerations. In addition, it may be appropriate to take account of the nature of LPG and consider:

- safety distances for approach of other craft.
- proximity of other cargo handling operations.
- the location of possible ignition sources.
- whether a berth not already subject to petroleum regulations can be made suitable.
- the proximity of residential and industrial areas to the transfer site.
- exposure to environment conditions, i.e. wind, waves and current.

3. Safety Control

The effect of the establishment of an LPG STS transfer operation on port operations and safety should be considered particularly if it involves the relatively long term presence of a large gas carrier in the port and/or an increased flow of traffic. In this respect it is important for the Port Authority to consider how any new traffic control requirements, safety distances, etc. will integrate into established arrangements within the port while the LPG carriers are anchored or underway within port limits.

The transfer operations should be coordinated by a responsible person (coordinator) who acts in an advisory capacity to both matters and as an intermediary between the matters and the authorities.

He should be authorized and obliged to take corrective action, including non-commencement or suspension of operations, if the safety of operations can no longer be guaranteed

and appropriate action is not taken to rectify. The role of the coordinator is to ensure that both vessels can meet to the fullest possible extent, their responsibilities to ensure a safe operation. The coordinator should preferably be a designated port officer. However, one of the masters, preferably the master of the discharging ship, could be appointed the coordinator.

It has been found that a simple reporting procedure at various stages during the loading/unloading operation serves to keep the Port Authority abreast of events, and aware of critical phases.

Recommendations on the safe transport, handling and storage of dangerous substances in port areas have been published by IMO (see reference 4). The recommendations include a ship/shore safety check list, guidelines for the completion of which have also been issued (see reference 5). The check list and guidelines have been adopted internationally and should be used as a basis to develop a check list to suit STS transfer conditions and any special local requirements.

Similarly, the operator should develop a contingency plan covering avenues of communication and response requirements to limit the effect of an emergency. Again full discussion of such a plan with a Port Authority and other Port Services is essential for the overall safety of the port.

4. Pre-Arrival Requirements

To assure that every LPG carrier proposed for use meets applicable safety standards, the Port Authority may insist that each is in possession of a valid IMO Certificate of Fitness, issued by or on behalf of the flag administration of the country of registration.

As some flag states have not adopted the relevant IMO codes, letters of compliance or other certificates offered as equivalents will require careful assessment, taking into consideration the issuing authority, period of validity and detailed content. Additionally, a Port Authority may wish to assure itself that the ship is operated in compliance with its IMO Certificate of Fitness or equivalent, that the standards set in the "International Convention on Standards

of Training, Certification and Watchkeeping 1978" (STCW 78) are being observed, that the master/loading master in charge of operation/cargo transfer and the ships' officers who will be immediately involved in STS operations are experienced in LPG cargo handling, and that a common language can be utilized to ensure good communications between the ships to be engaged in the transfer. Compatibility of the cargo handling systems on the two gas carriers with particular reference to cargo temperatures and pressures during transfer should also be confirmed at this stage.

Compliance with these requirements may best be established in the initial discussions with the operator of the transfer and by use of a short pre-arrival check list.

5. Arrival Inspection

Appropriate pre-arrival data will form a good base to assist a Port Authority to inspect incoming LPG carriers in order to satisfy itself that the standard of each ship, its equipment and crew can provide an operational level acceptable to the requirements of the Port.

Such inspections not only confirm the conditions on board the LPG carrier, but allow the Port Authority to gain some familiarity with the vessel, which can prove invaluable should an emergency arise.

To derive the most benefit from an inspection, it is desirable that the Port Authority representative acquires some training and, preferably, experience with LPG carriers and their operations.

The Oil Companies International Marine Forum (OCIMF) has addressed the problems associated with ship inspection and published a booklet on the subject (see reference 2). This booklet can provide a suitable starting point for developing an appropriate check list to meet a Port Authority's own needs.

In addition, a Port Authority may use the inspection as an opportunity to ensure that the ship is in possession of:

- Relevant National/Local regulations as may be necessary,
- ICS/OCIMF Ship to Ship Transfer Guide (Liquefied Gases) (reference 1),
- ICS Tanker Safety Guide (Liquefied Gas) (reference 3),

and other relevant documents that a Port Authority may consider necessary.

6. Berthing Arrangements

The procedures for securing two LPG carriers alongside each other, prior to transferring cargo, have been addressed in reference 1. A Port Authority may find this booklet useful for reviewing the essential hardware and mooring arrangements required to ensure the safety and security of the two ships.

In planning the transfer, the operator should discuss the provision and use of equipment, including tug assistance for berthing/unberthing, with the pilots, and the agreed proposals should be submitted to the Port Authority for their approval. Other limitations, such as visibility, weather conditions, darkness and tidal conditions should also be considered in determining acceptable operational plans.

7. Cargo Operations

A Port Authority, having satisfied itself of the total integrity of the operation and the competence of the ship's personnel, may not wish to become involved in the actual transfer of cargo. Nonetheless the Port Authority may wish to satisfy itself:

- a) that the transfer hoses and associated equipment are in good condition, properly checked and tested before each usage and type approved in accordance with the IMO gas carrier codes.
- b) that proper arrangements have been made to purge hoses with an inert gas, preferably nitrogen, before and after a transfer of LPG.
- c) that proper means of communication are available between ships, and between the Port Authority and the person on board the ship co-ordinating the transfer operations.
- d) that reliable means of access to and from both ships for both routine and emergency purposes are available at all times during cargo transfer and unauthorized access to the site is prevented.
- e) that no deliberate venting of cargo tanks is allowed while alongside.
- f) that conditions are agreed under which transfer operations will be

suspended and arrangements made to ensure the immediate suspension of transfer operations when required.

- g) that any LPG spillage is reported and is kept to an absolute minimum.

8. Background Information

In addition to the references in the text, references 6, 7, 8 and 9 below provide general background information which a Port Authority might find useful in making an appraisal of STS transfer of LPG.

References

1. "Ship to Ship Transfer Guide (Liquefied Gases)"
ICS/OCIMF
2. "Safety Inspection Guidelines and Terminal Safety Check List for Gas Carriers" OCIMF
3. "Tanker Safety Guide (Liquefied Gas)" ICS
4. "Recommendations on the Safe Transport, Handling and Storage of Dangerous Substances in Port Areas including: (Ship/Shore Safety Check List Guidelines)"
IMO
5. "Ship/Shore Check List Guidelines"
ICS/IAPH/OCIMF/INTER-

- TANKO/CEFIC/SIGTTO
6. "Safety Guide for Terminals Handling Ships Carrying Liquefied Gases in Bulk" OCIMF
7. "A Guide to Contingency Planning for the Gas Carrier at Sea and in Port Approaches"
ICS/OCIMF/SIGTTO
8. "A Guide to Contingency Planning for the Gas Carrier Alongside and Within Port Limits"
ICS/OCIMF/SIGTTO
9. "Guidelines on Port Safety and Environmental Protection
IAPH

CEFIC	European Council of Chemical Manufacturers Federation
IAPH	International Association of Ports and Harbors
ICS	International Chamber of Shipping
IMO	International Maritime Organization
INTER-TANKO	International Association of Independent Tanker Owners
OCIMF	Oil Companies International Marine Forum
SIGTTO	Society of International Gas Tanker and Terminal Operators

World Shipping in Transition — Co-operation the Key —

BIMCO at ICC Shipping Conference in Bombay

(This office notes with thanks that this article was made available for reproduction in the journal from BIMCO Bulletin 2/87 by the courtesy of BIMCO.)

The President of BIMCO Atle Jebsen, was invited to chair the Fourth Session during the ICC Shipping Conference in Bombay under the topic "Regional and Inter-regional issues: Changes and Challenges". The Conference itself was generally very well attended - over 200 persons from 42 different countries and various international organizations were present.

Many interesting papers were presented by numerous speakers, all aimed at identifying the problems the Shipping Industry is facing, and offering solutions of which, unfortunately, there

were very few.

At a round table discussion at the end of all the six Sessions, various sessional chairmen were asked to offer their observations from the deliberations.

Co-operation a Central Factor

Mr. Atle Jebsen summarized by saying that the conference certainly had contributed to identifying the many problems facing the industry, but raised the question of whether there were indeed any solutions, and if there were was the Shipping Industry willing to live by these? He highlighted co-operation as a central factor, but co-operation in an endeavour to achieve a higher degree of discipline. He felt that owners should plan investments for tomorrow's needs. An effective cost

control and introduction of the latest technology was needed, but certainly also imagination and an innovative approach. He supported the scrap/build philosophy, but emphasised that in order to reach a balance between supply and demand faster, increased scrapping was necessary.

On the subject of co-operation, he admitted that some governmental involvement was needed in view of the social consequences of shipyard closures. He felt that protectionism was dangerous in as much as this would lead to closed circle economies and subsequently stagnation. Mr. Atle Jebsen felt that it had been very valuable to be together in Bombay, and he felt that now that all the problems had been identified and some few effective solutions been offered, the participants would go back to their home countries and do something about it.

There were, indeed, many interesting comments during the Question/Answer Sessions. One participant reflected over the repeated statement about co-operation towards a common goal. He questioned whether there was a common goal between developed and developing countries.

Financing

One delegate drew attention to the fact that Japan, Korea and China were absent from the meeting, stating that these countries accounted for more than 80 percent of the total world shipbuilding capacity, and emphasized that it was necessary to curtail shipbuilding capacity. In this connection, he suggested that banks should limit financing to only 40 to 60 percent of the new-building price, not over 85 percent as often practiced.

There was general acceptance that Conferences of this nature in the long term would lead to a better understanding between maritime nations.

In his final statement, the Chairman of the Conference, Mr. V.D. Chowgule, made the following observations:

1. General Conclusions

World shipping today is in transition and faces challenges greater than ever. Shipping is not an end in itself but a key element in the service of world trade. Thus its overall health is of vital long-term importance to the efficient, economic and reliable carriage of goods between all nations, whatever their political or economic systems.

Distinct progress has already been achieved in implementing the concept of cooperation among all nations and all sectors of the maritime business, endorsed by the ICC in 1981 at its IVth International Shipping Conference in Caracas (Venezuela). Nevertheless the twin evils confronting shipping — over-capacity and protectionism — remain.

The private sector accepts its responsibility to take a lead in suggesting solutions to this dual threat, thereby stimulating relevant governmental initiatives worldwide and regionally.

The need for understanding and co-operation embracing all aspects of shipping within the business community, among governments, and between governments and business is both paramount and urgent.

Grave concern was expressed by delegates about the continuing attacks on innocent merchant ships in the Gulf area in contravention of established principles of international law. The Conference applauded the recent initiative by a top level international shipowners' delegation* which had urged the U.N. Secretary General to persist in his efforts to end these attacks. The Conference called on ICC National Committees, particularly in countries represented on the U.N. Security Council, to exhort their governments to address this situation again as a matter of urgency.

2. Specific Recommendations

The Conference made the following specific recommendations:

Shippers and Charterers should:

- recognize that whatever the short-term benefits, uneconomic freight rates cannot be in the long-term interests of efficient maritime transport
- strive to eliminate barriers to their freedom to choose the carrier best suited to their needs
- ensure that machinery exists to enable their views to be effectively presented to shipowners and particularly to liner conferences.

Shipowners should:

- refrain from ordering new ships except where a clear commercial need is established
- give preference to the acquisition of existing tonnage rather than new tonnage whenever feasible
- accelerate the scrapping of uneconomic tonnage

- cooperate with cargo interests, governments and others towards the elimination of any barriers to the free movement of shipping services.

Shipbuilders should:

- take positive steps to bring shipbuilding into line with the requirements of world shipping
- recognize that shipbuilding subsidies exacerbate the fundamental problem of excess shipbuilding capacity.

Banks and other financial institutions should:

- refrain from financing speculative shipbuilding orders or other speculative shipping deals
- insist on adequate equity participation by the owner
- decline to trade ships contrary to normal commercial principles in shipping.

Underwriters should:

- seek to compensate shipowners more fairly for proven excellence in maintenance and good claims records
- refuse to insure ships which are sub-standard in any manner.

Classification societies should:

- ensure that they do not permit any lowering of standards for competitive reasons.

All shipping interests (shipowners, shippers, shipbuilders, bankers, brokers, underwriters, forwarders, and others) should:

- work towards a better understanding of the respective problems of each sector of the maritime business
- promote fair competition, and the breaking down of impediments

to the free flow of shipping services

- co-operate towards the renewed economic well-being of shipping
- encourage the highest standards of business practice and ethics.

Governments should:

- reject all forms of protectionism and support the current GATT negotiations towards liberalization of trade in goods and services
- recognize that subsidies, whether to the shipping or shipbuilding industries, inevitably delay the restoration of balance between supply and demand; nevertheless the special circumstances of developing countries have to be kept in mind when developing national policies consistent with their specific requirements and the need to promote international co-operation based on widely accepted principles.

3. Future Priorities for the ICC Commission on Sea Transport

The Conference invited the ICC Commission on Sea Transport to give high priority to issues of common interest to the Shipping Industry in developing and developed countries. In particular it urged the consideration of opportunities offered by bareboat chartering to facilitate the greater involvement of developing countries in merchant shipping and supported the Commission's intention to follow up the Bombay conclusions as had been done so successfully after the Caracas Conference in 1981.

(*: BIMCO was represented in this delegation by the President Designate, Dr. Helmut Sohmen.)

MARITIME CRIME

By ERIC ELLEN, Director

ICC International Maritime Bureau

Organised Crime

"There is a great deal of evidence that a significant proportion of commercial crimes and related offences are perpetrated by organised crime groups"

These words were spoken by Dr. Barry Rider, Chief Commonwealth Fraud Officer, at the 1st International Maritime Bureau Lecture held in March 1984.

From my experience as Director of

the ICC International Maritime Bureau, I fully endorse Dr. Rider's statement and see the continuing infiltration of the shipping industry by organised criminal groups as the single most worrying factor in efforts to curb maritime crime.

In the late 70s, when maritime crime reached a new peak, new investigators would have identified let alone accepted that there was a recognisable organised element to the plethora of sinking, deviations and fires that were taking place. The investigators would, undoubtedly, have recognised the organisation of fraud by persons on the

fringe of the legitimate industry but certainly not the gang influence.

What then has caused organised crime groups to turn their attention to the world of shipping? In my opinion, it has to be the ease with which fraud can be carried out, coupled with the huge amount of money at stake. The low-risk factor with regard to arrest and conviction must also serve as a great attraction. So low is the risk of apprehension and the ease with which others can be put up front, if a scapegoat is necessary, that maritime crime is a natural successor to the more usual gang crimes of extortion, robbery and theft.

For years, the shipping industry ran freely and well on spoken commitment within a system that was known as trusted. The system was, however, seriously undermined by the events of the 70s and the industry has been palpably slow to respond.

Barbara Conway in her book *The Piracy Business*, published in 1981, summed up the situation regarding maritime crime as follows:-

"There may never be a perfect crime, but there is an ideal one. It is a minimum risk, maximum profit affair, easily adaptable to prevailing conditions, relatively simple to operate, difficult to detect and, even if detected, still more difficult to prosecute successfully in court. The ideal crime in short, is fraud. And never has it been a more profitable and secure proposition than during the past five years..."

Government Response

It is significant the UNCTAD in 1984 held an ad hoc meeting in Geneva to consider means of combating all aspects of maritime fraud, including piracy.

At last, here was a unified attempt by governments to examine the problem in depth. Sixty governments and twenty inter and nongovernment organisations were represented.

Three distinctive areas were singled out in the final Resolution for action at three levels: by national governments, by intergovernmental bodies and by private sector organisations. These were, first, action by national governments to tighten their national legislation to ensure that effective measures are available to prevent maritime fraud to investigate such fraudulent acts and to prosecute persons who commit such acts of fraud including taking action to avoid the

illegal sale of goods. Second, at intergovernmental level, to examine various in-depth proposals put forward before and during the meeting for fraud prevention; these include the possibilities for international cooperation in the investigation of frauds and subsequent legal action; formation of a set of antifraud guidelines directed primarily at the international banking community, but for the use of all parties in maritime trade transactions; a banking super-service for reducing risks of fraud in *letter of credit* transactions whereby banks could refer clients to inspection agencies for cargo control; adequacy of information available to the trading community on ship operations. Third, action by international organisations (also in the private sector) and commercial organisations, who were asked to continue their work on specific types of antifraud action.

The role of the International Chamber of Commerce and its International Maritime Bureau in combating maritime fraud and piracy was fully recognised and welcomed by all government representatives at the meeting. New initiatives introduced by the IMB were placed before the assembled representatives, including:

(1) **A Container Intelligence Unit** to monitor the losses of container from containers and of goods in transit. Losses are occurring world-wide and the losses are being discovered at places where the loss did not take place, thus causing difficulties for law enforcement.

(2) **A Chartering Experience Programme (CEP)**, to build a reference library relating to the performance of charterers/shipowners. Charterers/shipowners intending to fix a vessel could then check on the past performance of a party before finalising the fixture.

(3) **A Port Classification System** to act as an inducement to port authorities to improve their security. As I said to the Assembly, there must be no "port of convenience."

What Can Be Done?

There are two philosophies which are important to this question, and both are related to crime and crime prevention. The first philosophy is that if you make people aware of the problem they will take their own measures to overcome it.

This has worked extremely well within the shipping industry and a number of organisations including United Nations agencies have created an awareness, which is unprecedented in terms of crime prevention. The result had led to pre-contract and pre-shipment checks and, in my opinion, to a subsequent and significant reduction in the level of maritime crime.

I say my opinion because there is no organisation which has developed sufficient data to provide an accurate assessment. Within the International Maritime Bureau we probably have the best opportunity to indicate trends but for more detailed documentary evidence you need to refer to the *Far Eastern Regional Investigation Report* on sinking in the South China Seas which produced detailed evidence on the extent of frauds in that area.

It is interesting to note that as a result of the FERIT investigation and report the suspicious sinkings in the South China Seas came to a sudden and dramatic halt. Trends in maritime crime, however, tend to shift and often take on a regional or geographical characteristic. They are often endemic where there are political or economic problems.

Let us all, however, be under no misapprehension. The fraudsters are still with us. Often they are a step ahead of us and their ingenuity knows no bounds. New types of fraud often appear and it is now more difficult to classify these. Often these crimes are associated with economic crimes against the State.

The second philosophy is that the most single effective deterrent to the fraudster is the certainty of apprehension. In maritime crime there must be the greatest percentage ever in favour of the criminal.

Why Is This?

Maritime Crime is truly international and, indeed, the victim can come from any corner of the globe. The fraudster is indifferent to the colour, creed or political belief of his victim.

Often the victim will not report his loss to law enforcement. Sometimes because he is less than confident of the result; sometimes because of his embarrassment.

Law enforcement does not seek out this type of crime and waits for a complainant. Law enforcement, therefore, is reactive and not proactive.

