

PORTS *and* HARBORS

October, 1980 Vol. 25, No. 10



South Locust Point
Port of Baltimore

IAPH Conference Nagoya May 1981

The Publisher: The International Association of Ports and Harbors

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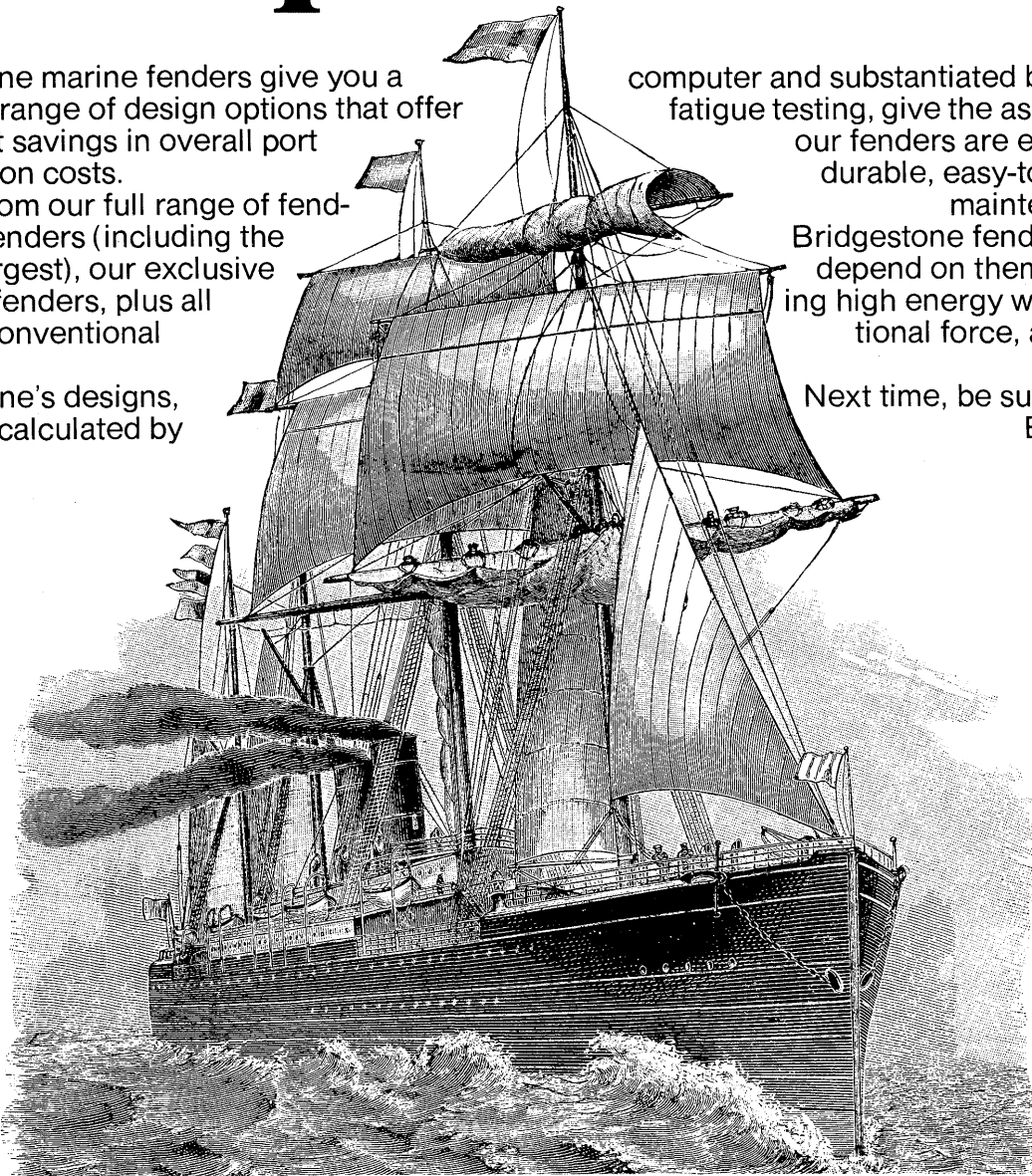
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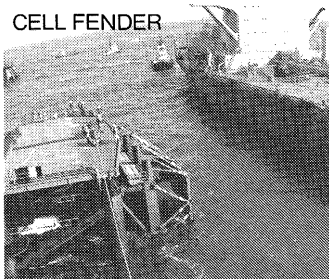
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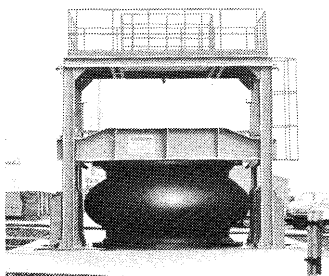
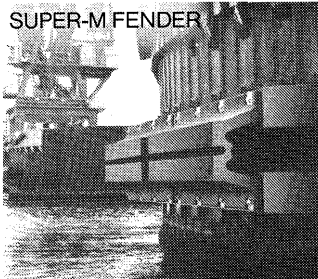
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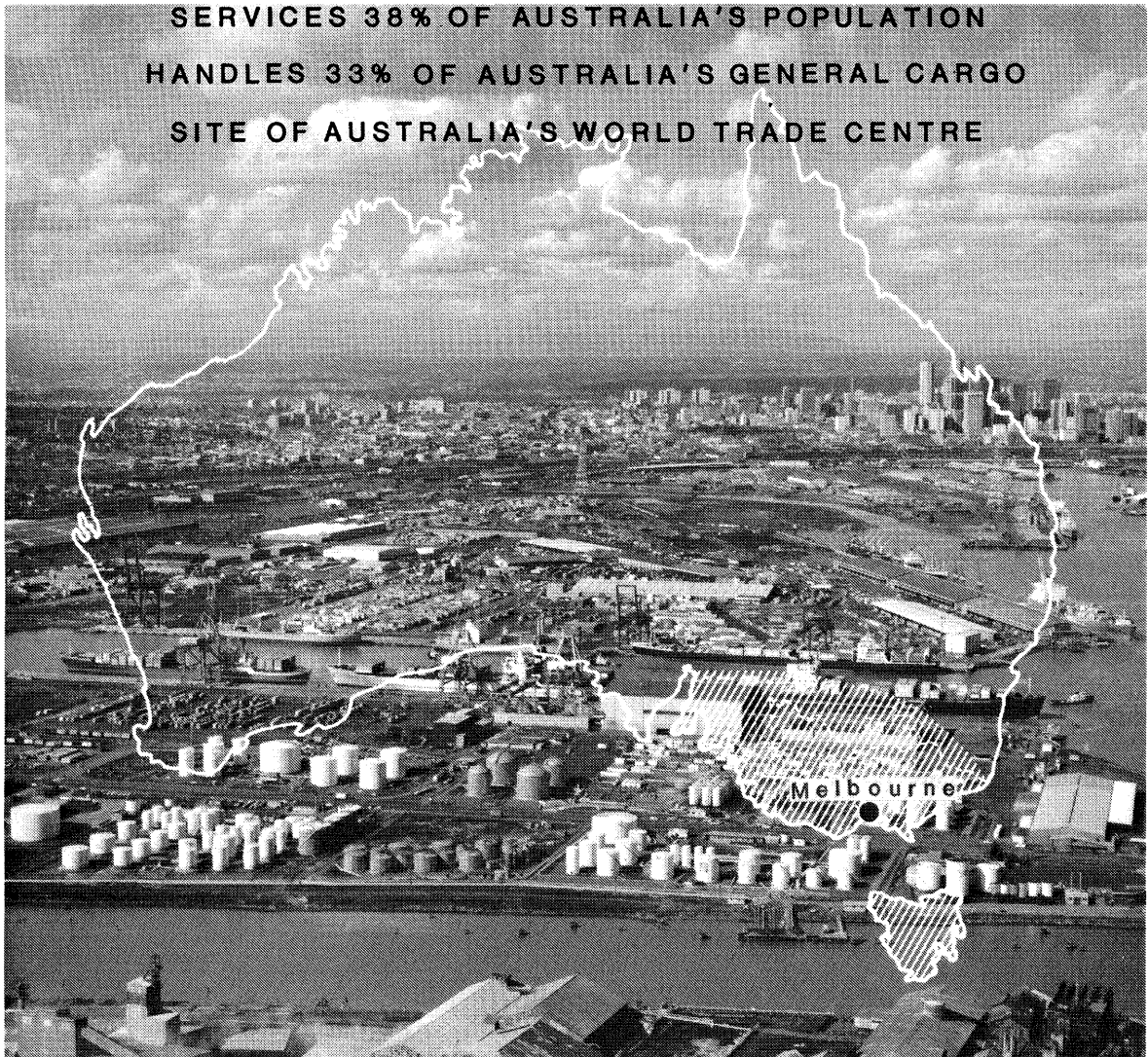
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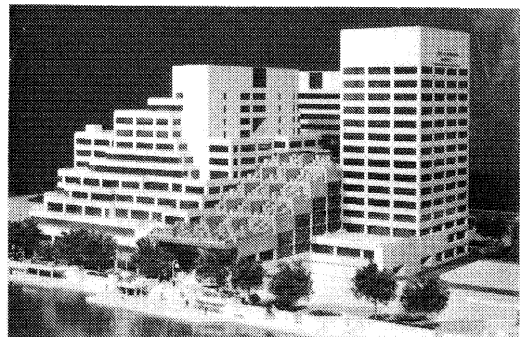
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Tel.: TOKYO (591) 4261

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October, 1980 Vol. 25, No. 10

CONTENTS

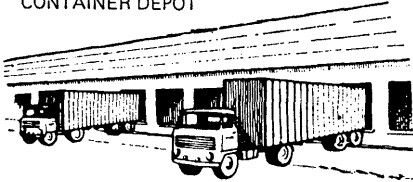
	Page
IAPH announcements and news:	7~11
Working Session Leaders and Bull Session Experts for Nagoya Conference now finalized—IAPH-BPA Arrangement on Representation—IAPH Resolution for IYDP approved by Board—Establishment of "International Inter-port Information Centre" 1st Phase: Setting up of a Club of Volunteers (Address by Mr. Paul Bastard)—World Maritime Day 1980—NPA represents IAPH at this year's meeting of the Port Management Association of Eastern Africa—Visitors—Membership Notes	
Open forum Port releases:	
My Experience (By A.B.M. Tukur, General Manager, Nigerian Ports Authority)	12
Annual Report 1979 (Extract): Nanaimo Harbour Commission	18
Annual Report 1979 (Extracts): Port of Corpus Christi	19
Annual Report 1979 (Extracts): Port of Seattle	22
Annual Report 1979 (Extracts): British Transport Docks Board.	24
Annual Report 1979 (Extract): Port of Copenhagen	26
Annual Report 1979 (Extracts): Port of Gothenburg	28
Annual Report 1979: (Wellington Harbour Board).	30
International maritime information:	
World port news:	
World economic outlook 1980-1981: UNCTAD secretariat	33
United Nations Convention on International Multimodal Transport	34
Status of IMCO's Conventions as of 1 May 1980	35
Present and Future Development of Port EDPS in the Port of Nagoya (2)	45

The Cover: Two Barber Blue Sea vessels load container cargo at the port of Baltimore's newest container facility, South Locust Point Marine Terminal. Visible in the background of this aerial photograph is the Inner Harbor and the World Trade Center Baltimore (tall building on the right). South Locust Point Marine Terminal is adjacent to Port Covington on the middle branch of the Patapsco River. The terminal features two 40-ton container cranes, 40 acres of backup area, a consolidation shed and 2,000 feet of berthing space. It is owned by the Maryland Port Administration and operated by Atlantic and Gulf Stevedores, Incorporated. (Cover of "Port of Baltimore, August 1980")

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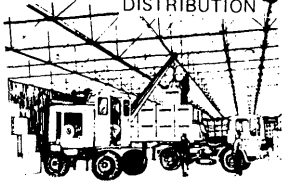
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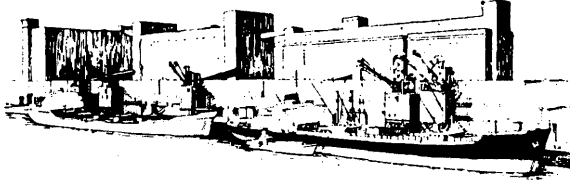


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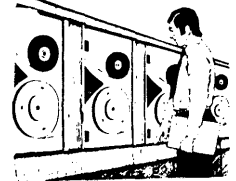
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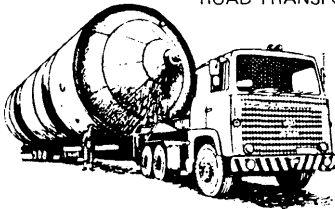
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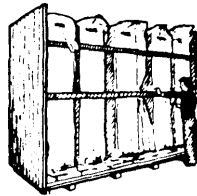
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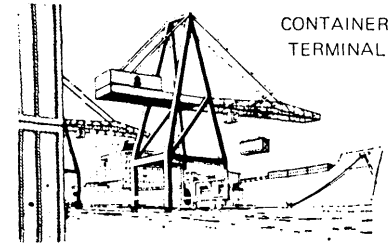
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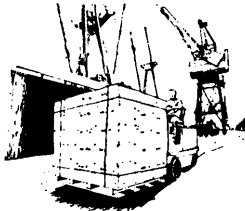
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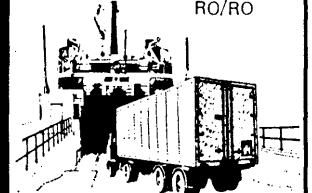
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IAPH announcements and news

Working Session Leaders and Bull Session Experts for Nagoya Conference now finalized

The Organizing Committee for the 12th Conference at Nagoya recently announced that the list of group leaders for working sessions and experts for bull sessions has been finalized as follows.