From this stems a number of sug-

gestions. One is that there needs to be an arrangement between law enforcement agencies and commerce. Commerce must encourage law enforcement to take a positive stance against fraud, and law enforcement needs to encourage commerce to be more forthcoming. Secondly, many of the incidents which the industry threats as civil transgressions must clearly be treated as fraud.

Thirdly, and most importantly, governments should be looking at the problems which will occur in five years time when the industry is computerised, and when documents are transmitted electronically. An historical review and action taken to correct present-day procedures may well be truly out of date before implementation is possible.

As short-term measures, we must look towards education, information and government cooperation as the best remedial action.

Education is vital. It is needed by traders, law enforcement and by those that work within the industry. It can and should be promoted by commercial interests.

Information is, perhaps, the key to the problem. This must be provided by commercial interests and the fraudsters must not be protected by ill-considered and outmoded conventions.

Governments should closely examine the relationship between law enforcement agencies and provide even more facilities for international investigations. Regional groupings of police could materially assist in this respect. We must eliminate wherever possible the so-called safe havens traditionally used by the criminal element.

UNCTAD have now recommended the setting up within the private sector of a *Maritime Fraud Prevention Exchange*. The idea is to make information on shipping more easily obtainable to third world countries. Already founder members of the M.F.P.E., ie. the International Chamber of Commerce, Lloyds of London and BIMCO are in discussion to examine how such a scheme could operate. Dr. Rider spoke of the organised crime groups. Let us not forget this and by a cooperative and concerted effort make every endeavour to rid the industry of any organised or fringe element.

Urban Waterfront Conflict and Reconciliation: Ports Canada

The development of Canadian ports and the urban centres surrounding them have always been closely linked. While the natural harbour provided the geographic location for the initial community settlement, transportation and trade contributed, over time, to urban and industrial growth.

The port and the city began as one and the same. Urban waterfronts were the focal point of commerce, concentrating on their commercial maritime function—the transfer of cargo between the marine and surface modes of transportation. The waterfront was unique in its orientation, with the port exerting the dominant influence on land-use activities not only along the water's edge, but also in the city's central business district.

Throughout the years, advances in marine transportation and cargo handling methods, coupled with fundamental changes in the twentieth century urban lifestyle, both social and industrial, substantially altered the relationship between the port and the city. The changing dynamics of both ports and cities have resulted in a reappraisal of the port and its role in the urban community. In the 1980s, the port no longer has a monopoly on the urban waterfront. In most cases, this reassessment of the urban waterfront function is directly related to land, its use, its accessibility and its perception as a tool for economic and social redevelopment. Often, the viable and essential marine transportation function and its impact on the national economy are overlooked, creating tension and even conflict between the port and the urban community.

Conflict arises, amongst other things, from the development and sophistication of marine terminals and the vessels using them.

Gone are the wooden finger piers jutting out at right angles from the shoreline. In their place have emerged highly specialized terminals designed to automatically handle containers and bulk cargoes. These container terminals have been isolated along the urban

shoreline in major port cities, resulting in a separate identity for the port distinct from that of the city.

Another closely-related phenomenon is the development of efficient transportation links in the functional port area and its hinterland. Intermodalism is now the key. In Montréal, for example, containers are placed directly on railcars bound for the heartland of America. Unit trains unload grain, coal, sulphur or potash in most major ports. Arterial roads and overpasses have been constructed to handle the ever-increasing truck traffic serving the marine terminals, and have been a major expense and planning concern of ports in Vancouver, Saint John and St. John's. The effect on the waterfront has been twofold: firstly, the vital commercial role of the port is reinforced in the community. Secondly, structural barriers, both in the physical and psychological sense, are erected between the port and the city. In addition, some obsolete port facilities have adversely affected the port's image and the perception of the waterfront. The relationship between the port and the city, once one of mutual interaction, has become less intimate reflecting, at times, the inevitable conflict.

Changes in the structure and function of the city itself have equally altered that perception. The city core was once the location of manufacturing industries which had a functional relationship with the port. Their raw materials were received through the port and their finished products reached market through the port. For a number of years, though, manufacturing industries have played a diminishing role in the business life of the central city. Industrial firms have migrated away from urban centres, leaving the city core to emerging highrise office towers of business and finance. While there are still many examples of industries located on the waterfront including pulpmills, refineries and fishplants, the urban core of larger port cities is increasingly geared towards the provision of specific services rather than the production of goods.

In comparison with the rest of the city, the port area is often the oldest sector, having been the original site for industrial, commercial and residential uses. As cities changed, through cycles of progress and decline, the urban waterfront was a natural focal point for redevelopment. A new waterfront

constituency developed, viewing the waterfront as an attractive public resource. Land and water were defined in terms of access, historical and cultural qualities, residential and recreational potential, and visual aesthetics. In many cities, restoration, renovation, and recreation became familiar themes as the historical, residential and cultural features of the waterfront were physically upgraded and promoted for the benefit of urban residents and tourists alike.

One impact of this changed orientation was that the historical water-related and water-dependent uses of the port were given less consideration as a viable land use, although their continuing economic impact on the city and its inhabitants has seldom been questioned. These changes and their implications ultimately confront port management throughout Canada, albeit at different times and with varying degrees of intensity.

In recognition of change and the importance of the waterfront property for alternative uses, ports have adopted a conciliatory stance, and have conceded significant portions of their land and structures to urban and community development. Ports, particularly those in mature urban centres, have now reconciled themselves with this position and have responded by ensuring that special characteristics of certain waterfront sites have been developed in response to community needs. The Vieux Port projects in the ports of Montréal, Québec and Trois-Rivières are prime examples of this new approach. They have provided the urban population with access to the ports and to the St. Lawrence River.

The authentic display of the cultural heritage of Place Royale in Québec is linked physically with the port and the river. It is also a key attribute of the tourist industry, so vital to the city's economic well-being. Successful urban renewal prospects in Halifax and Saint John were achieved by establishing a clear relationship between the communities' interest and the ports' traditional functions.

In Saint John, New Brunswick, the Market Square development, a retail, office, hotel and residential complex, has rejuvenated the downtown city core. Situated in the north-end of the harbour, it is possible to watch container vessels load from the comfort of a condominium living room or a hotel

lounge.

The Historic Properties development in the Port of Halifax provides year-round access to the ocean, and has created a meeting place on the harbour for office workers and tourists alike with restaurants, boutiques and pubs bringing to life the renovated historical buildings.

There have always been pressures for alternate, non-profit-related waterfront developments in the Port of Vancouver. Perhaps the climate, the panoramic setting, and the location of Stanley Park, on the waterfront, have engendered the community with a very personal view and interpretation of the port. Consequently, the waterfront now represents a blending of activities which have perpetuated the human relationship with the ocean; from the public viewing area of the Vanterm container terminal, to the Seabus Terminal, the Canada Place complex of Expo 86 and the port's new cruise ship facility. All the while, the fundamental role of the port in Canada's transportation network has been maintained.

In Chicoutimi, the relocation of the marine terminal to Grande-Anse, outside the existing urban core, will eliminate the industrial presence of the port in the city and will permit alternate uses of the old terminal area. In Sept-Îles, the construction of the Pointe-Noire terminal, at a significant distance from the city, will encourage heavy industrial development which would not have been compatible with urban life.

Perceptions are changing. There must be a balanced approach towards waterfront development proposals. The role and responsibilities of the port must be understood by all elements of the urban community, not only locally, but also in the regional and national contexts. Canadian port administrators also recognize the intrinsic values and the appreciation which a community places on such a complex resource. Conflicts regarding waterfront jurisdiction, appropriate use, public access and private and public sector participation in project development must be resolved through good planning, sensitivity and an openness for cooperation on all sides. Ports Canada will continue to play its vital role in reconciling the diverging pressures on waterfront lands for cultural values, on the one hand, and economic development, on the other.

Ports Canada Profile

"Ports Canada" describes a federal system of ports administered pursuant to the Canada Ports Corporation Act which was proclaimed in 1983. Seven of these ports are autonomous local port corporations located in Halifax, Montréal, Prince Rupert, Québec, Saint John, St. John's and Vancouver. The other ports are directly administered by the Canada Ports Corporation and are located in Belledune, Chicoutimi, Churchill, Port Colborne, Prescott, Sept-Îles and Trois-Rivières.

Ports Canada handles nearly half of the overall Canadian port traffic and more than 95 percent of container traffic. It is, therefore, an effective means for the implementation of the national ports policy. The policy provides for, at the best cost possible and in a manner equitable to all users, the services necessary for Canada's international shipping trade at national, regional and local levels.

The system operates on a decentralized basis; each of the local port corporations functions with a high degree of autonomy in the administration of their own port. In providing a public service, the ports are administered according to common commercial principles.

The Canada Ports Corporation's National Office is located in Ottawa.

(Report to the Minister 1986: Ports Canada)

AAPA Seminars, Conferences for '88

Concurrent Port Marketing/Public Relations Seminars: February 2-4, 1988; Ft. Lauderdale, Florida.

Executive Management Conference: February 28-March 4, 1988; Los Angeles, California.

Spring Conference: April 6-7, 1988; Washington, D.C.

Strategic Planning Seminar: April 20-22, 1988; Miami, Florida.

Environmental Law Seminar: May 4-6, 1988; Norfolk, Virginia.

Port Finance Seminar: May 18-20, 1988; Philadelphia, Pennsylvania.

Port Operations Seminar: June 8-10, 1988; Tacoma, Washington.

Special Seminar for Members of Port Authority Governing Boards and Commissions: June 22-24, 1988; Toledo, Ohio.

(AAPA Advisory)

MARAD '86: Port and Intermodal Development

(Extracts from 'The Annual Report of the Maritime Administration for Fiscal Year 1986, U.S. Department of Transportation')

MARAD provides research and technical assistance in the management areas of port and intermodal planning and operations to state and local port authorities and private industry. It also develops contingency plans for the

utilization of ports and port facilities to meet defense needs in times of national emergency or war.

Port Planning Program

MARAD's FY 1986 cost-shared port and intermodal planning programs included cooperative port-development studies with local, State, and regional port agencies and associations; port-planning and management information

systems, including database development; and financial and economic-impact analyses projects. Emphasis during the year was placed on developing generic methodologies usable by any U.S. port or region. This included the development of the appropriate software for use on mini- or personal computers. Projects under this program which were completed, continued, or initiated in FY 1986 are as follows.

Projects Completed	Description
Cost Reduction Proposals for P.L. 480 Cargo	Prepared a set of six proposals to reduce transport costs of government-generated cargo moving under Public Law 480. The proposals were submitted to the U.S. Department of Agriculture, the Agency for International Development and the Office of Management and Budget.
Service Contracts	Evaluated potential U.S. Government cost savings that could be realized through service contracts for commodity transactions and ocean transportation of agricultural export programs.
Laminar Flow/Boundary Air Technology	Update an analysis of anticipated investment and operating costs compared with other existing systems to discharge bulk cargo vessels anchored offshore. Developed a discounted cash-flow analysis of these revised costs and potential revenues, and prepared a comparison of voyage costs for shipping various tonnages of bulk cargos using laminar flow/boundary air technology.
Port Financial Management System	Designed and developed a generic port financial management information system for the U.S. port industry, through a cooperative agreement with the American Association of Port Authorities involving 14 participating ports.
Port Pricing	Revised and automated the MARAD Port Pricing Formula for the use of port terminal facilities. Ports derive benchmark prices based on this formula and the prices, in turn, form the basis for compensatory tariffs.
Inland River Port Information System	Developed and demonstrated a prototype management information system for the U.S. inland river port industry, at the Port of St. Louis. The system addresses inland port data requirements for management, operations, marketing, and planning.
Marine Terminal Capacity Handbook	Updated the <i>Port Handbook for Estimating Marine Terminal Cargo Handling Capability</i> . The handbook provides a simple and reliable method a estimating the annual cargo-throughput capacity of U.S. ports and marine terminals.
Potential Port Revenue Sources	Monitored the multi-phase, MARAD-sponsored university research contract with the Transportation Center, University of Tennessee, which assessed potential new revenue sources available to inland and ocean U.S. ports.
Terminal Productivity Study	At the request of the National Association of Stevedores, initiated and funded a study and symposium on improving productivity in U.S. marine container terminals. The study was prepared by a committee established by the National Academy of Sciences' Marine Board.

Projects Completed	Description
Upper Mississippi River Transportation Economic River	Signed a Cooperative Agreement with the Iowa Department of Transportation representing Study consortium of five Upper Mississippi States for an economic analysis and modeling of operating efficiencies for five towing companies. The U.S. Department of Agriculture also participates in this project.
Study of Socio-economic and Technological Change at Port	Continued monitoring a MARAD-sponsored university research project by the Massachusetts Institute of Technology on the impacts of socio-economic and technological change on U.S. ports.
MARAD/Corps of Engineers Memorandum of Understanding	Participated in semi-annual meetings of a joint working committee with the U.S. Army Corps of Engineers, addressing cooperative projects in marine transportation technology systems, port and waterway development, joint research, and applied engineering.

Port Facilities Inventory	Continued updating various segments of the Agency's automated Port Facility Inventory, including the Columbia-Snake River system, all Alaskan ports, and the individual ports of Chicago, Texas City, Galveston, Stockton, and Sacramento.	
Small Port Siting Evaluation System	Continued preparation of a report, computer software, and user's guide for an automated model to analyze and evaluate facility sites at small ports.	
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Projects Initiated	Description	
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Port Expenditure Survey	Initiated research to update the MARAD report <i>United States Port Development Expenditure Survey</i> which profiles major expenditures for new construction and rehabilitation.	
Economic Impact of U.S. Port Industry	Began contractual process for the development of a MARAD input-output model to conduct annual assessments of the national economic contributions of the U.S. port industry.	
Waterborne Trade Data Base	In conjunction with the Office of Economics, Office of the Secretary of Transportation, MARAD initiated efforts to update and expand the automated, international waterborne-trade data base used to generate current port and bilateral trade statistics.	
Port Facility Inventory Evaluation	Initiated an in-house study of the Port Facility Inventory to evaluate appropriate change in the hardware, software, and data record configuration.	
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Port Operations Program	This cost-shared program helps improve productivity in the operation of facilities, equipment, and waterways. The program also provides planning	for emergency operating conditions in time of crisis or war. Following are FY 1986 completed and ongoing projects:
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Completed Projects	Description	
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Computer Program to Aid Spill Response	In cooperation with the Coast Guard, monitored Phase II of DOT-sponsored university research by Dillard University on an oil and chemical spill response computer program. It is designed to enable regional response teams to use high technology tools, such as microcomputer mapping and laser video disks, to expedite containment and clean-up operations.	
Port Vessel Emissions Model	Coordinated the technical review of the MARAD Port Vessel Emissions Model developed by the Port of Long Beach with the Coast Guard, the Environmental Protection Agency, and the American Institute of Merchant Shipping to validate potential use of the model by the maritime industry and environmental regulators.	
Publications	Prepared and distributed the 1984 and the 1985 inventories of intermodal equipment owned by American steamship companies and major leasing organizations operating in the United States. Also distributed the publication, <i>Existing and Potential U.S. Coal Export Terminals</i> .	
Marine Board Vapor Emissions Study	Provided technical assistance to the National Academy of Sciences' Marine Board study on Vapor Emissions which investigated the state of technology in controlling and recovering hydrocarbon vapors from ships and barges.	
Port Study of Ocean Incineration	Completed study of the environmental, safety, facility, and regulatory requirements for the transfer of hazardous materials to ocean incineration vessels at ports.	
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Ongoing Projects	Description	
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Regional Community Cargo Release System	Signed a Cooperative Agreement with the Golden Gate Ports Association to develop a generic design of an automated regional Community Cargo Release System for U.S. ports that plan to use the U.S. Customs Automated Commercial System.	
Port Shipping Safety	Completed first MARAD Report on Port and Shipping Safety and Environmental Protection.	
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Projects Initiated	Description	
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Disposal of Vessel Generated Wastes	Initiated and coordinated a maritime industry-wide meeting with the Environmental Protection Agency (EPA) concerning EPA's February 1986 policy directive on vessel generated wastes. EPA subsequently retracted its position that the Resource Conservation and Recovery Act governs vessel wastes before their removal from the vessel.	
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Technology Transfer

A large share of projects undertaken by MARAD are initiated at port industry request or are proposed as a

response to port industry needs. In each case, results are designed to serve the needs of the widest spectrum of port users, in addition to the proponent. Consequently, the Agency has an active

program to acquaint the port industry with available tools, their benefits, and the procedures for obtaining materials. During FY 1986, the following technology transfer activities occurred:

Transfer Projects	Description
Conference on Barge Fleeting	Cosponsored with the Inland Rivers, Ports and Terminals, Inc., the first National Conference on Barge Fleeting, held in Memphis, TN, as a follow-up to the distribution of MARAD's regional barge-fleeting handbook.
Container on Barge Seminar	In cooperation with Louisiana State University and several industry entities, conducted a seminar on present and potential container-on-barge movements.
Computer-Aided Operations Research Facility (CAORF) Simulations of Port Channel Improvements	Promoted increased Government and industry awareness of the potential of the MARAD ship simulator at CAORF to optimize port channel designs and reduce dredging costs. The Corps of Engineers contracted MARAD during FY 1986 to simulate and evaluate alternative channel improvements at the ports of Oakland and Miami.
Multi-purpose Harbor Service Craft	Briefed officials of the New York, NY, Fire Safety and Port and Terminals Departments on the findings of the tests of the Tacoma, WA, prototype harbor service vessel and its flexible advantages to meet port emergencies.
Port Administration and Operation Seminar	Made a presentation on port economics and port pricing at the New York World Trade Institute's annual Port Administration and Operation Seminar for senior port managers of developing countries.
Port Finance Seminar	Made a presentation on MARAD's <i>Port Pricing Formula</i> and port pricing trends in the United States at the American Association of Port Authorities' (AAPA) Port Finance Seminar.
AAPA Annual Port Directors Meeting	Made a presentation on MARAD's major port and intermodal programs to all U.S. port directors at the American Association of Port Authorities' Annual Meeting in Portland, OR.

International seaborne trade scene from "Review of Maritime Transport 1986, UNCTAD" (DT/B/C.4/309)

Development of international seaborne trade, (a) 1970 and 1980-1986 (Estimates of goods loaded)

	Tanker cargo		Total	Dry cargo		Of which: main bulk commodities (b)		Total (all goods)	
Year	Millions of tons	Percentage increase/decrease over previous year	Millions of tons	Percentage increase/decrease over previous year	Millions of tons	Percentage increase/decrease over previous year	Millions of tons	Percentage increase/decrease over previous year	
1970	1 440	13.1	1 165	13.0	448	16.0	2 605	13.0	
1980	1 871	—6.6	1 833	3.3	796	4.5	3 704	—2.0	
1981	1 693	—9.5	1 866	1.8	806	1.3	3 559	—3.9	
1982	1 480	—12.6	1 793	—3.9	759	—5.8	3 273	—8.0	
1983	1 461	—1.4	1 770	—1.3	732	—3.7	3 231	—1.3	
1984	1 478	1.2	1 886	6.5	833	13.8	3 364	4.1	
1985	1 435	—2.9	1 895	0.5	857	2.9	3 330	—1.0	
1986 (c)	1 550	8.0	1 835	—3.2	810	—5.5	3 385	1.7	

(a) Including international cargoes loaded at ports of the Great Lakes and St. Lawrence system for unloading at ports of the same system but excluding such traffic in main bulk commodities.