Since the Gold Coast meeting of the Executive Committee, the Organizing Committee has been contacting each suggested individual confirming his availability and finally has obtained the agreement from the members as listed hereunder. There were some changes in the list, the Conference host announcing these in the July-August issue of this journal being the result of the Executive Committee meeting because certain requested members were just unable to accept, and their places were renegotiated and filled in consultation with the relevant authorities.

Name-List of Keynote Speakers, Chairmen and Group Leaders

No. 1 Working Session

Keynote Speaker:

Mr. Arthur J. Carmichael
Ports and Aviation Adviser
to the World Bank
Washington, D.C., U.S.A.

Chairman:

Mr. W. Don Welch
Executive Director
South Carolina State Ports Authority
U.S.A.

Group Leaders:

- Group A Mr. W.A. Abernathy
Executive Director
Port of Oakland
U.S.A.
- Group B Mr. Pierre Debayles
General Manager
Port Autonome de Bordeaux
France
- Group C Mr. R.T. Lorimer
General Manager
Auckland Harbour Board
New Zealand
- Group D Mr. Yukio Torii
Director-General
Port and Harbor Bureau
Kobe City Government
Japan
- Group E Mr. B.M. Tukur
General Manager
Nigerian Ports Authority

Nigeria

No. 2 Working Session

Keynote Speaker:

Mr. Makoto Yoshimura
Director-General
Bureau of Ports and Harbors
Ministry of Transport
Japan

Chairman:

Mr. J.P. Davidson
Chairman
Clyde Port Authority
U.K.

Group Leaders:

- Group A Mr. Eigil Andersen
General Manager
Port of Copenhagen Authority
Denmark
- Group B Ir. H. Molenaar
Managing Director
Rotterdam Municipal Port Management
The Netherlands
- Group C Mr. Michel Pechere
Managing Director
Port Autonome de Dunkerque
France
- Group D Mr. F.J.N. Spoke
General Manager
Vancouver Port Authority
Canada
- Group E Mr. F.M. Wilson
General Manager
Port of Brisbane Authority
Australia
- (Alphabetical order)

Name-List of Experts for Bull Sessions

Administration and Management

- *Mr. E.S. Reed
Executive Port Director, Port of New Orleans,
U.S.A.
- Mr. R.O. Ajayi
General Manager, National Cargo Handling Co., Ltd.,
Nigeria
- Mr. R.W. Carr
Chairman, Auckland Harbour Board, New Zealand

(Continued on next page bottom)

IAPH-BPA Arrangement on Representation

On July 30, 1980, at Russel Hotel in London, a meeting to discuss the IAPH-BPA arrangement on representation was held, attended by Mr. Paul Bastard, IAPH President, Ir. J. den Toom, Chairman of Finance Committee, Mr. Andre Pages, Chairman of Committee on Legal Protection of Port Interests and Mr. R. Kondoh of the Head Office, as IAPH representatives, and Mr. J.P. Davidson, Chairman of British Ports Association and Mr. A.J. Smith, BPA Secretary, as BPA representatives.

The meeting was called as a result of the guidelines agreed upon at the Executive Committee meeting in Brisbane, where it was decided to explore the possibility of improving and expanding the existing IAPH's liaison work with IMCO and UNCTAD, and with other international maritime organizations located in Europe, so that the voices of IAPH and world ports could be heard and be reflected in the forums responsible for the international maritime transport.

Thanks to the goodwill of the IAPH members involved, devotion of the individuals concerned, IAPH has been involving itself in various important aspects of international maritime issues, in particular in matters relating to IMCO and UNCTAD, by and through the IAPH Liaison Officers system (established in 1973) with those UN agencies, as well as other international organizations engaged in maritime transport.

To explore ways to improve and develop the status of IAPH in the international maritime field has been one of the most urgent requirements to make best use of the experience accumulated during the past years and this has only been made possible by the efforts of those people involved. In particular, an urgent need was felt to strengthen

en IAPH participation in the activities carried out by IMCO.

Hereunder is the text of the Agreement to be executed by and between IAPH and BPA though it was expressed by Mr. J.P. Davidson that BPA would be prepared to execute the spirit of the Agreement immediately on a trial basis. It is scheduled that the Agreement would be presented to the Nagoya Conference and formally put into effect thereafter.

(rin)

THIS AGREEMENT, made and entered into this ___ day of ___, 19___, by and between THE INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS (hereinafter referred to as "IAPH") and THE BRITISH PORTS ASSOCIATION (hereinafter referred to as "BPA"),

WITNESSETH:—

1. WHEREAS, IAPH has achieved much of considerable value, since its foundation, by establishing across the world, a community of ports, by making them aware of the common benefit which can come from their solidarity, in a relationship of friendship and cooperation,
2. WHEREAS, IAPH has been granted non-governmental consultative status with United Nations Agencies amongst which are the Inter-Governmental Maritime Consultative Organization (hereinafter referred to as "IMCO") and the United Nations Conference on Trade and Development (hereinafter referred to as "UNCTAD") and is recognized by these Agencies as the authoritative organization at the land/sea interface having responsibilities and expertise in both the maritime and trade development fields,
3. WHEREAS, these United Nations Agencies are endeavoring to promote general and equitable welfare of

(Continued from page 7)

Dr. E.L. Perry
Executive Director, Port of Los Angeles, U.S.A.
Mr. Jean Smaghe
General Manager, Port Autonome de Nantes-St. Nazaire, France
Mr. Wong Hung Khim
General Manager, Port of Singapore Authority, Singapore

Engineering

*Mr. J.M. Wallace
President, Maritime Services Board of N.S.W., Australia
Mr. J. Dubois
General Manager, Port Autonome du Havre, France
Mr. Kazuo Kudo
Director General, The Third District Port Construction Bureau, Ministry of Transport, Japan
Mr. R.P. Leach
Executive Director, Port of Houston Authority, U.S.A.
Mr. Howard Mann
Associate Member of IAPH, Vancouver, Canada
Mr. G.C. Moulard
General Manager, Port of Saint John., N.B., Canada
Mr. Th. F.M. Taen
Associate Member of IAPH, Nijmegen, The Netherlands

Operations

*Dr. Karl-Ludwig Mönkemeier
Director, Port of Hamburg, Federal Rep. of Germany

Mr. R.D. Ford
Executive Director, Port of Seattle, U.S.A.
Mr. R.N. Hayes
General Manager, Dublin Port and Docks Board, Ireland
Mr. Hirochika Kobayashi
Director-General, Port and Harbor Bureau, City of Yokohama, Japan
Mr. R.T. Lorimer
General Manager, Auckland Harbour Board, New Zealand
Mr. Claude Mandray
General Manager, Port Autonome de Rouen, France
Mr. C. van Krimpen
Deputy Managing Director, Port of Rotterdam, The Netherlands

Financing

*Mr. F.J.N. Spoke
General Manager, Port of Vancouver, Canada
Mr. Arthur J. Carmichael
Ports and Aviation Adviser to the World Bank, U.S.A.
Mr. A.J. Field
Chairman, Townsville Harbour Board, Australia
Mr. J.D. Presland
Executive Vice-Chairman, Port of London Authority, U.K.
Mr. Nobuji Shimada
Director, Bureau of Port and Harbor, Tokyo Metropolitan Government, Japan
*Coordinator

(Alphabetical order)

world people through international trade and shipping,

4. WHEREAS, new rules and regulations to increase the safety at sea, protection of the marine environment and to increase the efficiency and economy of the movement of goods by sea, are constantly under consideration of those inter-governmental agencies, and that their decisions may impinge upon the interests of ports as well as the various branches of the international maritime transport sector,

5. WHEREAS, IAPH is also aware of, and wishes to secure the benefits which may be derived from contacts and jointly co-ordinated action with other non-governmental international maritime transport organizations, both within and outside the meetings of IMCO and UNCTAD, the principal organizations being;

International Chamber of Shipping (ICS)

International Association of Classification Societies (IACS)

International Cargo Handling Coordination Association (ICHCA)

Permanent International Association of Navigation Congresses (PIANC)

International Union for Inland Navigation (IUAN)

International Association of Lighthouse Authorities (IALA)

International Container Bureau (ICB)

International Organization for Standardization (ISO)

Baltic and International Maritime Conference (BIMCO)

Comite Maritime International (CMI)

Oil Companies International Marine Forum (OCIMF)

International Shipping Federation (ISF)

International Association of Independent Tanker Owners (INTERTANKO)

International Institute for the Unification of Private Laws (UNIDROIT)

6. WHEREAS, the head office of IAPH is located in Tokyo, Japan, and the headquarters of IMCO and UNCTAD, and also of the majority of non-governmental international maritime organizations are located in Europe, IAPH has, accordingly invited BPA, being a London, UK-based regular member of IAPH with interests similar to those of IAPH, to represent IAPH, and BPA has indicated its acceptance of the invitation, NOW THEREFORE,

It is agreed between IAPH and BPA as follows:—

- 1) BPA shall represent IAPH interests in Europe and maintain a close relationship with IMCO and UNCTAD to collect information on their future working programmes and relevant data which can then be disseminated in digest form among IAPH members through IAPH head office,
- 2) BPA at the same time shall keep close and friendly relationship with international maritime organizations located in Europe for IAPH, to enable effective concerted action wholly or partly to protect interests of ports whenever deemed necessary,
- 3) BPA shall suggest to IAPH any appropriate or necessary action required in relation to IMCO, UNCTAD and other international maritime organizations,
- 4) BPA shall convey and promote agreed IAPH policy to IMCO, UNCTAD and other non-governmental international maritime organizations,
- 5) IAPH pay to BPA a sum, to be agreed by IAPH and BPA which shall not exceed an annual maximum negotiated every two years,
- 6) Either party hereto shall have the right to cancel and terminate this Agreement by giving to the other party

six month's prior written notice of such cancellation and termination. Neither party shall be liable to the other party for any claims arising from such cancellation and termination.

IN WITNESS THEREOF, the parties declare that the AGREEMENT shall become effective from _____ 1981.

THE BRITISH PORTS
ASSOCIATION

Chariman

Director

THE INTERNATIONAL
ASSOCIATION OF
PORTS AND HARBORS

President

Secretary-General

IAPH Resolution for IYDP approved by Board

IAPH Board of Directors, at its meeting by correspondence held on August 25, 1980, unanimously approved to place the suggested IAPH Resolution in support of the UN's International Year of Disabled Persons. The resolution, as the final step before presenting it to the United Nations, will be placed before all IAPH regular members at a meeting by correspondence towards the end of September or the early part of October.

Establishment of "International Inter-port Information Centre" 1st Phase: Setting up of a Club of Volunteers

Address by Mr. Paul Bastard

Like all firms ports need every more information on all the subjects that affect their many port-related activities, be they administrative, financial, economic, commercial or technical.

Many ports throughout the world have their own information department, thus making it possible for their managers to be constantly informed of the problems in which they are interested and of the way these problems develop or are perceived by other ports.

Thus there is among IAPH members a wealth of information processed by these specialists in information; these are likely to form a data bank that would be of great interest to the whole international port community. Furthermore we are all—at any given time—in search of data on various matters of interest to our ports or port.

The Port of Le Havre Authority proposed to the IAPH Executive Committee that a club of volunteers should be formed among its members, who would pool their experience and their data. This proposal was carried unanimously by the Executive Committee members during the Brisbane meetings.

A first step would be to receive as many possible replies on the interest felt by IAPH members in the proposal, be it either as a possible participant in the club or the need for information or quite simply to convey suggestions or advice likely to render service to IAPH members.

Therefore all IAPH members interested in the setting up of an international inter-port information centre are kindly requested to send their comments to the Port of Le Havre Authority, whose address is as follows:—

Mr. Dubois, General Manager
Port Autonome du Havre

Terre-Plein de la Barre, B.P. 1413
76067 Le Havre Cedex, France

Of course it would be of great help that ports from all areas and of all sizes, reply to this appeal so that, in particular with regard to language, a range as wide as possible of the various international publications could be covered in the port and maritime fields. For instance, it would be most desirable that this club include:—

- English-speaking ports
- Japanese-speaking ports
- French-speaking ports
- Spanish-speaking ports
- German-speaking ports
- Russian-speaking ports

and other ports speaking different languages, whose port publications would constitute a valuable contribution to the club.