(b) Iron ore, grain, coal, bauxite/alumina and phosphate.

(c) UNCTAD preliminary estimates.

World container population by length and type (At the beginning of 1986, actual units)

Type	20 ft units	%	40 ft units	%	35 ft units	%	Other units	%	Total units	%
General cargo	2 030 098	56.0	990 612	27.3	26 747	0.8	29 824	0.8	3 077 281	84.9
Others	395 233	10.9	132 592	3.7	9 735	0.3	8 251	0.2	545 811	15.1
Total	2 425 311	66.9	1 123 204	31.7	36 482	1.1	38 075	1.0	3 632 092	100.0

World container population by height and type (At the beginning of 1986, actual units)

Height	20 ft	40 ft	35 ft	Others	Total	%
8'	201 539	1 738	214	13 455	216 946	6.0
8'06"	2 185 102	1 013 318	35 668	13 385	3 250 473	89.7
9'	381	7 799	0	0	8 180	0.2
9'06"	1 971	93 269	0	8 082	103 322	2.9
Others	36 338	7 080	600	153	44 171	1.2
Total	2 425 331	1 123 204	36 482	38 075	3 623 092	100.0

ADB Supports Regional Study on Container Shipping Patterns

A better understanding of international container shipping patterns in order to facilitate future port planning needs in the Asian region will be addressed by a regional study being supported by the Asian Development Bank under a technical assistance grant.

The study will deal with the underlying causes and effects of container shipping patterns in the region and container port development, including likely shipping patterns and the future role of major ports until the year 2000.

An important part of the study will be the development of a computer model to demonstrate these patterns in quantitative terms.

In the 1980s, changes in shipping patterns have seen a distinct trend towards the hub port concept, with mainline container ships calling at fewer ports in the region, resulting in increased use of feeder ships to service other ports. This trend has been reinforced with the advent of round-the-world (RTW) container service which features one very large container ship calling at a few ports and distributing to other ports by feeder ships.

While most ports have a well-defined

role, there are some which are likely to shift in roles should changes occur in, for example, the price of oil, volume of traffic or ship operating costs. Findings from the study will enable developing member countries of the Bank to plan new container facilities more efficiently and help the Bank plan and appraise future container port projects.

A team of consultants will carry out the study which will complement another study being undertaken by the Economic and Social Commission for Asia and the Pacific (ESCAP) on future seaborne trade and regional maritime development.

	DRY CARGO 40 FOOT Standard and High Cubes Standard 8'-6"	DRY 20 FOOT Standard and High Cubes Standard 8'	REFRIGERATED 40 FOOT Standard and High Cubes Standard 8'-6"	REFRIGERATED 20 FOOT Standard 8'	FLAT RACK 40 FOOT	FLAT RACK 20 FOOT With Side Fence	OPEN TOP 20 FOOT	HI-CUBE 40 FOOT 9'	INCO-1 TYPE 20 FOOT TANK	DRY CARGO 35 FOOT Standard 8'	DRY CARGO 45 FOOT Standard 8'
OUTSIDE DIMENSIONS											
Length	40' 12.19 m.	19'-10 1/2" 6.06 m.	40' 12.19 m.	19'-10 1/2" 6.06 m.	40' 12.19 m.	19'-10 1/2" 6.06 m.	20' 6.09 m.	40'	20' 6.09 m.	35' 10.67 m.	45' 13.72 m.
Width	8' 2.44 m.	8' 2.44 m.	8' 2.44 m.	8' 2.44 m.	8' 2.44 m.	8' 2.44 m.	8' 2.44 m.	8'	8' 2.44 m.	8' 2.44 m.	8' 2.44 m.
Height	8'-6" 2.59 m.	8' 2.44 m.	8'-6" 2.59 m.	8' 2.44 m.	9' 2.74 m.	8'-6" 2.59 m.	8' 2.44 m.	9'	8'-6" 2.59 m.	8'-7" 2.59 m.	9'-6 1/2" 2.91 m.
INSIDE DIMENSIONS											
Length	39'-6" 12.04 m.	19'-5" 5.92 m.	37'-8" 11.48 m.	17'-8" 5.38 m.	38'-4" 11.68 m.	18'-1" 5.51 m.	19'-5" 5.92 m.	39'-6 7/8"	TARE from 3100 kg. to 3500 kg. TANK DIAMETER 2000 m m. or 2240 m m. CAPACITY 17000 l. to 21000 l. TEST PRESSURE 4 bars	34'-7" 6.11 m.	44'-6" 13.56 m.
Width	7'-8" 2.34 m.	7'-8" 2.34 m.	7'-3" 2.21 m.	7'-1" 2.16 m.	8' 2.44 m.	7' 2.13 m.	7'-9" 2.39 m.	7'-8 1/2"		7'-8" 2.34 m.	7'-8" 2.34 m.
Height	7'-10" 2.39 m.	7'-3" 2.21 m.	7'-1" 2.16 m.	6'-5" 1.96 m.	7'-2" 2.18 m.	7'-1" 2.16 m.	7'-4" 2.22 m.	8'-4 1/2"		7'-10" 2.39 m.	8'-10 1/2" 2.71 m.
DOOR OPENING											
Width	7'-8" 2.34 m.	7'-8" 2.34 m.	7'-1" 2.16 m.	7'-1" 2.16 m.			7'-8" 2.34 m.	7'-8"		7'-6" 2.29 m.	7'-8" 2.34 m.
Height	7'-6" 2.29 m.	7' 2.13 m.	6'-10" 2.08 m.	6'-6" 1.98 m.			6'-11" 2.11 m.	8'		7'-6" 2.29 m.	8'-6 1/2" 2.6 m.
USABLE INTERIOR											
Cube	2,395 cu. ft. 67.83 cu. m.	1,096 cu. ft. 31.04 cu. m.	1,960 cu. ft. 55.51 cu. m.	854 cu. ft. 24.18 cu. m.	2,198 cu. ft. 62.26 cu. m.	897 cu. ft. 25.40 cu. m.	1,102 cu. ft. 31.21 cu. m.	2,542 cu. ft. 71.94 cu. m.		2,099 cu. ft. 59.44 cu. m.	3,035 cu. ft. 85.94 cu. m.
GROSS WEIGHT	67,200 lbs. 30,480 kgs.	44,800 lbs. 20,320 kgs.	67,200 lbs. 30,480 kgs.	44,800 lbs. 20,320 kgs.	67,200 lbs. 30,480 kgs.	44,800 lbs. 20,320 kgs.	49,800 lbs. 22,590 kgs.	61,300 lbs. 27,806 kgs.		50,000 lbs. 22,680 kgs.	58,650 lbs. 26,603 kgs.
TARE WEIGHT	6,200 lbs. 2,810 kgs.	4,500 lbs. 2,040 kgs.	9,450 lbs. 4,290 kgs.	7,600 lbs. 3,430 kgs.	11,360 lbs. 5,150 kgs.	6,260 lbs. 2,840 kgs.	5,000 lbs. 2,268 kgs.	6,300 lbs. 2,858 kgs.		5,500 lbs. 2,495 kgs.	8,550 lbs. 3,878 kgs.
NET WEIGHT	61,000 lbs. 27,670 kgs.	40,300 lbs. 18,280 kgs.	57,750 lbs. 26,190 kgs.	37,200 lbs. 16,870 kgs.	55,840 lbs. 25,330 kgs.	38,540 lbs. 17,480 kgs.	44,800 lbs. 20,322 kgs.	55,000 lbs. 24,948 kgs.		44,500 lbs. 20,185 kgs.	50,100 lbs. 22,725 kgs.

NOTE: Individual container dimensions may vary slightly.

FIATA: Focal Point Of Data Interchange

The 20th World Congress of the International Federation of Freight Forwarders Associations, FIATA, took place in Antwerp, Belgium, from September 13 to 17, 1987. The event stood under the slogan "The Freight Forwarder — Focal Point of Data Interchange." To fit the slogan FIATA had organized a forum on the subject (September 15, 1987).

In session I "Facilitation and Automation in International Transport" four speakers of the different modes of transport and one from a port informed forwarders what carriers and ports are doing to speed up the flow of cargo and information that goes with it. They came from the International Chamber of Shipping (ICS), London, the International Air Transport Association (IATA), Montreal, the International Union of Railways (UIC), Paris, and the International Road Transport Union (IRU) in Geneva. The ports were represented through the International Association of Ports and Harbors (IAPH), Tokyo.

What international organizations, governments and trade facilitation bodies are doing to cut down the paper mountain, and to "facilitate" the electronic exchange of information was dealt with in session II "Facilitation — the Governmental View." Speakers from the United Nations Conference on Trade and Development (UNCTAD), Geneva, the European Commission (EC), Brussels and the Swedish Trade Procedures Council (SWEPRO), Gothenburg, took the floor.

As for the efforts made by customs administrations a speaker from the Customs Cooperation Council (CCC), Brussels, took the rostrum.

Last but not least freight forwarders themselves reflected upon the subject. A speaker from the Institute of Freight Forwarders (IFF), London, showed up the new possibilities EDP offers freight forwarders, whilst a forwarder from Antwerp looked at the challenge from a "company's point of view."

Unfortunately the forum, although it did not deal with the subject from a technical point of view, was not well attended. It is to be hoped that the FIATA information containing all speeches delivered at the forum shall be read more widely. After all, facilitation and electronic data interchange

are of utmost importance for freight forwarders if they still want to stay in business in the next century.

The General Council elected as new FIATA President Mr. Jiri Kadanik from Czechoslovakia. Incoming President is now Curt Stjernlöf from Sweden. Mr. Rudolf Hoogewerff (Netherlands) was reelected Secretary General, and Mr. Gottfried Baumann (Switzerland) Treasurer.

Australasian Transport Research Forum in July '88 in Christchurch

THE Australasian Transport Research Forum provides a major annual forum of debate and discussion on transport policy, planning, research and operation in an international arena. The Ministry of Transport, New Zealand, will be host to the 13th Australasian Transport Research Forum, to be held from 18-21 July 1988. The venue will be the Christchurch Town Hall.

A theme of particular relevance to the transport scene in both New Zealand and Australia has been chosen for the forum. The theme is: Corporatisation, Deregulation, Privatisation... Problems and Prospects.

It calls for research on the impact

Personnel News

Canadian Port & Harbour Association

Mr. Cy Pringle of the Port of Saint John was elected president of the Canadian Port and Harbour Association during the association's annual meeting September 12-16 at Ste-Foy, Quebec. He succeeds Mr. Yvon Bureau of the Port of Quebec. Also elected were first vice president, Mr. Donald E. Brooks of the Port Alberni Harbour Commission, and second vice president, Mr. Bradley I. Guest of the Toronto Harbour Commission.

Gulf Ports Association

Mr. Harry Plomarity, executive director of the Port of Corpus Christi Authority, was elected president of the Gulf Ports Association during the group's annual meeting September 16-18 in Pensacola. The outgoing president is Mr. David Schaller of the Port of Pensacola. Also elected were first vice president, Mr. John Dutton, director of the Alabama State Docks Department, Port of Mobile, and second vice president, Mr. Gary Pruitt, executive director of the Greater Baton Rouge Port Commission.

(AAPA Advisory)

of these three courses of action on the current and future transport industry. Other papers that prove of interest, or significance to the transport industry, will be considered. A call for papers will be issued in September 1987.

All correspondence about the 13th Australasian Transport Research Forum should be addressed to:

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New Publications

BIMCO Publications 87

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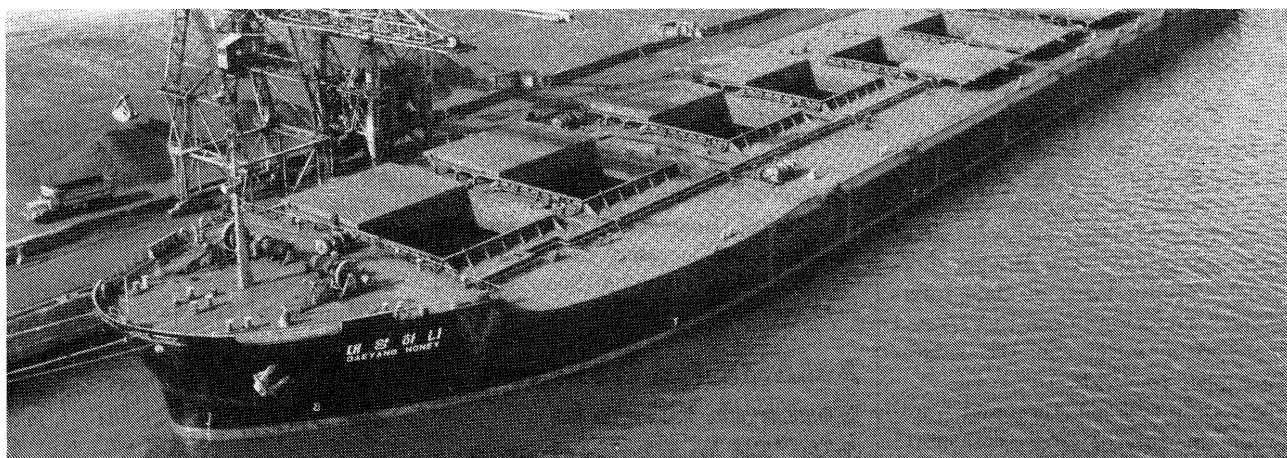
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The Americas

Best Half Year For Port of Halifax

A record 120,000 containers — stretching over 450 miles if laid end to end — have moved through the port of Halifax so far this year in what one port official is calling the best half year since the Second World War.

Mr. Dennis Creamer, director of finance and administration for the Halifax Port Corporation, said all cargo volumes — from split dried peas to locomotives — have increased 20 per cent compared to the same period last year.

"It's the best six months since the war years," said Mr. Creamer. Record tonnes of beef, grain and flour, including 78,000 tonnes of flour bound for Cuba, sifted through the hands of Halifax stevedores and into the cargo holds of freighters during the first six months of 1987.

Forty thousand tonnes of flour was shipped to Africa as part of Canada's world food program compared with 27,000 tonnes last year.

Other six-month statistics include:

6.7 million tonnes of cargo from both public and private berths was handled compared with 6.3 million tonnes last year.

1.265 million tonnes of containers compared to 1.023 million tonnes last year. This represents a 24-percent increase.

133,000 tonnes of imported grain arrived on the Halifax waterfront compared with 83,000 during the first six months of 1986.

1.354 million tonnes of gypsum was

Record Shipment at Port of Quebec

The Port of Québec recently handled its largest shipment of iron ore, unloaded at the Beauport solid bulk terminal operated by the St. Lawrence Stevedoring Company. The South Korean-flag *DAEYANG HONEY* delivered 118,280 metric tonnes of ore, a quantity sufficient to build 110,000 medium-size automobiles! Thanks to the expertise of the Corporation of Lower St. Lawrence Pilots, the 270 meter long vessel also established a record 15.65 meter draft at the port. Pilots Roger Gilot and Jean-Louis Dufour guided the ship from Les Escoumins to Québec City. The *DAEYANG HONEY*'s call illustrated the Port of Québec's potential for increased shipments of bulk commodities. A vessel of such size cannot navigate on the St. Lawrence upstream from Québec City. The ship's cargo was transhipped to lake barges for delivery to U.S. steel mills.

exported from Halifax compared with 1.264 million tonnes last year.

Crude oil imports topped 2.150 million tonnes compared to 1.73 million tonnes last year while crude exports hit 1.47 million tonnes compared to 1.299 million tonnes from January to June in 1986.

545,000 tonnes of bulk cargo passed through port corporation docks compared with 339,000 tonnes last year.

Container Innovation for Transporting Feedgrain

To properly service a new market sometimes requires developing a new product or new equipment. Such was the case with Co-op Atlantic when they looked at shipping feedgrain to Newfoundland livestock producers. Although there was a demand, the transport methods used in mainland distribution were not cost efficient since a portion of the haul included water transport.

Co-op Atlantic came up with a container that could be lifted on and off a tilt load chassis. Operating in much the same fashion as a dumptruck, the feedgrain is bulk loaded through top hatches, transported on specially designed chassis and upon arrival at the

customers storage facility, is tipped up and unloaded through a hatch at the end of the box.

Co-op Atlantic had a prototype box built by Winlie Containers of Halifax and sent it to an Ontario trailer company to have the tilt chassis built. After testing and evaluating its efficiency, Winlie were given a contract to build 6 containers with a follow up order for more.

Winlie Containers have now completed a total of 12 of the 9'x20'x8' boxes which they've dubbed "Bulkers." The boxes are also fitted with an adjustable bulkhead for LCL (less than container loads) of dissimilar products. For versatility, they have been built with conventional doors at the end opposite the hatch for conversion to traditional use.

To minimize costs, only two chassis were built, one for use in Newfoundland and the other in Nova Scotia. Lou Snyder, Plant Manager with Co-op Atlantic in Truro, says the system works very well.

Mr. Snyder is very pleased with the time/cost efficiencies of the new system. He said that a co-op in British Columbia is looking at the Bulker as a means of transporting animal feed to Vancouver Island.

(Port of Halifax)

Saint John Tonnage Shows 1% Increase

Significant increases in petroleum, potash, and bulk cargo through the Port of Saint John accounted for an increase of 1% in total tonnage for the first half of 1987. Cargo increased from 6,024,000 tons last year to 6,090,000 tons this year for the same period.

Mr. Ken Krauter, General Manager and Chief Executive Officer of the Saint John Port Corporation reported that the bulk cargo through the port increased 6% over last year, to 5,531,000 tons. Container traffic was down 62%, reflecting the loss of container lines. Break-bulk cargo was down 3%, from 431,000 tons in 1986 to 416,000 tons this year.

Petroleum cargo increased 6%, from 4,184,000 tons to 4,435,000 tons; potash rose 34%, to 635,000 tons and other bulk cargo was up 16%, to 171,000 tons.

Grain shipments were down 33% this year, due to a poor Ontario harvest. Salt shipments were also down, from 114,000 tons to 90,000 tons, but are expected to pick up in the second half of the year.

Forterm forest products terminal reported a 7% increase, from 245,000 tons to 263,000 tons. CKD's (knocked down vehicles) were up 40%, to 7,000 tons, from last year. A major steel shipment through the port in early 1987 was reflected in the 50% rise in other general cargo.