We fully realize the difficulty that lies in such an undertaking and we wish to be certain that we take the right course before we consider introducing a structure corresponding to the needs and the realities that exist in information matters.

That is why I rely on your co-operation and I wish that a large number of ports from all horizons agree to co-operate. I am sure that IAPH members will appreciate the interest of this centre and that many of them will answer the proposal we have made.

Depending on the replies it will receive, we may expect that the Port of Le Havre Authority will be in a position to submit concrete proposal to the coming Nagoya Conference.

The above is the reproduction of Mr. Bastard's message which was circulated to all IAPH members on July 29, 1980. Several replies expressing active willingness were received by the Head Office, while it is assumed that some have been sent directly to the Port of Le Havre Authority as requested.

World Maritime Day 1980

Following his first circular letter of July 1st, on the subject "IMCO-IAPH Cooperation for the World Maritime Day", Secretary General Sato sent a second letter to all members requesting their further cooperation in the event. At the same time he wrote separately to the Board members to convey the advice from President Bastard that IAPH member ports are to be encouraged to participate in the "World Maritime Day 1980" wherever practicable and further to get in touch with their respective governmental authorities who have responsibilities for IMCO affairs and establish a cooperative ship/shore celebration of World Maritime Day 1980.

It was particularly mentioned in the letter addressed to the Board members that though ports have not, specifically, been consulted on the 1980 theme, there would be a wide variety of topics, of direct interest to the impacts on port operation within that theme, for example, the transport of dangerous goods within port areas, reception facilities for oil residues or noxious substances and inter-port data communication on ship and traffic movement.

Secretary General's letter sent to all members on August 4, 1980 was as follows:

Dear Members,

I find it very gratifying to inform you that we have been receiving many favorable responses from IAPH members to the circular letter I sent to you on July 1st regarding

"IMCO-IAPH Cooperation for the World Maritime Day".

While the responses are still coming in, I think I can inform you, at this stage, as a result of the analysis of answers already received, that the position of our members is so overwhelmingly positive that we may make a definite proposal for the mutual benefit of IAPH and IMCO.

In order to reflect the views of IAPH members as much as possible, I would ask you, if you have not yet replied, to send us your comments as soon as possible.

As you know, World Maritime Day 1980 is to be celebrated between the 22nd and 26th September, 1980, the actual day being chosen by each nation. It is our hope that your country will be able to participate in the celebration within the circumstances of your port and to make the event as effective and beneficial as possible.

Further in this connection, I should inform you that we have requested the IAPH Director in your country to get in touch with their respective governmental authorities dealing with IMCO affairs including Merchant Marine interests, to establish a ship/shore celebration of World Maritime Day 1980.

The theme of World Maritime Day 1980 is "Maritime Training for Safer Shipping and Cleaner Oceans", even though this theme is perhaps not explicitly oriented towards the sphere of interest of the ports, there are a number of possibilities for port people to contribute, for instance, for ports, the possible themes of participation to the World Maritime Day 1980 can be the transport of dangerous goods within port areas, reception facilities for oil residues or noxious substances and inter-port data communication on ship and traffic movement.

Your cooperative support for World Maritime Day 1980 will be sincerely appreciated.

Yours sincerely,

NPA represents IAPH at this year's meeting of the Port Management Association of Eastern Africa

IAPH has been invited to send a representative to the 8th Council meeting of the Port Management Association of Eastern Africa which will be held in Maputo, Mozambique, between the 6th and the 11th October, 1980.

The invitation came from Mr. P.K. Kinyanjui, Chairman of the Association and organizer of the Maputo meeting, who was former Chairman of Kenya Ports Authority and former IAPH 3rd Vice-President.

In response to an earnest request from President Bastard, our new 3rd Vice President B.M. Tukur, General Manager of Nigerian Ports Authority, kindly accepted to send his Alternate Director Mr. J.E. Nkpanang to the October meeting in Maputo.

Mr. Kinyanjui, in his letter of invitation to President Bastard has given an outline of the background and the present membership situation of the Association as follows:

The Port Management Association of Eastern Africa was set up in 1974 under the auspices of the Economic Commission for Africa. The Association's primary objective is to foster co-operation and co-ordination in port management within the Eastern Africa region.

The current full members of the Association are Ethiopia, Kenya, Mozambique, Madagascar, Seychelles, Somalia, Sudan and Tanzania. Those countries who have indicated their intention to join the Association are Burundi, Zambia, Djibouti, Mauritius, Comoros and Uganda. Others who have been invited to join the Association are

Rwanda, Malawi, Swaziland, Botswana and Lesotho.

As soon as the report by Mr. Nkpang of NPA is received, it will be published in the journal.

Visitors:

On August 7, 1980, Mr. Kim J. Loroach, former member of the Port Authority of New York and New Jersey, now engaged in a project for the Government of Malta, and Mr. Lino C. Vassalo, Sea Malta Co., Ltd. who visited IAPH Head Office, and were met by Deputy Secretary General Kusaka and other staff members.

The visitors from Malta were in Japan meeting shipping and trading companies for the PR purposes with an ongoing Mediterranean transshipment project with carriers/shippers.

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(Mr. Carmen J. Lunetta, Port Director)

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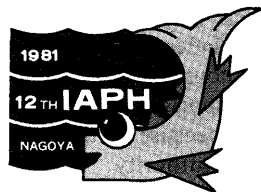
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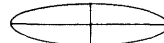
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The Nagoya Conference

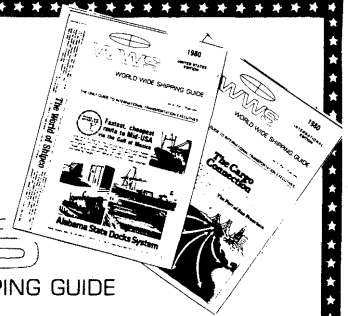


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MY EXPERIENCE

By Alhaji B.M. Tukur
General Manager
Nigerian Ports Authority

A write-up on experiences gathered in a large Organization like the Nigerian Ports Authority must necessarily, to a limited extent, hang on a very broad point of view to make it truly representative. This paper will therefore attempt to highlight the various experiences from various facets of Port Management in Nigeria.

The Nigerian Ports Authority which was created as an autonomous Public Corporation by the Ports Act of the Laws of Nigeria and Lagos commenced functioning on the 1st of April, 1955. The same Act which created it also empowered it to maintain improve and regulate the harbors and approaches thereto in all Ports of Nigeria and to make provision for and operate such shore-handling and quay facilities as may appear to it to best serve the public interest. In addition, to provide security and safety to ships, the Authority is responsible for pilotage services and aids in all ports, port approaches and the territorial waters of Nigeria.

Two Bodies sit over the affairs of the Authority. The Board which is headed by a Chairman is a policy making Body while the Management Committee which sees to its day to day administration is headed by the General Manager who is the Chief Executive of the Organization.

A total number of 23,298 workers are directly employed to work in 5 Port Complexes (Tin Can Island, Apapa, Delta, Rivers and Calabar) as well as in the Authority's Headquarters in Lagos. Each port is headed by a Port Manager who takes charge of the day to day administration of the port.

From its inception till the present, there is no period as remarkable as the present decade. Within this period, 1970-80, the Authority recorded an indelible chequered experience. From one type of port congestion to a brief spell of normalcy, the Authority marched into another grave period of port congestion from which it emerged to a period of massive port development. Finally, there is the present lull which imposes vacant berths on the ports.

Two types of congestion emerged from the Nigerian experience. Cargo congestion was short-lived and it occurred in 1970/71. Ship congestion lasted from mid 1974 to part of 1977.

Cargo congestion coincided with the end of the civil war in the country. Lagos port was subjected to much pressure since all other ports were closed to international traffic for most of the war period. Out of a total of 5,971,447 tonnes of cargo passing through Nigerian Ports in 1970/71 Lagos handled 5,112,500 tonnes or 85.6%. By the end of the war, the uncleared accumulated war time cargo, coupled with the sharp increase in the country's international trade occasioned by the heavy importation of reconstruction, industrial and consumable materials left Lagos port in a



Mr. A.B.M. Tukur

hopeless condition. Both the sheds and open storage areas were filled to capacity by uncleared goods.

Apart from the reasons given above, a number of other factors combine to give rise to the cargo congestion. The rate of evacuation could not cope with rate of landing because of the poor and inefficient condition of the approach roads through which 85 per cent of the cargo had to be evacuated. There was inadequate supply of mechanical handling equipments which were badly needed at the Port. Those available were subjected to continuous usage which later affected their efficiency while their repairs was hindered by scarcity of spare parts. Above all transit warehouses were turned to near permanent warehouses by importers who found it cheaper to leave their goods there because of the very low rates of rent charged by the Port Authority. The various conditions to be fulfilled under customs examination as well as customs and Ports Authority documentation procedures help to aggravate the already bad situation.

To nip the bad situation in the bud, a number of measures aimed at attracting importers to take delivery of their cargoes as well as those to speed up the deliver were introduced by the Ports Authority. When, however, the various measures failed to yield appreciable results, the Federal Military Government declared a state of emergency at the port and consequently appointed a Military Port Commandant with full powers to decongest it. All measures introduced during the emergency period were carried out with Military precision. Consequently the cargo congestion was in no time cleared.

After a spell of ease, the ports were once again thrown into a more serious and protracted condition of ship congestion which shook the economy of the nation to its very foundation. The build-up of vessels became noticeable

about mid-1974 and by January, 1976 the figure had risen astronomically to 379. Ships coming into the country had to experience delays which varied between 120 and 180 days before securing berthing facilities. The berth occupancy rate in major Nigerian Ports well exceeded the 75 per cent mark. Lagos port had a berth occupancy rate of 85.1 per cent in 1974/75 and 95.1 per cent in 1975/76 while Port Harcourt recorded 85.1 per cent and 93.6 per cent rate in 1974/75 and 1975/76 respectively.

Although there were a number of factors which gave rise to the congestion, the main factor was the mass importation of cement. Because of the very great demand for cement to prosecute delayed development as well as reconstruction projects, the Government placed order for 20 million tonnes of cement, 16 million tonnes of which was for the Ministry of Defence alone. Unfortunately, the arrival of the cement-carrying vessels was not properly spaced out because the country was in a hurry to develop. According to the contract stipulation, all the consignment had to be delivered within 12 months on the signing of the contract. The delivery of 20 million tonnes of cement within 12 months was clearly beyond the capabilities of existing port facilities in a country where the total annual capacity in 1975 was estimated to be only about 8 million tonnes.

Within a very short space of time, 3 million tons of cement had arrived at the port. More cement-carrying ships continued to flood the port despite the apparent congestion. They had been greatly attracted by the Government's agreement to an excessive demurrage clause in the contract. ₦2,546 or US\$4,100 was to be paid to each ship a day for delay in excess of 10 days of waiting for berth facilities.

Other congestion-causing factors that could be of special mention included firstly, that Port development programme did not keep pace with the level of both importation and exportation. Secondly, the ports lacked sufficient specialized berths. Almost all the existing berths were the conventional types. Much delays were therefore brought about when conventional berths were used for container and roll-on roll-off ships. Thirdly, evacuation of cargoes from the ports was too slow to keep pace with the rate of discharged. The roads leading to the port of Lagos were always congested and consequently, it was very difficult to get a lorry to do two trips in a day if such lorry had to carry goods to a warehouse situated at some 25 kilometres away from the port.

The consequences of the stifling congestion, both direct and remote, were so crippling to the nation's economy that various desperate measures, immediate and long term, aimed at arresting the serious situation were taken.

Certain of the immediate measures taken, such as the purchase of several barges and pontoons, laying of more mooring buoys, purchase of a large number of additional sophisticated mechanical handling plants and equipment as well as a number of delivery trucks, involved heavy financial investment. The Government showed much concern and gave the Ports Authority all the financial and technical assistance required to execute all the measures successfully.

While effective measures were made to eradicate port congestion, Government's great determination to prevent its re-occurrence was pursued vigorously. New ports were built while extensions were made to existing ones.

With the urgent desire to release pressure on over-worked Apapa Quay facilities at the height of the congestion,

the Government gave out the construction of the Tin Can Island Port in Lagos as a "turn key" development project. Having 10 berths, each 250 metres long, it was completed within 15 months at a cost of about ₦200 million. It was commissioned in October 1977 and since then it had played a great role in clearing the back-log of vessels awaiting berth.

The third Apapa Wharf Extension is an extension to the over-stretched 14-berth Apapa Quays. Built at a cost of ₦80 million, ₦33 million of which was financed from a loan from the World Bank, the port has 6 berths with a total of 1,600 metres quay length. It was commissioned in April, 1979.

A new site was selected for the Calabar Port because the old site was found unsuitable for further development. Part of the approximately ₦85 million cost of the port was financed by the Norwegian Government grant of 40 million Norwegian Krone (₦4 million). The port has 4 berths with a total of 860 metres quay length. It was commissioned in June, 1979.

Phase I of Warri port was commissioned in June, 1979. It consists of 6 berths with a total of 1,900 metres quay length. The cost of construction is ₦84.4 million.