While the number of foreign trading vessels calling at the port decreased from 756 to 754, the average cargo handled per vessel was up.

Import of Hyundai Autos Through Brunswick

Georgia Governor Joe Frank Harris announced on September 3 that an agreement has been reached with Hyundai Motor America to import Hyundai automobiles through the Port of Brunswick.

A projected 60,000 Hyundai Excel automobiles per year will arrive at Colonel's Island, the Brunswick site developed by the Georgia Ports Authority as an auto import center.

Hyundai's entry into the United States — the world's largest automotive market — can be described as an overwhelming success. Only four months

after its February 20, 1986 introduction to U.S. customers, Hyundai set a new record for an importer's first year sales, with 48,531 Excels sold. Hyundai's original goal of 100,000 car sales for 1986 was achieved in seven months. Hyundai now ranks as the No. 4 importer in the U.S., following Honda, Toyota, and Nissan. The company expects to sell 250,000 cars in the U.S. during 1987.

Hyundai joins auto importers Yugo, BMW, Saab, and Peugeot in making Brunswick their South Atlantic port of entry. In just one year's time, Brunswick has surpassed Seattle, Boston, Providence, Portsmouth, and other U.S. auto ports in volumes of imported cars, with over 135,000 cars per year contracted to enter at the Colonel's Island site. Each auto entering the Port of Brunswick carries an economic impact of \$100.00 to the local community.

The State of Georgia operates a trade development office in Seoul, Korea. A joint venture between the Georgia Department of Industry and Trade and the Georgia Ports Authority, the office was established during Governor Harris' administration to provide visibility for Georgia in one of the world's most rapidly growing industrial countries.

Port of Houston Public Facilities

Turning Basin Terminal

A multipurpose complex of wharves and storage facilities, the Turning Basin Terminal can accommodate a wide variety of breakbulk and container cargo. An alternating arrangement of open wharves and docks backed by transit sheds makes the Turning Basin an ideal location for direct discharge and loading operations. This terminal is also equipped for the handling of large, odd-shaped cargos and long-term project cargo.

Houston Public Elevator

Located at the Turning Basin Terminal, the Houston Public Elevator has a capacity of 6 million bushels and more than 600 separate bins for storing products delivered by truck and rail. Operated by the PHA, this elevator is one of five located along the Houston Ship Channel. It is equipped for quick movement of grain and provides quality

control unmatched on the U.S. Gulf.

Barbours Cut Container Terminal

The most modern intermodal facility on the U.S. Gulf, Barbours Cut Terminal is only two hours sailing time from the gulf and offers a highly efficient turnaround schedule. In addition to four container berths, the terminal offers a roll-on/roll-off ramp, a LASH dock, a barge-marshalling area, two 100,000-square-foot transit sheds and acres of open marshalling and storage area. Make-ready facilities for import automobiles and a comprehensive refrigerated food warehouse are among the private facilities located near the terminal.

Bulk Materials Handling Plant

The Port of Houston Authority's Bulk Materials Handling Plant can load or unload almost any kind of bulk material, from the finest granules to lumps eight inches in diameter and weighing up to 200 pounds per cubic foot. The plant is equipped with high-speed loading and unloading systems and a sophisticated dust collection system that permits the handling of extremely dusty commodities.

Bayport

Bayport Industrial Development is a chemical and chemical specialty complex developed by the Port of Houston Authority in cooperation with Friendswood Development Co., a subsidiary of Exxon Corp. The complex — one of the largest of its kind in the United States — is located 2 1/2 hours from open sea. Bayport has two privately owned liquid terminals available for public use: Baytank Inc. and PetroUnited Terminals Inc. In addition, the Port Authority has land available — for lease — to be used for the development of private liquid terminals. The Bayport Division of the Port of Houston features a 40-foot-deep channel with a 1,600-by-1,600-foot turning basin. All plant sites in the complex have access to utilities, rail service and roads. (*Port of Houston*)

Mayor Stresses Houston's Potential

One of the most important tasks facing Houstonians today is helping foreign investors better understand the city's international business potential,

according to Mayor Kathy Whitmire.

Houston already has a positive image in the international business community, an image as an energy capital and "a little bit of an image as the Wild West," Mayor Whitmire said. During a recent luncheon speech, the mayor asked members of the Houston Inter-American Chamber of Commerce to help her promote the city abroad.

"This is a time when Houston needs to place stronger emphasis on our international business ties," she said. "It doesn't take too long to figure out that one of our primary needs is for greater investment capital in this community."

Houston already is an international city because of its port and its consular corps. But another factor, the international make-up of Houston's population, will prove to be a key element in expanding the city's international ties. The mayor said an estimated 20 percent of Houston residents were born outside the United States.

"I think that demonstrates the diversity of the population and the fact that Houston is an area that naturally lends itself to international cultural and economic ties," she said. "We have a very international population. We have found that people come here from every part of the world and that they are very well received."

Latin America, because of its proximity to Houston, should be a focal point in efforts to market the city, she said.

Available labor, office space, and real estate are prime selling points for the city, the mayor said, and the energy, space, and medical industries offer unlimited potential for foreign investors.

One of Houston's most impressive assets, though, is the quality of life it offers. "What I have found in talking to numerous companies making location decisions is that no such decision is made without giving significant consideration to the quality of life — the living environment, surroundings, cultural and educational facilities that are going to be available to people who work for an organization."

Houstonians already have made tremendous commitments to their city, she said. "The commitment we need to make today is to let other people know about Houston, because Houston is a city....that has tremendous opportunities. Many of those opportunities come through our connection with

people from other countries."

(Port of Houston)

WORLDPORT LA Fastest Growing Port

The San Pedro Bay ports of Los Angeles and Long Beach have experienced a 162 percent increase in containerized foreign cargo during the last decade, according to an independent study conducted by Manalytics, a San Francisco consulting firm for the Bay Area's Metropolitan Transportation Commission. The two ports make up 55.7 percent of all West Coast TEUs (twenty-foot equivalent units), a 10.8 percent increase from 1976 figures of 44.9 percent.

WORLDPORT LA alone has nearly doubled its container traffic in the past four years, with 735,000 TEUs in 1983 and almost 1.5 million TEUs in fiscal 1987.

A separate study by WORLDPORT LA, the Foreign Trade Market Share Analysis, shows the foreign cargo at the Port of Los Angeles itself has increased from 16.9 million short tons in 1985 to 18.2 million short tons in 1986. Over the last three years, the Port has experienced a 49 percent growth in foreign trade, the largest increase of any West Coast port.

With an increase of \$5.2 billion over 1985, the Port remains the number one West Coast port in terms of foreign trade cargo value. WORLDPORT LA is also number one in imports and number three in exports on the West Coast, accounting for 21.7 percent of imports and 11.1 percent of exports. These factors have helped to make WORLDPORT LA the nation's fastest growing port.

The increase in WORLDPORT LA's market share may be linked to the port's growing strength in intermodalism, according to Mr. Steven Paul Resnick, Director of Marketing, WORLDPORT LA. Last year, the Ports of Los Angeles and Long Beach, in conjunction with the Southern Pacific Transportation Company, opened the Intermodal Container Transfer Facility (ICTF). The 165-acre ICTF, located within four miles of port facilities, reduces time, fuel and drayage costs and has drawn tonnage from other West Coast ports of entry. Throughput in ICTF's first year should exceed early expectations and is approaching the 360,000-con-

tainer capacity of its first phase. It is expected to ultimately reach 700,000.

Another component of the Port's intermodal strength is an extensive railroad network, approximately 125 miles of track within the Los Angeles/Long Beach harbor complex. Both ports are served by Union Pacific, Santa Fe and Southern Pacific Railroads, all with equal access to all portions of the harbors, ensuring daily delivery and pickup of rail borne freight from all terminals. Additionally, the interstate highway system contributes to WORLDPORT LA's intermodal force, providing convenient access to Port facilities. The federal government has funded \$140 million in the past four years for specific highway and railroad improvement projects within and adjoining the harbor complex. Such improvements enable the Port to handle the continuing increases in container traffic.

Other features of WORLDPORT LA's intermodal power include extensive warehousing, transloading, and distribution facilities. In addition to covered facilities, the Port offers open dock areas as well as specialized cold storage and ice housing facilities to handle frozen meats and fruits.

With over 40 percent of the cargo through the Port of Los Angeles traveling intermodally to midwest and eastern destinations, Southern California is quickly gaining distinction as a load center and regional distribution point for imported and domestically produced consumer goods.

Los Angeles-Hawaii Monthly Barge Service

Cargo on barges is moving between the Port of Los Angeles and Hawaii through a new monthly service by Transportation Express Lines with stevedoring provided by Cargo Handling Specialists.

It's unusual to see relatively small barges call at the harbor side by side with the enormous container ships using Overseas Terminal at the Port of Los Angeles.

"It is unusual, but it's also practical for our shipping clients who prefer to utilize the barge service as a cost-saving, simple operation for cargo that is less time-sensitive than some," explains Mr. Steven Paul Resnick, Director of

Marketing, WORLDPORT LA. The barge service to Hawaii takes approximately 12 days while conventional oceangoing vessels take five to six.

A towed barge cuts down on costs because during loading or unloading its tugboat is free to go out and do other jobs. The barge service is also beneficial because the loading and unloading operation is more simple than similar activities on larger vessels. Additionally, with their slim design, the barges are easier to maneuver than bulky vessels and can enter narrow, restrictive waterways.

The barges, capable of handling 500 TEUs, predominantly carry containerized cargo, but can also accommodate "tough-to-handle" cargo. "We have carried everything from 50-foot sheet piling to 60-foot fiber glass tanks," comments Mr. David Hoppes of Cargo Handling Specialists. "Anything goes with the barge system."

The Hawaii-bound service is an addition to the Port's existing barge services which includes barges to pump waste from vessels calling at the Port, as well as to provide water and lumber barges southbound from Canada and the Pacific Northwest. Additionally, the Port provides fuel to many vessels that take advantage of the Harbor's ready availability of bunkering barges and low fuel prices.

Port of Boston Reports General Cargo Gains in First Six Months of 1987

According to six-month 1987 statistics released by the Massachusetts Port Authority (Massport), the outlook for the Port of Boston continues to be upbeat.

"During the first six months of 1987 we once again experienced the same consistent growth in our general cargo that has been the hallmark of the past four years," announced Ms. Anne D. Aylward, Massport's maritime director. "Despite the loss of U.S. Lines and BCR Lines, our three public terminals in the Port of Boston handled 485,465 tons of containerized cargo, approximately the same volume that was handled in the first six months of 1986."

In addition, non-containerized cargo rose 25 percent over the same six-month period in 1986. "This upward movement can be attributed to greater automobile tonnage and the introduction

of Ro/Ro service to the Port of Boston," explained Ms. Aylward. The balance of trade also continued to improve, with containerized exports increasing by three percent over the same period last year.

"Based on the healthy economy in New England and the increasing demands from both regional businesses and consumers, we anticipate that the Port of Boston will continue to see gains throughout 1987," said Ms. Aylward.

Baltimore Strategy Targets 50% Cargo Increase in 5 Years

Governor William Donald Schaefer recently announced a Strategic Plan for the Port of Baltimore that includes nearly 50 action steps to improve operations in the port.

"These changes — which include improved customer service, a new high-speed rail yard, and dedicated transcontinental train service — will make Baltimore easier, faster, and cheaper to use," Governor Schaefer said.

In announcing the plan, the Governor said that the Maryland Port Administration will:

- * Reorganize its Trade and Promotion Division to provide more specialized service to shipper and carrier customers and to upgrade its market analysis capability.

- * Initiate development of a 70-acre Intermodal Container Transfer Facility incorporating the latest technology in ship-to-rail cargo movements in conjunction with the construction of the Seagirt Marine Terminal.

- * Jointly promote with CSX a new high-quality, transcontinental train service, to be known as the "Baltimore Clipper," that will connect the port with the Pacific Northwest.

- * Target cargo movements that can provide new work for the International Longshoremen's Association in Baltimore.

- * Work with the City of Baltimore to identify a site for a new cruise passenger facility.

- * Implement a rail brokerage program so as to consolidate shipments and obtain volume discounts.

- * Install double-trolley cranes at Seagirt Marine Terminal.

"These steps are being taken so that we can meet our goal of increasing

general cargo tonnage by 50 percent over the next five years," said Governor Schaefer.

The MPA's Strategic Plan was developed by the agency in conjunction with an outside consultant and an advisory panel drawn from the private sector.

The plan includes a core strategy and eight supporting strategies to strengthen the port's labor relations, marketing, administrative activities, inland transportation network, operations, facilities, information systems, and financial position.

"The MPA's overall strategy is to integrate the Port of Baltimore into an international ocean shipping system by providing and/or promoting high-throughput marine terminals and logistical services so as to maximize the returns to port users through cost reductions and the creation of new business opportunities," said Maryland Port Administrator David A. Wagner.

"The MPA will work to ensure the port's continuing role as part of a successful transportation pipeline for moving international cargo in an efficient and effective manner," he added. "This includes the MPA's promotion of both private and public terminals within the Port of Baltimore."

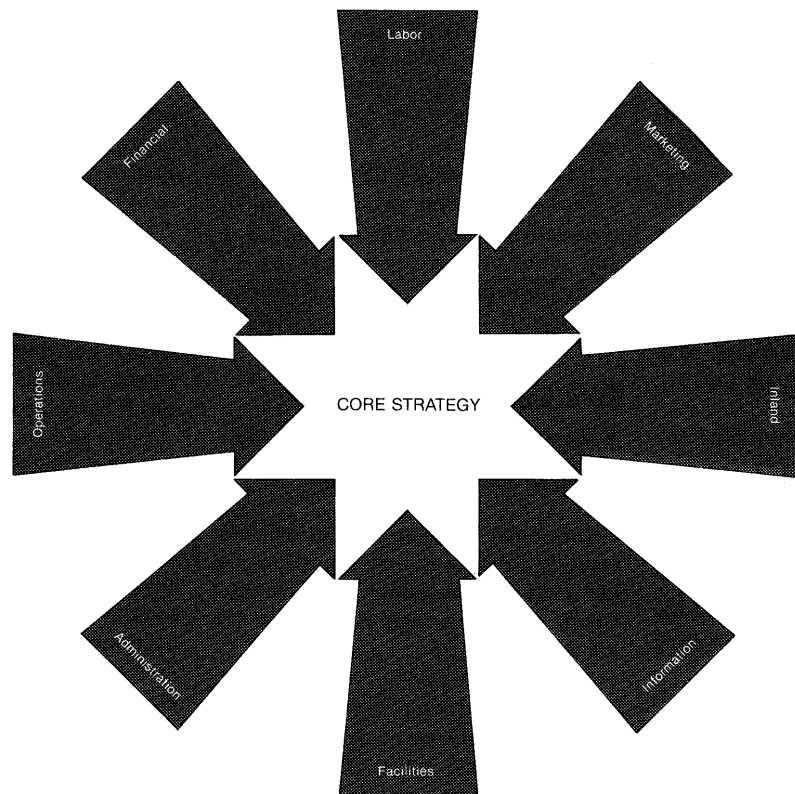
Action Agenda Summary

Reorganize Trade and Promotion Division to provide more specialized service to shipper and carrier customers and to upgrade market analysis capability.

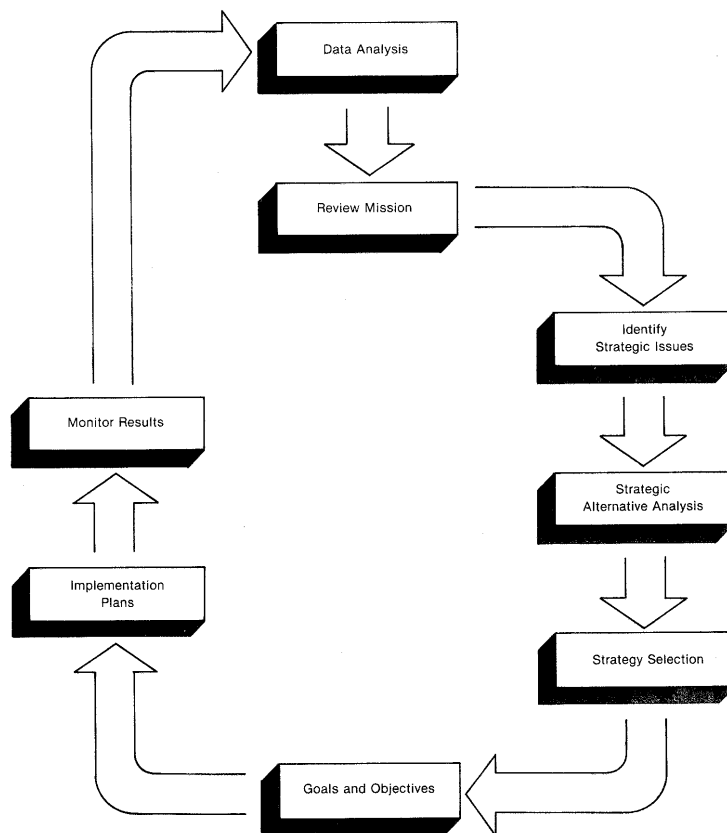
Although the MPA has always directed its attention to both shippers and carriers, this new organizational structure will allow the agency to provide more effective support to these two major customer classes by creating separate offices to focus on their specialized needs. The directors of these two new offices, Shipper Sales and Steamship and Intermodal Marketing, will be hired within a short period of time.

In addition, the MPA will upgrade its market analysis capabilities. As a first step, the MPA will make its statistical analysis unit a separate office within Trade and Promotion.

Initiate development of an Intermodal Container Transfer Facility incorporating latest technology in ship-to-rail



Eight functional strategies support the MPA's mission.



The MPA's strategic planning process is ongoing and dynamic.

cargo movements in conjunction with the construction of Seagirt Marine Terminal.

The MPA is beginning the design of a 70-acre ICTF that will be built adjacent to Seagirt. The ICTF can eliminate current drayage moves of 2.5 to 7 miles for most of the port's container traffic. It will include four loading tracks of up to 4,000 feet in length and will offer optional center storage. The design will incorporate the latest equipment for efficient operation and a state-of-the-art gate complex to minimize turnaround time at the facility. The capacity of the ICTF is 260,000 containers per year, and the cost is estimated at \$25 million. Through the recent acquisition of controlling interest in the Canton Railroad (see July '87 *Port of Baltimore* magazine), the ICTF can provide direct access to both Conrail and CSX.

Establish high-quality, transcontinental train service via the new "Baltimore Clipper."

This six-day-a-week service will connect Baltimore with Chicago (via CSX) and Seattle, Tacoma and Portland (via the CSX and Burlington Northern). Both container-on-flat car (COFC) and double-stack capabilities will be offered. Shippers using this service will be able to take advantage of the shortest route to the Midwest and to the West Coast, thereby saving valuable shipping time. The run-through service will provide sixth-day availability to the West Coast.

CSX in recognizing the importance of the Port of Baltimore, has named the train the "Baltimore Clipper."

Target cargo movements that can augment ILA manhours if attracted to the Port of Baltimore.

Part of the MPA's mission is to increase transportation-related employment in the state. One way to do this is to target its marketing efforts on certain labor intensive commodities and to make sure that the port has the necessary facilities to handle them. For example, the MPA has been working with shippers of steel coils and is now planning to shift a container crane from Dundalk Marine Terminal to North Locust Point Marine Terminal. The move will make the port much more attractive to shippers of this commodity since it will reduce the risk of damage and allow direct discharge from ship to rail.

Work with the City of Baltimore to identify a new cruise passenger facility that will tie in with the growing tourist

business.

Recent changes in the cruise industry have increased the demand for ports of call along the North Atlantic Coast. Although Baltimore has already benefited from this trend to some extent, the current location of the port's cruise passenger facility is believed to have reduced Baltimore's ability to participate in this market. This facility is located in one of the world's busiest cargo terminals, Dundalk, and is far removed from the hotels and shops of Baltimore's Inner Harbor. The MPA will work to identify a new site for a passenger facility that will be more accessible and more attractive to visitors.

Implement a rail brokerage program with MPA acting to consolidate shipments and obtain volume discounts.

The MPA plans to act as a broker for customers of the Port of Baltimore so that it can obtain volume-based discount rates for rail shipments and pass them on to small and medium-sized operators. This effort is part of the MPA's effort to strengthen the rail connections from Baltimore and to reestablish the advantages derived from the port's inland location.

Install double-trolley cranes at Seagirt Marine Terminal.

Double-trolley and automated cranes represent the latest technological advancements in crane design and hold potential for significant productivity gains. The cranes operate on two cycles, one that moves containers from the ship to a shuttle between the crane legs and another that moves the container from the shuttle to the pier. If installed in conjunction with a well-planned terminal layout, the cranes can greatly speed the flow of cargo through a terminal. Baltimore's new terminal at Seagirt provides an excellent opportunity to implement this new technology and maximize the gains it has to offer.

(Port of Baltimore)

New Container Crane At Baltimore Terminal

A new container crane is being erected at the Port of Baltimore's South Locust Point Marine Terminal as part of a project to increase the facility's size and cargo-handling capacity.

The crane, which has a 40-ton lift capability, was built in Japan by Ishikawajima-Harima Heavy Industries Co., Ltd. (IHI). It was purchased by the Maryland Port Administration at

a cost of \$3.3 million.

The crane has a 125-foot outreach and a 65-foot backreach. Its trolley travel speed is 500 ft./min., while its gantry travel speed is 150 ft./min. McLean Contracting Co. will erect the crane by November 1987.

"This crane will help our port to handle more container cargo," said Mr. David A. Wagner, Maryland Port Administrator. "By adding this third crane to our South Locust Point Marine Terminal we are giving current and future customers of this facility the ability to move their ships faster. We are also encouraging them to increase their cargo shipments through our port."

The South Locust Point Marine Terminal is in the midst of a project that will double its size from 37 to 80 acres. The addition of the new container crane complements the creation of a second full container berth, and the construction of a new gate/arrival area for less-than-full container load cargo traffic at the terminal.

Cargo storage acreage is also being expanded as part of the project.

About 20 acres of backup cargo storage space has already been paved and is now in use at the terminal. In addition, 20 acres of recently-acquired Western Maryland Railroad property near the terminal will become part of South Locust Point's container cargo operations.

The terminal's multi-million dollar expansion project is scheduled to be completed in December 1987.

NY & NJ Port Authority To Construct 3 Modular Buildings

The Port Authority will expand important support services for the marine transportation industry by constructing three modular warehouse and distribution buildings at the Elizabeth Port Authority Marine Terminal at an estimated cost of \$10 million, it was announced on September 10 by the bi-state agency's Chairman, Mr. Philip D. Kaltenbacher.

"Record tonnages for oceanborne general cargo have been achieved for the past three consecutive years in the New York-New Jersey Port," said Chairman Kaltenbacher following the monthly Board meeting. "These buildings will provide support facilities

that will satisfy the burgeoning demand for smaller modular units at our seaport and help to diversify industrial space in our Port," he stated.

"We believe these modular buildings will serve an incubator function in the Port enabling new, small firms to locate start-up operations," said Chairman Kaltenbacher. "In time, such smaller operations may become the mainstays of tomorrow," he added.

There are 5.5 million square feet of warehouse and distribution space presently at the Port Newark-Elizabeth Port Authority Marine Terminal. All of this space is leased to importers, exporters and public warehousemen with the smallest existing unit consisting of 13,000 square feet.

Buildings with 5,500 square feet modular sections, consisting of approximately 4,300 square feet of warehouse/distribution space and 1,200 square feet of office space, would effectively meet the demand for smaller space.

The modular buildings are expected to attract new activity to the Port such as foreign firms starting operations in the United States and small domestic firms engaged in exporting and importing. In addition, each modular unit could be activated with Foreign Trade Zone status further enhancing its attractiveness to potential tenants.

The three 44,000 square foot modular buildings will be developed on a 10-acre site on McLester Street with the first two buildings expected to be ready for occupancy by September 1988 and all to be completed by early 1989.

The contract requires that there will be a minimum of 10 percent minority business enterprises participation for firms owned and controlled by minorities and 2 percent women's business enterprises participation for firms owned and controlled by women.

Economic Surge Strong In Bi-state Area; Growth Seen Continuing

A ten-year overview of the Port of New York and New Jersey's regional growth has been capped by a particularly strong economic surge in 1986, according to Mr. Stephen Berger, Executive Director of The Port Authority of New York and New Jersey. "The economic recovery that began here in 1976," Mr. Berger stated, "is the most

Summary of the Port's Foreign Trade: Port of New York-New Jersey

Oceanborne	Long Tons			Millions of Dollars		
	1986	1985	% Change	1986	1985	% Change
Bulk Exports	2,939,191	2,853,052	+ 3.0	\$532.5	\$557.8	-4.5
Bulk Imports	40,231,524	34,694,483	+ 16.0	4,724.6	6,985.9	-32.4
Total Bulk Cargo	43,170,715	37,547,535	+ 15.0	5,257.1	7,543.7	-30.3
General Cargo Exports	2,815,658	2,675,928	+ 5.2	9,794.8	9,594.9	+ 2.1
General Cargo Imports	11,072,950	11,072,061	+ 0.01	34,851.5	31,635.5	+ 10.2
Total General Cargo	13,888,608	13,747,989	+ 1.0	44,646.3	41,230.4	+ 8.3
Total Oceanborne Cargo	57,059,323	51,295,524	+ 11.2	49,903.4	48,774.1	+ 2.3
Air Cargo						
Exports	273,898	258,498	+ 6.0	24,040.9	19,201.2	+ 25.2
Imports	492,842	565,267	-12.8	28,170.3	24,486.9	+ 15.0
Total Air Cargo	766,740	823,765	-6.9	52,211.2	43,688.1	+ 19.5

(Via Port of NY-NJ)

impressive recovery the region has ever experienced. Year after year the region's vitality continues to assert itself." Highlights found in the bi-state agency's annual economic analyses underscore his comments.

Regional unemployment in 1986 dipped to 5.8 percent (down from 6.4 percent in 1985). This represents the lowest rate in over a decade and compares favorably to a national unemployment rate of 7 percent. Additionally, regional employment grew by some 132,000 jobs, an increase of 1.8 percent. While employment figures showed an overall improvement, the region's manufacturing sector lost approximately 37,500 jobs in 1986.

Within this region, Hudson County in New Jersey showed the highest unemployment rate at 8.1 percent, while Westchester, New York, had the lowest at 3.2 percent.

Concurrent with its overall higher employment picture, the region's inflation rate dropped to 2.3 percent, the lowest rate in over 22 years.

Overall construction activity in the bi-state port jumped a healthy 8 percent in 1986 and was particularly strong in the New Jersey sector. Commercial, industrial and office construction in the region surged an extraordinary 34 percent last year. This rate is especially impressive when measured against a 13 percent decline in such construction nationally.

The year also had a healthy showing

in retail sales which surged 8.4 percent (almost double the national rate). Sales were spurred in part by new tax legislation and auto sales incentives. New York City led the region in retail sales with a vigorous 13.6 percent increase — its best gain since 1980.

Ms. Rosemary Scanlon, Chief Economist of the Port Authority, predicts continued expansion for the region in 1986. Ms. Scanlon reports, "We expect that employment will continue to grow at a healthy rate, the unemployment rate will continue to fall and the construction industry will remain strong." Ms. Scanlon noted that while the region's inflation rate was low, it remains higher than the national rate for the fifth consecutive year. "Another area of concern," Ms. Scanlon states, "is housing." Pointing to the metropolitan area's population density, a housing shortage remains with concurrent higher costs based upon demand. She indicated that residential construction is proceeding at an encouraging level but it will require three to five years of increased activity to abate demand.

Executive Director Berger noted that the continued boom has impacted on the interstate transportation network, as well as on the region's airports and marine terminals. He indicated, "The Port Authority and other agencies must make a heavy capital investment in the next few years to improve the region's

(Continued on Page 37, Col. 1)



(Continued from Page 36, Col. 3)
transportation systems, or risk reversing the growth trend." He stated, "With the cooperation of the two states, we will make this vital investment in our region's future."

Air travel to and from the region was up one percent in 1986. Its airports handled 79 million passengers. Air cargo volumes increased 2.6 percent to 1.4 million tons.

Mr. Berger reported, "Some 1.2 million new jobs were created during the last 10 years. That is extraordinary growth, especially for a region that was widely thought to be in its death throes in the mid-'70s."

(Via Port of NY-NJ)

1,491 Ships Made Calls at Charleston

Vessel calls at the Port of Charleston reached 1,491 at the State Ports Authority's four Charleston Terminals in Fiscal 1987, up 15 percent from the previous year's total of 1,297.

"The latest records, on the increased number of merchant vessel calls at the Port of Charleston, reflect a strengthening of import service and breakbulk commodities, as well as, in our over-all traffic," said Mr. L. Duane Grantham, the Port's director of Marketing and Sales.

"We were also pleased to note that, as of this latest vessel activity report, Charleston now offers one or more weekly ocean liner services in each of eight major world trade areas."

Records for the latest Ports Authority fiscal year, ended June 30, show the new total is the highest since 1983. Since that time, a number of ocean liners ceased operations or were merged with

NEW EXECUTIVE DIRECTOR OF THE PORT OF REDWOOD CITY, FLOYD L. SHELTON (center) was recently congratulated by Port Board Vice Chairman Dick Dodge (left) and Chairman Guy Smith. Shelton took over the helm of California's second oldest Federal port project on August 1, upon the retirement of Executive Director Fred DiPietro. Formerly senior executive of the Oregon ports division, he directed a statewide marketing, planning and coordination program for the 23-port system there. Subsequently, he was executive director of the Port of Astoria before coming to his new position at the Port of Redwood City on the south shore of San Francisco Bay.

other lines.

The Port of Charleston's world trade routes now cover 109 countries, served by 68 ocean liner companies. Among those services, 12 lines make weekly calls at Charleston, 16 call monthly, and another 18 call two or more times each month. Of the remaining services, which maintain irregular schedules, most call three to five times a year at Charleston.

Port of Tacoma Awards Contract for Terminal 3

A contract of \$18,688,624 was recently awarded by the Port of Tacoma for construction of Terminal 3, a new container handling complex to be located adjacent to existing Terminal 4.

The Terminal 3 facility is the largest construction project undertaken by the Port since completion of the \$32 million Sea-Land terminal in 1985. When completed in March 1989, the Terminal 3 project is expected to have a pricetag of \$30 million. That amount will include purchase of two new state-of-the-art container cranes, paving utilities, demolition and possible construction of support buildings.

To be located adjacent to the Port's North Intermodal Railyard, Terminal 3 will be among the most modern and efficient container facilities in North

America, said Port of Tacoma Commission President Joe Faker.

"With three berths that are capable of handling the largest container ships afloat, and immediate proximity to on-dock rail, Terminal 3 will offer a great many advantages to steamship lines.

Fully-erected Cranes To Virginia Terminal

PACECO, Inc. recently shipped four fully-erected container stacking gantry cranes to Virginia International Terminal in Norfolk, Virginia, bringing the total number of PACECO Transtainers at the Port to seventeen. (Delivery of fully-erected cranes allows the Port to operate them much sooner than site-erected units.)

Designed and fabricated at PACECO's 100-acre manufacturing complex in Gulfport, Mississippi, the 40-long-ton capacity cranes can service one truck lane and a block of containers stacked six wide and four high (1 over 3). Equipped with PACECO reeved-in telescopic container lifting spreaders, they feature wider balloon-like treadless tires, which are specifically designed to provide the lowest surface pressure possible (minimum P.S.I.). They also feature higher hoisting speeds (loaded 75 F.P.M. — unloaded 150 F.P.M.).

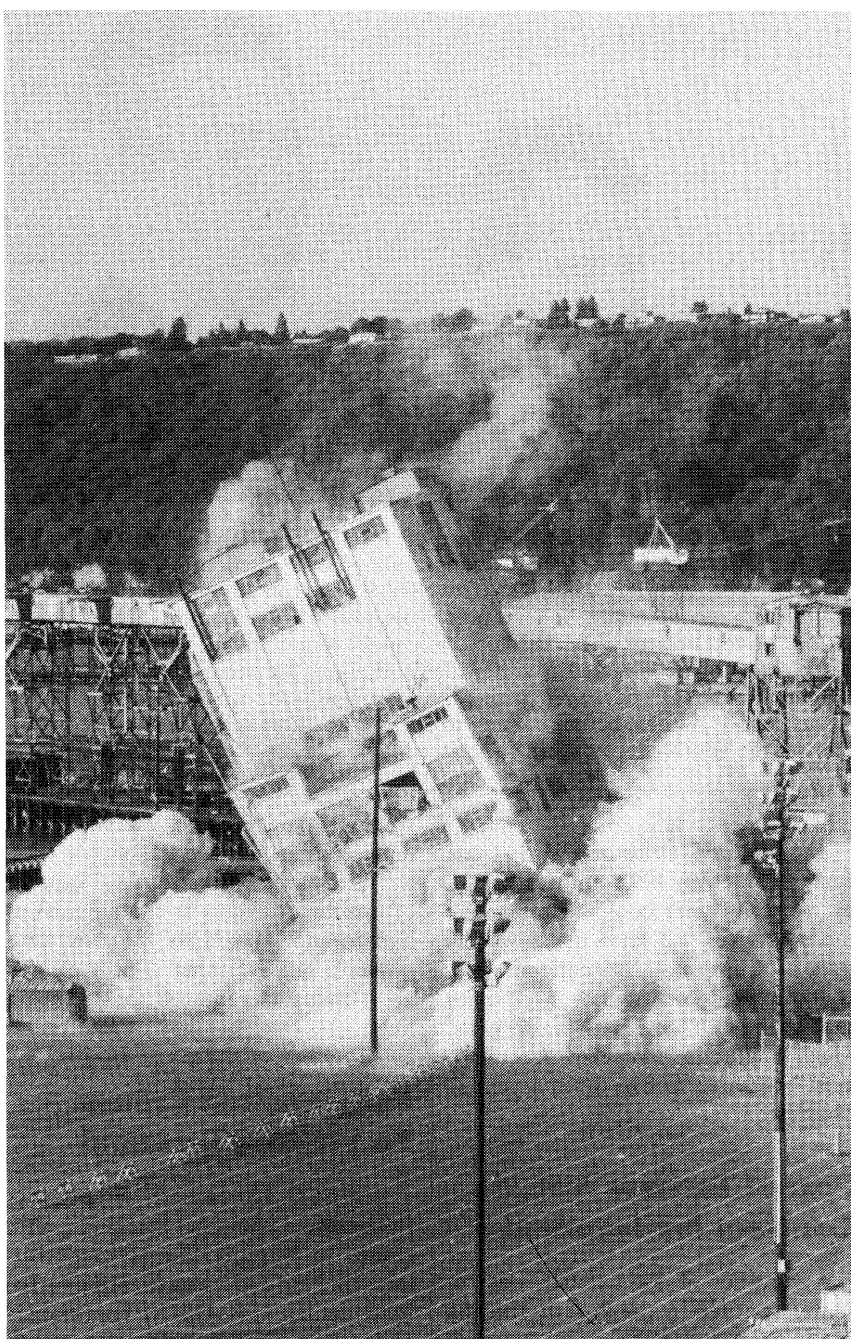
High-Performance Crane In Service at Le Havre

A "high performance" gantry was brought into service not long ago at the Europe Container Terminal at the Port of Le Havre, the first of a new generation of specialized container cranes resulting from very detailed design studies carried out jointly by the Port Authority and an internationally known Le Havre firm, Caillard Levege, who put in the successful tender for the contract in early 1986.

It was the fifth container crane to join the lifting equipment at the Europe Terminal, where 244,421 TEUs were handled in 1986. The main measurements are much like those of other gantries, except that the legs have been set 16.5m (54ft.) apart instead of 15.5m (51ft.) so as to allow for the handling of containers 48ft. long. The outreach (40m/131ft.) is the same as in earlier models and is sufficient for the widest container ships at present using Le Havre (32.5m/106ft.). However, to cope with future vessels of up to 38.5m (126ft.), it will be a simple matter to add an extra section. The backreach is 25m (82ft.).

The most important improvements are in lifting speed and horizontal speed, which has gone up from 2 to 3m/sec. Whereas ordinary gantries work at constant speed, this new version works at variable speed, which a computer adapts constantly to the container load. This results in a very noticeable reduction in lifting times and should improve output by about 20%. The old electromechanical circuits have been computerized and the amount of electric cabling has been considerably reduced, resulting in improved reliability, less maintenance and greater safety.