Other development project on hand is the Onne Lighter Berth Terminal. The projected ones include the New Ocean Terminals at Onne and Lagos, Ogunnu to cater for the Ajaokuta Iron and Steel Industry and the Atlas Cove Tanker Jetty in Lagos.

A thorough look into all the development projects reveals a modern trend explained in an article on "Some Elements of the study of Port Geography". G.G. Weigend, the writer, observed that in a situation of changing transport technologies, the orientation of a port will change according to the competitiveness of its transport technology. The veracity of this observation is highly exhibited in the Nigerian context. Until in recent times almost all of the berths in the Nigerian Ports were of the conventional types. Specialized ships coming into the ports were being handled in the conventional ways. This proved inadequate and much delays arose.

In response to changing technologies therefore, specialized berths were provided for in the new ports. Tin Can Island Port has facilities for Roll-on Roll-off and bulk cargo while Third Apapa Wharf Extension has facilities for container as well as Roll-on Roll-off ships. They are all provided with adequate back-up areas. Bonny and Okrika are specialized ports serving the petroleum industry. Atlas Cove in Lagos, when completed, will also fall into this category.

The efficiency of these ports depends on the inter-play of a number of back-up transportation system. Only two ports Apapa and Port Harcourt, are rail served while all are served by roads. The importance of rail in the evacuation of goods has greatly dwindled. In 1965/66 rail handled 28 per cent of the total goods for Apapa while in 1975/76, this was reduced to 5.5 per cent. Comparatively, evacuation by road assumes the most important position, 72 per cent of the total goods for Apapa passed through the road in 1965/66 while in 1975/76 the percentage rose to 94.5. Inland Waterways play very little or no role at all in the process of goods evacuation from the ports.

The condition of port entrances is a first limiting factor to the capacity of a port. In other words, the physical conditions of the entrances immediately determine the size and draught of ships that can call at the ports. This is very

true of Nigerian Ports where most of them are situated at the upper reach of their approach channels. Calabar, Port Harcourt, Warri, Sapele, Koko and Burutu are in this category.

In Nigeria, the physical conditions of the coastline allow siltation and formation of sand bars even at the approach to and entrances of most of the ports. To make the ports accessible to ocean-going vessels of considerable size, constant dredging has to be carried out at the entrances, access channels and within the harbor.

Maintenance dredging which goes on all the time is being handled by internal labour, using a trailer suction dredger, a cutter dredger, and two grab dredgers, all belonging to the Ports Authority. Over 4.6 million cubic metres of spoil is dredged annually. This attracts an expenditure of as much as ₦7 million.

Capital dredging, which occasionally arises, is being contracted out to Dredging Companies. The on-going capital access channel dredging to the Delta Ports is to provide a double lane navigation channel of approximately 150 metres width and 10 metres draught from the sea to the Port of Warri. It attracted a contract period of 18 months including 2 months of mobilization and a heavy financial investment of approximately ₦79 million.

By its very nature and from the various topics earlier treated it is quite clear that port industry is capital intensive. Funds to run both the day to day services and capital projects are generated from internal sources. However, since this is generally not enough to meet all the capital financial requirements, funds are being raised by way of loans principally from the Federal Government of Nigeria and also from International Finance Organizations.

The Port Authority derives its revenue from suitable levies charged on ships and cargoes according to the type of services rendered. A comprehensive schedule of all the charges maintainable is contained in the DUES AND RATE REGULATIONS of the Authority. The recent slight upward revision of the over-due low dues and rates coupled with the introduction of a prepayment system for stevedoring and wharfinger charges had greatly improved the finances of the Authority.

Having already outlined the various situations to which the Nigerian Ports Authority had been exposed in the preceding paragraphs the next stage examines the various experiences that emerge from these situations.

- (i) There is a great need for proper co-ordination and consultation between the Ports Authority and the Government on the one hand, and Ports Authority and port users on the other hand. The lack of consultation and co-ordination on the part of the Government led to the conclusion of contract for the purchase and delivery of 20 million tons of cement within 12 months of the signing of the contract when the annual capacity of all Nigerian Ports put together stood at 8 million tonnes of general cargo in 1975. Furthermore, this congestion-favoured atmosphere was aggravated by Government's agreement of the inclusion of excessive demurrage clause in the contract. ₦2,546 or \$4,100 (US) was to be paid to each ship a day for delay in excess of 10 days of waiting for berth facilities and because ship owners were bent on making a lot of money, they exploited the situation to the maximum. By the end of the first year of congestion, ₦77 million had been paid out on demurrage to ships.

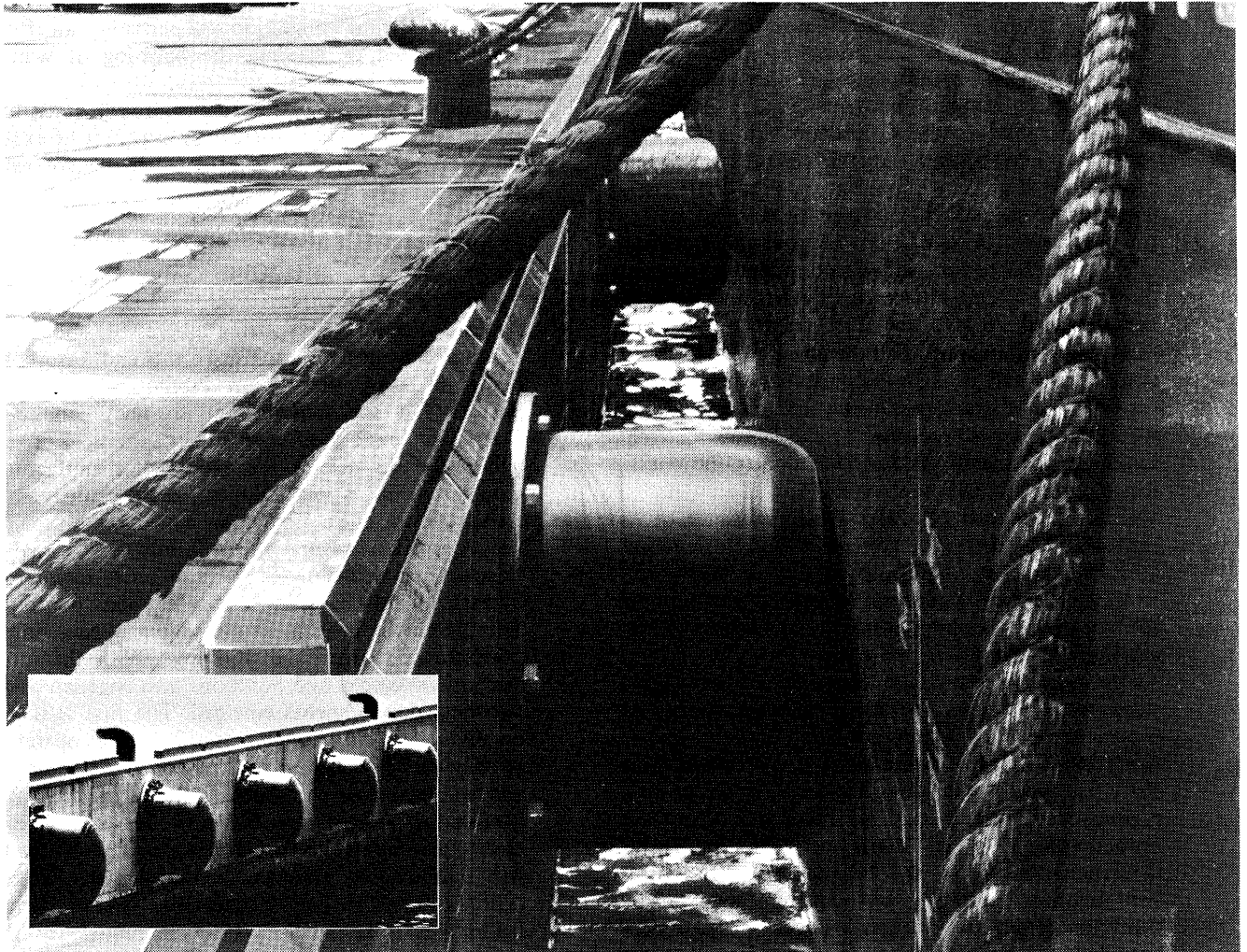
On the other side of the scale there was always a vacuum between the plannings of port organizations and those of the port users. Confusion and much delay therefore arose as a result of the lack of consultation and plan co-ordination. This was exhibited in the dumping of thousands of 20-foot and 40-foot containers at a port which in 1975 had little or no facilities for handling them. Handling of heavy machineries also became a great problem for both the ship that brought them and the port that should receive them. There would be much benefit on both sides if there had been consultation between themselves in the matter of planning the type of vessels to be used in future, the type of cargoes to be handled, and the provision of port facilities.