A visual display unit provides the operator with up-to-the-second information on how the gantry is functioning, enabling him to react much more quickly if anything goes wrong and pinpoint the trouble far more easily. A mass of information is constantly passing between the control cabin and the vessel, using a specific computer program worked out by Alstom. The routine use of computers not only steps



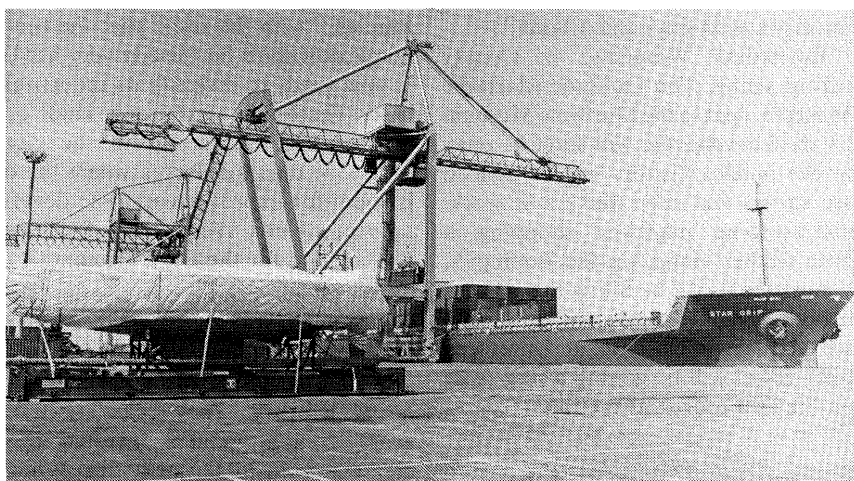
A Big Blowout at the Port of Tacoma

It took two months of intense planning and only a two-second explosion to turn the Port of Tacoma's landmark United Grain elevator into a pile of rubble.

The outdated United Grain elevator, built in 1930 and closed in 1985, was demolished recently to make room for further expansion of the Port's North Intermodal Railyard. Expansion will boost the yard's capacity to 67 double-stack railcars.

Rubble from the formerly 177-ft.-high elevator will be used in the Port's fish mitigation project in the nearby Pier 5 area. This is mitigation for filling an area which previously housed a small fishing fleet, now relocated.

The demolition and mitigation are both related to the Port's construction of Terminal 3, a \$30 million facility to be completed in March, 1989. Located adjacent to Terminal 4 and the North Intermodal Railyard, Terminal 3 will have three full container ship berths, each capable of accommodating the largest container ships afloat, and a total of over 65 acres of adjacent backup storage area.



Unusual Loads for STAR GRIP

During her call at the Verdon container quays in the Port of Bordeaux, France, on August 10, 1987, *Star Grip*, a container ship belonging to Norwegian Star Shipping, and operated on their regular line service between Europe and the West Coast of the United States, loaded, in addition to some 250 TEUs, three yachts, and left for Los Angeles.

The yachts built in the port's hinterland at the Benetau yards at St. Hilaire de Riez — Vendee are each 12.80m long and weigh 8.6 tons and they all have masts of 17m.

These unusual loads were mounted on container flats for the voyage and loaded by the Verdon gantry cranes with an ease that demonstrated the skill and experience of the operators, for which Le Verdon is renowned.

up performance but simplifies maintenance as well.

A further advantage of the new equipment is that it has an automatically controlled telescopic spreader. Moreover, a new device to facilitate the centering of containers on trailers by means of a photoelectric cell is to be installed soon. It has already been tested and put into permanent service on three other gantries.

The Europe Terminal's fifth gantry crane is without a doubt the first of a new generation of high-performance cranes that are more reliable, easier to operate and maintain, and therefore more economical. Thought is already being given to ways of stepping up their performance still further by increasing efficiency on both the landward and seaward sides.

(Port of Le Havre Flashes)

Transshipment of Goods At Amsterdam

According to figures of the Port Authority, Amsterdam's harbor has transshipped nearly 15.3 million tons of goods in the past six months.

Compared with the same period of last year this means a slight decrease of 1.2%. The decrease primarily made itself felt in the transshipment of grain, coal, and ore in the dry bulk goods sector, and in the general cargo sector, in conventional cargo and wood. By contrast, the ocean-going traffic in oil-bearing seeds and fodder, molasses, edible oils as well as container traffic and automobile import and export showed significant increases. During the past six months 2,266 ocean-going vessels were handled in the harbor, 101 more than during the same period last year. Their gross cargo also increased by 0.3% to 15,734,636 tons.

General Cargo Traffic

During the first half of 1987, the total amount of general cargo diminished by 0.7% to over 1.3 million tons. A significant decrease of 8% and 10% respectively occurred in conventional general cargo and wood as compared to the same period of last year. Container traffic showed an appreciable increase of 11% to nearly 0.4 million tons thanks to a better second quarter. The ocean-going traffic in cars continued to grow, increasing by nearly 16% to almost 178,000 tons.

Port of Amsterdam's Support Services

The business of a port has changed over the years from a simple cargo-handling base for ocean-going ships into a handling, storage, processing and distribution centre involving all kinds of goods and all means of transport. This requires advanced ship and cargo handling equipment, skilled stevedoring operations, facilities for road, rail and inland waterway transport and storage facilities for all types of cargo: dry and liquid bulk, general cargo in all forms as well as perishable goods or those requiring specialized handling or storage.

One thing that hasn't changed in this business of ports is the need for ships to deliver and take away the cargo: regular liner shipping services (conventional, ro/ro and containerized) as well as specialized bulk carriers, other tramping 'services,' coasters and inland waterway vessels (which are getting very specialized as well).

Getting the ships is a very complicated balancing act. Amsterdam's advantages are the proximity to major markets, excellent transport links to the hinterland, a full range of handling and storage facilities, a skilled work force and traditional trading and transport ties to Scandinavia, Latin America, West Africa and Southeast Asia, especially Indonesia. Liquid and dry bulk shippers are also well aware of Amsterdam's storage facilities and distribution links.

Another essential is finely-tuned relations with importers, exporters, forwarders, shippers and shipping lines and agents everywhere. And once a regular cargo flow is established it must be nurtured or it might lose markets or - worse - opt for another port. The port business requires diplomacy, hard-selling, counseling and advice and smooth operations.

Many ports, especially in the highly competitive North Sea continental range from Le Havre to Hamburg try their best to attract ships and cargo: most with at least some success. After all, these continental European ports handle about 25% of the world's ocean-borne goods each year. Europeans are consumers as well as producers. The quality of the support services is often the determining factor in maintaining cargo flows through a certain port.

These services range from insurance to Customs to provisions, from tugs to container repair, and from cargo supervision to communications.

Shiphandling and bunkering are two of the oldest port services. In Amsterdam, Neptunus/Vinke and Aug. Köpcke are the main ship chandlers, with Canne and Balwé handling foreign requisites. Drinking water is supplied by the aptly named Waterboot, v.d. Linde provides fuel and lubricants in the Port of Amsterdam, while Klaas de Boer is the bunkering expert in IJmuiden.

Amsterdam's attractions as a cargo distribution center are strongly supported by its excellent range of services to shipping transport on a 24-hour basis. Ships keep to tight schedules: efficient loading and discharge are vital and services which ease ship handling and movement in and out of port or provide supplies, bunkering or last-minute repairs are absolutely essential. They give shipowners and operators peace of mind, ensure the smooth flow of cargo and cope quickly with emergencies. Strong support services enhance the advantages of Amsterdam's facilities, location and connections, and certainly contribute to Amsterdam success in the port business. (*Haven Amsterdam*)

Rotterdam Strengthens Its Ties with the River

By Janny Kok

Rotterdam is not a particularly nice place and it has a big port. Research findings published recently by Burke/Interview show that the city still has this negative image. Yet the same research revealed that Rotterdam manages to attract large numbers of visitors: and the city's position as a tourist centre is expected to be reinforced soon when plans for the "Rotterdam Waterstad" recreational project are implemented. If the planners have their way, the right bank of the River Meuse will be an area which tourists will simply not want to miss. It is to acquire a tropical swimming paradise; a film theatre, the Imax, which will show films about the Port of Rotterdam and other topics on a king-size screen; an exhibition centre focusing attention on

the city's economy; and a hotel.

Rotterdam Waterstad is already taking shape. The Outdoor Maritime Museum, next to the Maritime Museum on the Leuvehaven, will soon be open to the public. Visitors will be able to see smiths and rope makers at work, and do some "maritime" shopping. A little farther along, on the Boompjes, a music boat will be filling the air with melody. The inquisitive will be able to see an oil rig in close-up, and a refitted pilot vessel will be getting a new lease on life as a tourist attraction.

Ships, Art and Culture

In fact, the new project complements the river's existing attractions. The most famous of these are the boat trips around the port, which start from Willemsplein. The trips are organised by the city's own company, Spido. Farther along the Leuvehaven is the Prins Hendrick Maritime Museum, an imposing building designed by Wim Quist. The museum has a collection of historic inland waterways vessels. The ramming vessel "De Buffel" recreates the atmosphere of naval life around 1900.

Just over the road from the Maritime Museum is the Schieland Museum of History, where visitors can admire Rotterdam's culture, history and art. Just half a mile away is Rotterdam's answer to the Pompidou Centre: the Central Library building, which resembles the great exhibition centre in Paris. Not far from the library are Piet Blom's avant-garde "dwellings on stilts," which are well worth a visit. In terms of historical interest, though, the city comes into its own in the Oude Haven, where vessels from bygone eras are on view. All of these vessels can be repaired on a repair slip which dates from the beginning of the century.

Rotterdam Waterstad gives private initiative its head. The world's leading port has room for industries in various sectors, not just in shipping. Small and medium-sized businesses can help in shaping the city's waterfront. Pieter van Empelen, a former director of the Maritime Museum who is now closely involved in "Rotterdam Waterstad," says that the project is giving Rotterdam a new economic base.

"In the nineteen sixties and seventies, so much effort was put into large-scale port operations that Rotterdam's economy grew lopsided," says Mr. van

Emplen, "with the result that the economic downturn hit the city very hard. It now needs to diversify its industrial base. There are hardly any small or medium-sized businesses in the city centre, so that is one area where there is room for improvement. The development of new recreational facilities is also good for the city's economy."

The people behind the "Rotterdam Waterstad" project are convinced that the new recreation area will attract small businesses in the hotel and catering industry. They calculate that every million guilders invested can create at least fifteen new jobs. When the project is complete, the area will play host to hundreds of thousands of visitors, and it will no longer be possible to "do" Rotterdam in a day.

Plans for the Left Bank

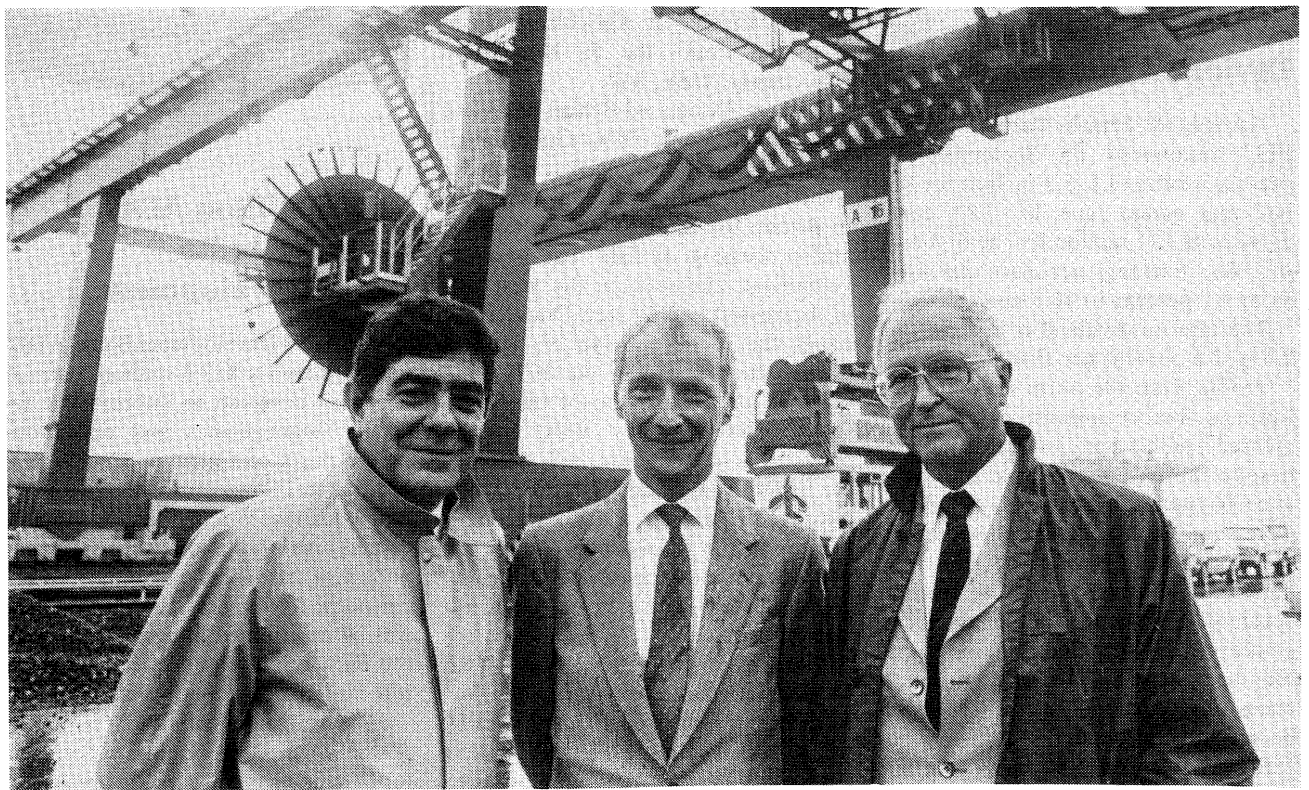
The project has already started to generate follow-up developments. The authorities want to get the southern part of the city involved, too. Even before the plans for South Rotterdam have got off the ground, the area has been dubbed "Manhattan-upon-Meuse." The plans provide for skyscrapers to be built alongside more familiar types of buildings. Some 5,000 dwellings are planned, as well as attractions along the waterfront.

Mr. Alderman J. Laan, who has special responsibilities for physical planning in the city, believes that the area has the potential to become a leading international business centre where famous names will be eager to locate. He is confident that the people behind the project are going to rise to the challenge. He thinks that the key to success will be if the Municipality agrees to the construction of a bridge linking South Rotterdam with Coolsingel in the city centre. The bridge alone will cost the city about 175 million guilders.

The plans for South Rotterdam include a major new road which will run through the city, linking Rotterdam Airport, the football stadium De Kuip and Zuidplein. It already has a name: Rotterdam Avenue.

These ambitious plans all have a common denominator: Rotterdam's desire to prove that, far from being a boring old place where you only go if you happen to work there, it is a dynamic and exciting city.

(*Rotterdam Europoort Delta*)



Mr. Ignacio de Cardenas, head of the crane department at Fruehauf S.A. of Madrid, Spain (left) was present when the Port of Gothenburg commissioned the first of its two new Fruehauf transtainers, as was Mr. Rolf Claeson, head of ASEA's Drives division, the supplier of the electricity systems of the cranes. In the middle, representing the buyer, is the Port of Gothenburg vice president, operations, Mr. Börje Appelqvist.

Crane and Truck Investments at Port of Gothenburg

The Port of Gothenburg has commissioned four straddle carriers, one ship-to-shore container gantry and one terminal gantry. The upcoming autumn and winter will see another, identical set of machinery put to work.

"This year we will spend about 100 million Swedish Kronor (£10 million, US\$16 million) on the upgrading of our crane and truck fleets, and it will probably take some years before we hit this level again," said Mr. Nils Birgander, the port's technical director.

The Straddle Carriers

The straddle carriers are part of a program that will increase the number of straddles at Gothenburg's Skandia Harbor from four to twenty in the five-year period ending in 1990. A cargo handling system based on straddles rather than terminal tractor/trailer combinations is being implemented, and the recent delivery makes the total number of straddle carriers ten. Another four are to be delivered in February, 1988.

The straddle carriers are all manufactured by Valmet of Finland and have a three-high container stacking capacity.

The Ship-to-Shore Gantries

The two ship-to-shore gantries are of Danish manufacture. The new cranes are being built by Aarhus Maskinfabrik, with Swedish ASEA supplying the electricity systems; they will increase the number of ship-to-shore gantries at Gothenburg's Skandia/Älvsborg facility to seven.

The gantries feature a 38-meter (i.e. Panamax) outreach over water and a 41-meter outreach over land, measured from the outer crane rail.

The lifting height has been compared to the port's older cranes. The new 28.5-meter height will allow a smoother operation on the cell guide system of Atlantic Container Line's G3 vessels.

Also, the new Aarhus gantries have a quieter acceleration and a retardation in the lifting and lowering movements. The lifting capacity is 40 tons in con-

tainer operation and 70 tons for heavy lifts using a hook.

The Terminal Gantries

The terminal gantry cranes that are being delivered to the Port of Gothenburg are of Paceco design and are manufactured by Fruehauf of Spain. As with the ship-to-shore gantries, the electricity systems were designed and are being installed by ASEA. These rail-mounted transtainers have a 26.1-meter rail span and a 10-meter outreach on both sides. Intended for shifting containers between railroad cars and terminal, the cranes have a 12-meter lifting height. As they will operate together with straddle carriers, they have rotating hoisting machineries that enable the operator to park containers at an angle to the rails. Thus, the straddle carriers will be able to pick up a container without having to follow a lane of other containers.

As a special feature, the two new transtainers have operator's cabs that move independently of the hoisting trolleys. This unique feature lets the operator position himself in the best possible way for any specific operation; also, it gives him a better working environment since the cab has its own trolley with rubber tires. In this way, the operator avoids the necessarily harsher ride of the trolley with its 40-ton hoisting capacity.

ABP Holdings Profits Up; Dividend Increased

Associated British Ports Holdings PLC announced on September 10 pre-tax profits of £13.3 million for the half-year ended June 30, 1987, compared with £11 million for the first half of 1986. Earnings per share increased from 9.1 percent to 10.3 percent.

The interim dividend is raised from 2.0 to 2.5 percent per share.

Profits from the ports sector of the business (before interest payable) increased from £8.2 million to £9.4 million despite the exceptional cost of severance payments which at £3.8 million were some £1.1 million higher than in the first half of 1986. The relatively high cost of severances arose from a substantial reduction in the numbers employed in the South Wales and Humber ports, and the cost of severances in the second half of 1987 will be very much lower.

Profits from property activities, including Grosvenor Square Properties acquired in January 1987, contributed £4.7 million (1986: £3.5 million). Investment income was £1.1 million (1986: £0.5 million) and interest payable was £1.9 million (1986: £1.2 million).

Port services achieved a turnover of £79 million compared with £73.5 million for the first half of 1986. Grain continued to be an important feature, and ports in the ABP group between them handled over 5 million tons in the 1986/87 season.

On prospects for the year as a whole, Sir Keith Stuart, Chairman of Associated British Ports, said:

"Following the satisfactory first half, prospects for the year 1987 are for a further significant improvement in profits compared with 1986. Port services should continue to make useful progress as the effects of cost reductions come through. Property profits will benefit from the recent successful sale of Grosvenor Square's property in Bishopsgate for £20.5 million, and from a range of schemes now under way."

New Fish Market Boost For Lowestoft Fishing

Lowestoft's fishing industry received an important boost on September 25 with the opening of the port's new £1.5 million Waveney West Fish Market

by the Minister of Agriculture, Fisheries and Food, the Rt Hon. John MacGregor, OBE, MP.

Built by Associated British Ports and part-funded by a 60% Government grant, the new fish market provides some of the most up-to-date facilities in Britain for the landing, auctioning, and processing of fish. The new development, centered on the west side of Lowestoft's Waveney Dock, completes the modernization of the fish docks which began in the 1970s and included the restoration of the South Quay. The Waveney West market provides a new auction hall, facilities for fishing vessels and fish processors, improved roads and a new canteen.

Inviting the Minister to declare the new development open, the Chairman of Associated British Ports, Sir Keith Stuart, said:

"The new Waveney West Fish Market reflects the revival in the fortunes of the Lowestoft fishing industry which has taken place over the last few years, and its construction amounts to a considerable vote of confidence by all parties concerned in the future of fishing at Lowestoft."

New Ferry Service From Southampton

The Port of Southampton's newest business started with the arrival of the Flota Suardiaz roll-on/roll-off vessel "Arroyofrio Uno" on a daily freight ferry service from Dieppe.

The new service, operating from Southampton's 30 Berth Ro/Ro Terminal, is the second cross-channel freight link established this year from Southampton and reflects the considerable increase in ro/ro trade at the port. CAT (UK) and the French shipping line Carline started regular sailings to Le Havre in February from new facilities in the port's Western Docks and in October the Southern Africa Europe Container Service transfers its ro/ro operation from Tilbury.

Southampton's Deputy Port Director Andrew Kent commented: "Southampton can handle the largest ro/ro ships operating into Europe; it is close to the Continent and its major shipping routes; has considerable marshalling areas for freight and vehicles; and the UK motorway network feeds directly into Southampton. We expect to win further new business in the months to come."

Asia/Oceania

\$87.6 Million ADB Loan for India Ports Development

The Asian Development Bank (ADB) has approved a \$87.6 million loan for a project designed to improve the facilities, management and operations of the ports of Calcutta, Cochin and Madras in India.

The loan is from the Bank's ordinary capital resources and has a repayment period of 24 years, including a grace period of four years. The interest rate will be determined in accordance with the Bank's pool-based variable lending rate system.

Modernization of India's major ports, which were originally designed for handling general cargo in breakbulk form, is long overdue, especially in view of rapidly increasing container and bulk cargo traffic, as well as changing shipping technology and cargo handling methods.

The Bank-assisted Ports Development Project includes the following main components: **Part A: Calcutta Port:** (i) construction of a container terminal; (ii) provision of container-handling equipment; and (iii) provision of a computerized container traffic control system (CCTCS); **Part B: Madras Port Container Terminal:** (i) expansion of the existing container terminal; (ii) provision of container-handling equipment; and (iii) expansion of CCTCS; **Part C: Madras Port Fertilizer-Handling Plant:** (i) provision of a high-speed fertilizer unloader; (ii) provision of facilities and plant for storing and handling of fertilizer; and **Part D: Cochin Port:** (i) upgrading of existing port facilities for container operations; (ii) provision of container-handling equipment; and (iii) expansion of CCTCS. Consultant services will be provided to assist in Project implementation.

Significant economic benefits are expected from the Project. They include savings of ships' waiting and service time, reduction of cargo spillage, savings in container rental, and savings in capital tied up in cargo. Additional benefits include savings in transporting

containers between shipside and storage areas.

The total cost of the Project is estimated at \$130 million, of which \$71 million will be the foreign exchange cost and \$59 million the local currency cost. The Bank loan of \$87.6 million will finance \$67.9 million of the foreign exchange cost and \$19.7 million of the local cost.

The executing agencies for the Project, which is expected to be completed by end 1990, will be the Port Trusts of Cochin, Madras and Calcutta.

Brisbane Renews Cargo Throughput Record Again

For the fourth year in a row, the Port of Brisbane has broken its cargo throughput record.

Total cargo to move over the port's wharves in 1986/87 was 13,223,200 mass tonnes. This is a rise of 1.4 per cent above the previous best year (1985/86).

Releasing the figures, the Minister for Maritime Services (Hon. Martin Tenni, M.L.A.) said that prominent in the final result were the individual records set in the trades of coal (1,595,500 m.t.), oil/products (6,847,000 m.t.), and metal ores (1,166,600 m.t.).

Mr. Tenni said the number of containers handled also reached a record high — 104,326 TEUs.

He noted that several other trades had registered very strong results, and he offered his congratulations to all concerned.

Executive Chairman of the Port of Brisbane Authority (Hon. A.M. Hodges) described the results as "rather remarkable."

He felt the general situation pointed to steadily increasing customer awareness of the port's versatility and efficiency.

Mr. Hodges said the number of commercial ship calls were "up" to 1,242 (from 1,197) and meat exports had risen 21.2 per cent to 276,400 m.t.

Those two sets of figures were particularly satisfying, he said.

"I believe they mean that the Authority, and the Brisbane port/shipping industry generally, are making some impression against the trend of centralising Queensland cargo in Sydney," he said. *(Brisbane Portrait)*

Port of Geelong's New Weapon to Fight Oil Spills

The Port of Geelong has a powerful new weapon in its armoury to combat sea oil pollution.

A \$100,000 helicopter dispersant spraying unit was delivered on long-term loan to the Authority from the Commonwealth Department of Transport during July.

The Simplex 6810 unit has boosted the Authority's ability to protect the coastline of Corio and Port Phillip Bays from oil slick damage and is a major element of its Port Disaster Plan.

The helicopter-slung unit, with a capacity of 908 litres and a spray width of 15 metres, is powered by a 10-horsepower petrol engine driving a hydraulic pump.

It is worked independently of the helicopter by the pilot, using a control box to operate the engine and dispersant pump.

The spectacular Department of Transport demonstration of the unit broke the morning tranquility of Corio Bay on July 8.

Watched by Department and Authority officials, media and emergency service personnel from Corio Quay North, the Aerospatiale SA 315B helicopter doused an imaginary oil slick area with water containing a fluorescent dye in several low height runs at speeds between 30 and 70 knots.

A second control and observation helicopter relayed precise details of the targeted area to the operator.

Among the observers was the then Minister for Territories, Mr. Gordon Scholes, who said that although there has not been a major oil spill in Australia since 1981, there was no room for complacency. *(Portside)*

To Beat Oil Spills

A full-scale demonstration of clean-up equipment, which is available in the Port of Brisbane to fight oil spills, took place recently on Moreton Bay.

Equipment on display included a deployment launch, "Triton," a Troilboom, a GT 185 skimmer, a Marco skimmer and an aerial spray unit, plus Port of Brisbane Authority vessels, "Kathleen" and "Akuna," and three Harbours and Marine (State Govern-

ment) craft.

The exercise, organised by the Commonwealth Department of Transport, is part of the continuing programme introduced under a national plan to combat pollution of the sea by oil.

An area off Manly Boat Harbour was selected as the "spill zone."

All aspects of the exercise were filmed by the Department of Transport as part of the national plan's extensive training programme for oil spill management.

It proved to be a particularly testing and useful training session. Participants had to cope with weather conditions which included 25-knot wind, choppy seas and rain squalls.

(Brisbane Portrait)

Gladstone Maintains Record Cargo Growth

The Port of Gladstone handled a massive 26.8 million tonnes of cargo during the year ended 30 June, 1987. This was a record tonnage and was 10.3% higher than the previous year.

The Maritime Services Minister, Mr. Martin Tenni congratulated the Gladstone Port Authority on handling its record tonnages. Mr. Tenni said the achievement was a further indication of Gladstone's repute as one of Australia's most important export oriented ports.

Mr. Tenni is quoted as saying "Such a huge tonnage passing through the Port could only be achieved by the great cooperation of all associated with the Port. I look forward to an even better result next year."

Councillor Alf O'Rourke, M.B.E., Chairman of the Gladstone Port Authority added: "The shipping industry is of enormous importance to Gladstone and its effects are not only felt in the city but reach far into the hinterland where much of the cargo is produced and mined."

"It was pleasing to the Port Authority that its forethought and planning were facilitating the shipping of ever growing tonnages."

Coal export figures were particularly pleasing in the light of increasing difficulties in securing coal exports overseas.

Coal exports through Gladstone have continued to expand at a steady rate, with just on 15 million tonnes being

(Continued on Page 45, Col. 3)

Port of Melbourne Developing Positive Corporate Plan

The Port of Melbourne Authority is developing a major Corporate Strategy Plan following a report on the future prospects and problems of the Port.

The Report, commissioned by the Ministry of Transport, highlighted several areas requiring action by the Authority.

The PMA Board, in a letter of response to the Minister for Transport, Mr. Tom Roper, said the PMA welcomed the Report as it identified a number of fundamental issues in relation to the operations of the Authority.

"The Board recognises that success in meeting its challenges will depend upon the cooperation of the many parties with which it interfaces in the operation of the Port.

"It therefore sees positive value in using the Report to increase consultation with Port customers and operators," the letter said.

It also stressed that significant steps had already been taken, not only to tackle the issues faced by the organisation, but also to introduce the necessary change requirements.

"It is therefore pleasing to note that the majority of the Report's recommendations mirror, or are based on, the direction of our current actions," the Board added.

This puts the PMA
in a position of
achieving a great
deal in the near future

"This puts the PMA in a position of achieving a great deal in the near future."

The Corporate Strategy Plan, to be in place by the end of the year, will integrate all PMA plans and activities in line with comments made in the Report and decisions made by the Board.

It will set clear, short and medium term business plans for agreed segments of the PMA's operations, identify revenue-increasing and expenditure-redu-

cing programs, set specific targets for approved programs, identify appropriate staff involvement required and develop a program of communication to Government, unions, industry and other interested parties.

The Minister has
officially endorsed
the PMA's plans

The Minister for Transport, Mr. Tom Roper, has officially endorsed the PMA's plans and, in a letter to industry, stressed that the Authority's positive response to the Report was a basis on which the Port's potential would continue to be developed.

Mr. Roper added that the interest shown in the Report by a wide range of organisations indicated the Port's importance to the Victorian Economic Strategy, and the necessity for regular public reviews of one of the State's key assets.

Of major
Importance is the
World Trade Centre

Of major importance in the future financial operations of the Authority is the World Trade Centre—developed, owned and operated by the PMA.

It is proposed the WTC be sold at a price acceptable to the Board. Should an acceptable price not be achieved, the Board considers a greater benefit to the Authority and Port users would be to retain the property at this time and examine opportunities for increasing net returns from the complex.

While involvement with the WTC is consistent with the PMA's Corporate Objectives, it is not strategically essential for the Authority to own the property. However, the WTC has been successful in achieving trade facilitation objectives which were originally envisaged with the majority of shipping business currently being transacted in the Centre.

The Board believes it is desirable the basic philosophy of the Centre, namely the facilitation of trade into and out of Victoria, be continued either by the PMA or some other competent orga-

nisation.

Leading Melbourne property agents, Jones Lang Wootton, have been appointed advisors on the sale of the Centre. The PMA is also liaising with Merchant Banks and the Ministry of Transport on the issue.

Port Pricing —
a total review by the
PMA is well advanced

Port pricing within the Port of Melbourne was another area highlighted by the Report and a total review by the PMA is well advanced. A final draft of pricing proposals is currently being considered by the Board.

The review of pricing has been developed around a standard port tariff structure being designed by the PMA for the United Nations Economic and Social Commission for Asia and Pacific Group (ESCAP).

The main principles of the tariff structure include that there is an appropriate relationship between port charges and costs, and a consistency in the basis and form of port charges throughout the region.

The finalising of port pricing options will be followed by a program of extensive consultation with government, industry, other interested parties and port authorities. The PMA is also taking the initiative of encouraging other Australian ports to adopt the model tariff structure.

Increased
dialogue with the
Port community

Central to the implementation of all current and future initiatives, including improving the level of performance within the Port itself, is increased dialogue with the Port community.

The future marketing strategy of the PMA recognises the importance of linking all parties in the transport chain to take advantage of the benefits offered by the Port of Melbourne. These benefits include ship frequency, service reliability, industrial stability, a competitive terminal environment and a

distance advantage to hinterlands.

Interaction with major industry groups, leading retailers, manufacturers and importers/exporters will continue to be a part of the Authority's marketing push with the aim of becoming involved in the transport decision making process of major trade organisations for mutual benefit.

Increasing overall Port efficiency

The PMA's establishment of a Cargo Services Department, charged with increasing overall port efficiency, reinforces the Authority's commitment to the total port and trading community.

Specific increases in port business from NSW, SA and Tas. have been the result of a business development program and are consistent with the PMA's efforts in influencing decisions based on promoting Melbourne as Australia's major distribution centre.

A joint working committee with V/Line

Other initiatives have included a joint working committee with V/Line to examine and improve rail services to the Port area. Following discussions on rail services over the past few months with shipping lines and individual terminals, a strategy document will be made available during the next month for comment.

Identifying particular issues facing shippers, the development of a customer information system, a total review of the PMA's organisational structure, business plans and control systems are other matters being pursued. Progress in these areas will be in line with the overall Corporate Strategy Plan.

Port customers and
waterfront unions can
expect a significant
improvement

Mr. Roper stressed, in his letter to

industry, the importance of the Report and current actions by the PMA, adding that the subsequent assessment and comment from both the PMA and its customers and employees can only assist in moving positively towards the achievement of the required performance level.

"I have been assured by the Board of the PMA that Port customers and waterfront unions can expect a significant improvement in consultation and communication in the future, especially in those areas specifically raised in your response to the Report," Mr. Roper said. (Port Panorama)

Port of Melbourne Authority

Corporate Mission Statement

The Port of Melbourne Authority exists to ensure the safe, efficient, cost-effective movement of shipping, cargo, passengers and other related modes of transport through the port system for the overall benefit of the Victorian community, by planning, providing and managing port and trade-related facilities, assets and services, in a manner responsive to customer requirements. (Port Panorama)

Beach Renourishment Program for Brighton

The Port of Melbourne Authority will pump more than 100,000 cubic metres of sand onto the Brighton foreshore as part of its beach renourishment program.

The final stages of the \$730,000 project to restore the 900-metre Stretch between Green Point and New Street commenced late in May.

Transport Minister Tom Roper said the work would protect the existing limited foreshore reserve and the old seawall which has been undermined and damaged by wave action. A sandy beach would also greatly enhance the recreational assets of the Brighton foreshore area.

In 1986, the trailer suction dredge, *Matthew Flinders*, deposited coarse-grain sand offshore. In May this year

a contractor began pumping the sand onto the beach.

The work carried out on the New Street beach restoration is one of the functions previously undertaken by the former Ports and Harbors Division of the Ministry of Transport. Many of the Ports and Harbors functions were transferred to the PMA under the 1986 restructure of Victorian Port responsibilities. (Port Panorama)

\$6.7 Million for Developing Newcastle

The Minister for Public Works and Ports, Mr. Laurie Brereton, on September 22 announced a \$6.7 million development program for the Port of Newcastle during 1987/88.

Mr. Brereton said the Maritime Services Board would invest \$2.4 million on new and upgraded port facilities and equipment.

A further \$4.3 million would be spent on improving plant and amenities in the port as part of a special program to improve efficiency and reduce costs, he said.

The major capital works project for the port during 1987/88 is the construction of new mechanical and electrical workshops at Carrington. The workshops, to be completed in 1988/89, will replace old and outmoded facilities.

"The construction of the new workshops will considerably increase the efficiency and level of service provided by the MSB to its commercial customers in the Port of Newcastle," he said.

The workshops are to be built at a total cost of \$5.9 million, of which \$3.1 million will be spent during 1987/88.

Gladstone Maintains

(Continued from Page 43, Col. 3)
shipped from the Port during the year.

Skilful marketing by the various coal companies had ensured that where reductions in tonnages to traditional markets had occurred, the securing of new markets had increased the overall tonnages.

A few years ago, virtually all coal shipped from Gladstone was destined for Japan. Now, Japan's share had fallen to about 45%. On the other hand, Europe's share had grown to 26%. In all, coal was shipped from Gladstone to 27 countries.

Auckland Harbour Board Is in Housing Business

The Auckland Harbour Board operates as a diverse organisation, with port operations, landholdings, property rentals, boatharbours, and financial investment as some of its major interests.

In addition to the commercial property interests of the Board in downtown Auckland, and at Te Atatu, the Board is also a major property developer, and since 1962, has been opening up land for housing at Lynfield, overlooking the northern shores of the Manukau Harbour.

This type of investment is important to the commercial operations of the Board, because when port trading is going through difficult times, it is important that other interests such as property and financial investment are able to ensure overall profitability is achieved.

In 1962 the Board began development of a 136-hectare site at Lynfield in the Borough of Mt. Roskill for residential subdivision.

A shopping centre to service the community was opened in 1965 and over 850 residential sections have now been developed.

Initially the sites were sold on a leasehold basis only but in 1970 this policy was altered. The Board resolved to offer future purchasers the option of purchasing either the leasehold or the freehold interest, and to encourage existing leasehold owners to freehold their properties. As an incentive a 10% discount for cash was offered to all lessees of the board's residential properties who held leases at the date of 15 December 1970, and who wished to freehold their properties. This offer remains open to existing lessees who meet this criteria.

In 1975 the Board moved to update the terms of its residential leases and resolved that future leases would require rent reviews at five yearly intervals. Subsequently the policy has been to offer sections for sale on a freehold basis only.

The Board's latest residential subdivision at Lynfield is the Sylvania block which was completed in May 1986.

The final subdivision to be developed by the Board at Lynfield is Stage II of the Strathnaver Block which is expected to produce a further 74 resi-

dential sections.

The Board's engineering consultants have been instructed to prepare final working drawings for Stage II. They have now supplied a preliminary report and timetable calling for commencement of construction work in September 1987 with completion and marketing of sites in April 1988. Overall development costs have been estimated at \$1.6 million plus GST.

(Port of Auckland)

Indonesian Ports Run By Public Corporations

A significant step has been taken by the Government of Indonesia in port administration and management.

In 1983, after a long deliberations, the Government decided to run the administration of the ports in more businesslike manner and decided to form Public Port Corporation. (Formerly they were under individual Port Administration). Ports under the administration of Public Port Corporation that scattered over 27 Provinces in Indonesia are grouped into 4 Public Port Corporations: Public Port Corporation I to Public Port Corporation IV.

Each Public Port Corporation is administered and managed by a Board of Directors who in carrying out its duties and obligations is responsible to the Central Government through the Minister of Communications.

The Board of Directors is appointed by the President. It consists of 5 Directors, namely: Managing Director, Director of Operation, Director of Engineering, Director of Finance, and Director of Personnel and General Affairs.

The Managing Director in carrying out his duties is directly assisted by two functional units, i.e. Planning, Information and Development Centre, and Internal Supervising Unit.

Public Port Corporations have their head offices in Medan, Jakarta, Surabaya and Ujung Pandang, and each undertakes around 18 to 19 branch ports under its control which are classified into 5 classes. The first class ports are Belawan, Tanjung Priok, Tanjung Perak and Ujung Pandang.

This classification is based on the size, area, facilities and other important criteria.

Each branch port is headed by a

Branch Manager who is responsible to the Board of Directors.

(Primer 1986, ASEAN Port Authority Association)

Pusan Handles More Cargo Volume This Year

The cargo traffic volume handled at Pusan port was on the increase so far this year, according to the material released by the Pusan District Maritime and Port Authority.

The first seven months of this year saw the general cargo volume of the port stand at 26.6 million tons, which represents a 23.7 percent growth over the same months of last year when the corresponding figure was 21.5 million tons.

Of the total cargo traffic volume, export volume amounted to 15.6 million tons, and import volume 11 million tons, up 27.8 percent and 18.2 percent, respectively, from last year.

In addition, the container cargo traffic volume of the port up to July this year marked 1.02 million TEUs, up 32.6 percent when compared with last year's 776 thousand TEUs.

Of the container cargo volume of the port, the Busan Container Terminal Operation Co. handled 668 thousand TEUs by July, an increase of 28.6 percent from last year's 519 thousand TEUs.

(Korean Maritime News)

Additional Lock Gate at Inner Harbor of Incheon

A project is scheduled to begin to construct an additional lock gate at the inner harbor of Incheon port, it was learned.

The Korea Maritime and Port Administration said that the new lock gate which is designed to accommodate 50,000-ton class vessels will be completed by 1990 at a cost of 15 billion won in order to improve the operational efficiency of the port by giving calling ships easier access to the port and departure from it.

At present, the operation of inner harbor which has two lock gates through which up to 50,000-ton class vessels can make entry into or exit from the port, is seriously interrupted when the 50,000-ton lock gate undergoes regular repair work every three years or mechanical troubles arise on the gates.

(Korean Maritime News)

Highlights of the 7th National Port Development & Improvement Plan of Japan

Reflecting the acute changes in various aspects of Japan's economic and industrial structure which have been mainly triggered by the drastic appreciation of the Yen during the last two years, the direction of national port development and improvement has changed markedly when compared with those of previous years. Moreover, the trend is mirrored in the 7th National Port Development & Improvement Plan of Japan.

In short, attention is being concentrated on private participation in the development of waterfront space for civic and commercial facilities rather than industrial amenities. Another critical factor contributing to the enhancement of waterfront development has been the recent dramatic increase in land prices, especially in big cities and their peripheral areas. In fact, because of the phenomenal spiralling of land prices, public investment requiring a significant area of land has become extremely difficult and is virtually stagnant due to the fact that an exorbitant amount has to be spent just on the acquisition of land.

Under the circumstances, the land designated as 'port areas' as well as those stretches of reclaimed land which were originally intended for industrial use have become the focal points of public investment and development.

In order to enhance domestic consumption, the Government is in a position to boost its public spending in various sectors. Among the areas earmarked for such development are the waterfront zones where new investments could be made in bridges, tunnels, commercial and residential complexes and other facilities in strategic areas such as the coastal zones within the Three Bays, namely Tokyo Bay, Ise Bay (Nagoya) and Osaka Bay (Osaka and Kobe).

At the same time, spending on the improvement and modernization of port facilities has been expanded considerably with special attention directed toward containerization and unitization, both for international and coastal shipping, as well as the advancement of safe navigation of ships by means

of providing better equipped refugee ports (where ships can take shelter at the time of typhoons) and deeper and wider channels.

Hereunder is a brief description of eleven major projects, followed by (A) the overall target parameters for the beginning of the 21st century, (B) the target areas included in the 5-year plan, (C) the total amount of investment to be made throughout the whole span of the 5-year plan, (D) the amount which was incorporated in the previous 1987 budget, (E) the amount it is hoped will be incorporated in the second year of the 7th National Port Development & Improvement Plan for 1988, and (F) an overall description of the projects included in the 1988 plan.

1. Container terminals for overseas traffic

- (A) Balanced distribution of container terminal facilities within the Three Bays and 12 other ports
- (B) New construction of 16 berths at 11 ports (including 6 berths at 6 ports outside the Three Bays Areas)
- (C) 140 billion yen
- (D) 70 billion yen
- (E) 136 billion yen
- (F) Improvement work at five ports located in the Three Bays, and two ports from other areas

2. Unit load terminals for domestic traffic

- (A) An overall target of installing 1 unit-load-terminal per prefecture, with 30 such terminals are to be included
- (B) Development work at 21 ports
- (C) 60 billion yen
- (D) 70 billion yen
- (E) 42 billion yen
- (F) Continued improvement work at 11 ports, with new construction work commencing at 3 ports

3. Improvement of access road to port terminals with trunk lines

- (A) An overall target covering some 150 km. of roads

- (B) About 11 km. of roads at 14 ports
- (C) 140 billion yen
- (D) 21 billion yen
- (E) 48 billion yen
- (F) Continued improvement work at 10 ports, with new construction work commencing at 2 ports

4. Safety Improvements in navigation of ships

- (A) Improvement of refugee ports and navigation channels
- (B)
- (C) 100 billion yen
- (D) 15 billion yen
- (E) 17 billion yen
- (F) Continued improvement work at 11 refugee ports and 14 navigation channels

5. Improvement of multi-purpose public berths with deeper draft

- (A)
- (B)
- (C) 130 billion yen
- (D) 15 billion yen
- (E) 16 billion yen
- (F) Improvement work on 32 berths at 29 ports
 - 12-meter berths: — continued work: 21; new work: 6
 - 13-meter berths: — continued work: 3; new work: 2

6. Improvement of energy fuel storage ports

- (A)
- (B) Improvement work at 10 ports
- (C) 70 billion yen
- (D) 18 billion yen
- (E) 16 billion yen
- (F) Continued improvement work at 8 ports with new work commencing at one port

7. Improvement of marinas

- (A) 2 — 3 marinas per prefecture facing the sea
- (B) Improvement work at 36 ports
- (C) 50 billion yen
- (D) 3 billion yen
- (E) 9 billion yen
- (F) Continued improvement work at 17 ports with new work commencing at 12 ports

8. Improvement & provision of green areas

- (A) Approximately 5% of the port areas as designated by the law

(Continued on Page 48, Col. 3)

Philippine Ports Authority at a Glance

In the past, port administration in the Philippines was merged with the traditional functions of revenue collection of the Bureau of Customs (BOC). Ports and harbours maintenance and construction were done by the Bureau of Public Works. In the early '70's, there were already 591 national and municipal ports plus 200 private ports scattered all over the Philippines necessitating the need for long-range planning and rationalization of ports all over the country.

Economic planners thus agreed:

1) that there was a need to integrate and coordinate port planning, development, control and operations at the national level;

2) that regional ports bodies that are responsive to the needs of their individual localities must be established; and

3) that the peculiar potentials of harbours and their tributary areas have to be considered in their port planning and development.

Two other developments during the same period also led to the creation of the Philippine Ports Authority:

1) The Bureau of Customs proposed to the Reorganization Commission and to Congress the creation of a separate government agency to integrate the functions of port operations, cargo handling and port development and maintenance to enable that Bureau to concentrate on tax and customs duties collection.

2) The World Bank as a condition for the granting of a ports development loan in 1973, stipulated the creation of a Port Authority for their project ports.

Realizing that the establishment and operation of port authorities in other countries led to improved port operations and national government, it was felt that the same benefits could be derived by the Philippines with a national port authority to manage all its ports.

President Ferdinand E. Marcos, therefore, created the Philippine Ports Authority in July 1974 under Presidential Decree No. 505, subsequently amended by P.D. 857 in December 1975. The latter decree broadened the scope and functions of the PPA to facilitate the implementation of an in-

tegrated program or the planning, development, financing, operation and maintenance of ports or port districts for the entire country.

On November 16, 1978, the President issued Executive Order No. 513 to amend the PPA Charter. Among its more salient provisions were the granting of police authority to the PPA, the creation of a National Ports Advisory Council to strengthen cooperation between the government and private sector, and empowering the Authority to exact reasonable administrative fines for specific violations of its rules and regulations.

By Virtue of its Charter, the PPA was attached to the Ministry of Public Works, which also serves as the executing agency of the Authority for all its port construction projects. Under this set-up, PPA prepares the general plans, project priorities and programs of the Authority, while MPW is in charge of actual construction and supervision of port construction projects.

Lately, however, PPA has been attached to the Ministry of Transportation and Communications with the Ministry of Public Works and Highways remaining as the executing agency for port construction.

Objectives/Functions of PPA

The general objective of the Authority is to implement the State policy of an integrated program to the planning, development, financing, operation and maintenance of ports or port districts for the entire country.

By its Charter (PD 857), PPA is specifically given the task to ensure:

1) a well-coordinated, streamlined and improved planning, development, financing, construction, maintenance and operation of ports and its facilities;

2) a smooth flow of waterborne commerce passing through the country's ports, whether public or private, in the conduct of international and domestic trade;

3) the promotion of regional development through the dispersal of industries and commercial activities throughout the different regions;

4) the furtherance of better inter-island seaborne commerce and foreign trade;

5) a broader concept of port administration involving total port district development that includes the utilization of port's hinterland

and tributary areas;

6) the proper collection and accounting of all income and revenue accruing to the Authority;

7) the realization of a reasonable return on the assets employed.

(Primer 1986, ASEAN Port Authority Association)

Highlights of the 7th

(Continued from Page 47, Col. 3)

(B) Improvement work for a target percentage of 3%, involving some 600 hectares

(C) 90 billion yen

(D) 8 billion yen

(E) 14 billion yen

(F) Improvement work at 115 ports (including 4 port areas which are being designated as areas for redevelopment)

9. Improvement of garbage disposal sites (Phoenix Project)

(A) To be developed in the Three Bay Areas, and Seto Inland Sea

(B) Continued work at the Bays of Tokyo and Osaka

(C) 50 billion yen

(D) 7 billion yen

(E) 10 billion yen

(F) Provision of disposal sites for major regions

10. Improvement/provision of earthquake resistant berths

(A) Improvement work at 137 ports comprising 400 berths

(B) Improvement work at 41 ports comprising 64 berths

(C) 50 billion yen

(D) 8 billion yen

(E) 9 billion yen

(F) Continued improvement work at 37 ports comprising 23 berths, and commencement of new work at 4 ports comprising 4 berths

11. Promotion of redevelopment/re-furbishment of port areas

(A) Approximately 130 such areas to be included

(B) Improvement work at 38 ports

(C) 120 billion yen

(D) 20 billion yen

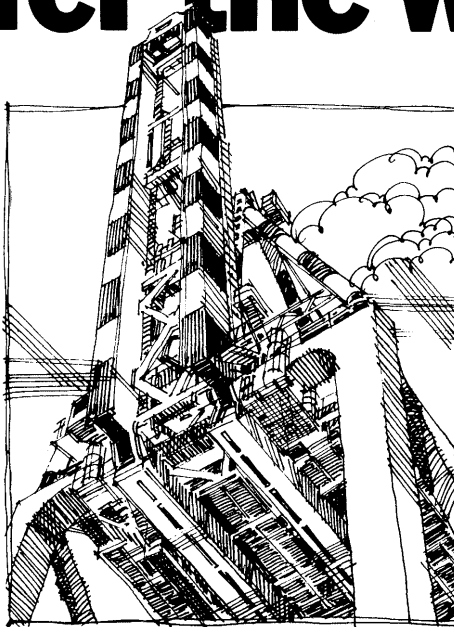
(E) 21 billion yen

(F) Continued improvement work at 23 ports, commencement of new work at 8 ports

(Prepared by R. Kondoh,
IAPH Head Office)

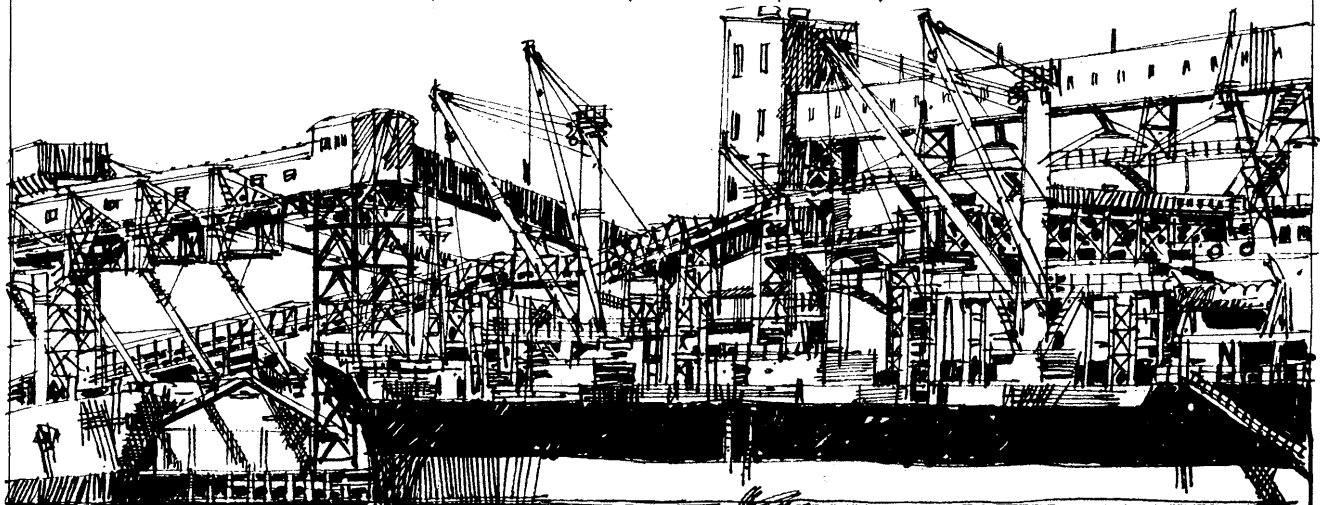
The Port of Brisbane has a lot to offer the world.

Every day it handles —
grain • oil • petroleum
products • coal • metal
ores • scrap • meat
• fertilizers • chemicals
• wool • cotton • food
stuffs for animals
• vegetable oils • fats
• beverages • non-ferrous
metals • hides • skins
• cement • gypsum
• paper • wood • transport
equipment • iron • steel
• machinery • fruit
• sugar • vegetables
... just to mention a few
of the trade items!



Private enterprise and the Authority have spent more than \$200 million over a period of several years to ensure that the Port of Brisbane has on hand the very best facilities for you ... the shipowner. Backed up by fast rail and road transport to any point in Australia, plus economical services, this is the port that will deliver the goods.

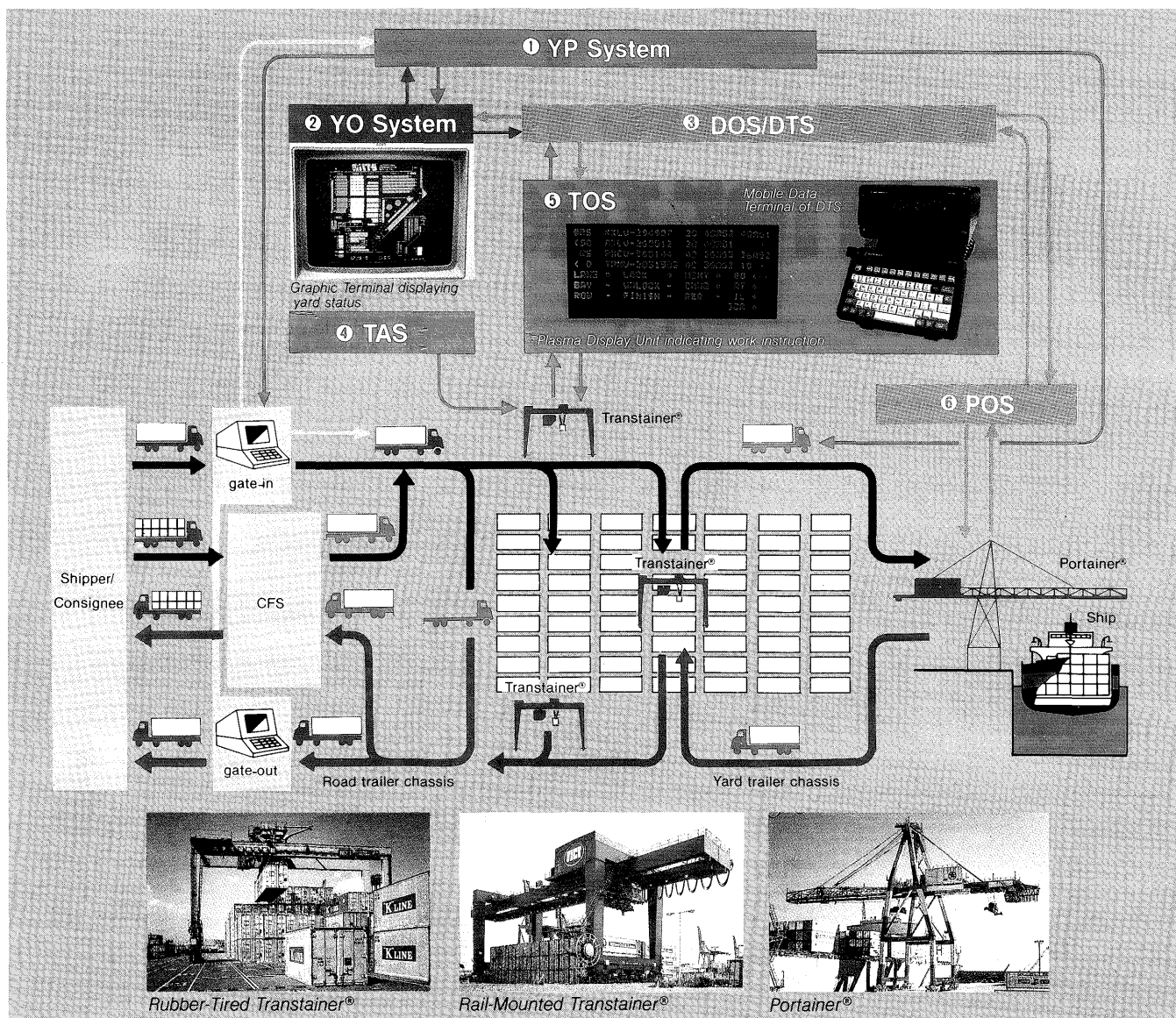
P.S. In addition, you won't find better container handling facilities anywhere in the Southern Hemisphere ... the Fisherman Islands, right at the mouth of the Brisbane River.



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- ① YP System: Yard Plan Computer System
- ② YO System: Yard Operation Computer System
- ③ DOS: Data Transmission & Oral Communication System (Inductive radio)
DTS: Data Transmission System (Radio)
- ④ TAS: Transtainer® Automatic Steering System
- ⑤ TOS: Transtainer® Operation Supervising System
- ⑥ POS: Portainer® Operation Supervising System

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