At present, however, the gap is being bridged. Consultations on and solution of problems arising from the ports are being carried out by different committees at different levels. At the headquarters level is the Ports Consultative Council, a standing Council, established in accordance with the provisions of the Port Act 1963. Comprising representatives of the Nigerian Ports Authority, Government Departments with port-related functions, Shipping Group, and Trade Group, the Council concerns itself with all and matters of importance bearing, either directly or indirectly, on the operation, usage, development and finance of Nigerian Ports, and in addition deals with any matters of controversy between the Ports Authority and the main port users. On a lower level a Port Working Committee is established at each port on the same line as the Port Consultative Council.

- (ii) As a result of the agreements in the contract for the supply of cement there was a great influx of vessels. To stop the great influx of vessels at the height of the congestion an order to embark on the efficient scheduling of ships was made. The Government made it obligatory on the part of ship owners to give the Nigerian Ports Authority notice of their intention to load ships for any port in Nigeria. It is a condition that the notice must be given two months in advance of loading. The note should state, among other things, the type of commodity to be loaded and the port of call in Nigeria. This step had helped to eradicate build-up of ships and at the same time ensured that goods urgently required in the country are available.
- (iii) There was the evidence of lack of proper planning in relation to access roads to the ports. Port-wise traffic is not separated from the metropolitan traffic in the major port cities of Lagos and Port Harcourt. As a result of this, port traffic was subjected to congestion which in turn affected the rate of evacuation of cargoes from the ports. However, there is now a ray of hope. Ring roads are being built to by-pass the city centres.
- (iv) Cargo-handling plants and equipments of various types incurring heavy financial investment were bought at the height of the two congestions. They were subjected to continuous use and hence there was regular break-down. Where repairs were to be carried out, there was usually scarcity of spare parts. Consequently, a number of the unserviceable ones were cannibalized to resuscitate others. The downtime of the plants became so alarmingly high that the

(Continued on page 16)

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(Continued from page 14)

Ports Authority found it expedient to engage the services of consultants to formulate a suitable plant maintenance and repair systems as well as a system of spare parts procurement and indenting.

- (v) As it became clear that extra operational efforts would be needed to supplement Ports Authority's efforts in grappling with the congestion, berths were appropriated to major Conference Lines. The Conference Lines were required to inject some capital into their operation in Nigeria principally to supplement the mechanical plants and equipment provided by the Nigerian Ports Authority. Since the Port Authority expected a standard minimum throughput in each berth appropriated, the Conference Lines strengthened their shore-based supervision and took more active role in getting importers to clear their cargo immediately upon discharge from the ships.
- (vi) An unwholesome condition of over-concentration of traffic in Lagos port added a considerable quota to the problem of congestion. In 1974/75, and 1977/78 Lagos carried 78.16% and 71% respectively of the total cargo throughput of all the Nigerian Ports. Historical as well as locational factors are accountable for this type of situation. During and after the second World War, Lagos was used as the centre for transshipment to and from the Delta ports. Secondly, Lagos port is rail and road served. Thirdly, the depth of water at the entrance to its harbor is 9.14 metres as compared with 7.62 metres at Port Harcourt, and 6.40 metres at Warri, and fourthly, there is a concentration of institutional services such as banking, insurance and telecommunications in the city. At the height of congestion a number of the waiting ships were diverted to other Nigerian Ports. At present a number of steps are being taken to reduce the grip on Lagos. On the part of the Government there has been a conscious effort to carry out an even regional development that would produce the same attracting force in the eastern ports. To complement Government's efforts, the Nigerian Ports Authority has mounted publicity both within and outside the country on the various modern facilities now provided at the various ports together with areas each port could profitably serve.
- (vii) During the port congestion, a large number of the Nigerian populace attributed all high prices on and scarcity of goods whether arising from the congestion or from the exploitive acts of unscrupulous businessmen to the Nigerian Ports Authority's making. The community then became much antagonistic to the Ports Authority. To eradicate such unfavourable situation a system of educating the public was embarked upon both in the National Newspapers and on the National Television. In addition, members of the public wishing to visit the ports are being permitted and conducted round.
- (viii) Modern technological achievement in shipping exhibited the inadequacy of conventional berths in handling specialized ships. To catch-up with the change, specialized terminals were developed. A modern container terminal is located at Apapa while Tin Can Island Port carries a Ro/Ro terminal. These are being operated respectively by a Container

Terminal Agent and a Ro/Ro Terminal Agent appointed by the Ports Authority to ensure a very efficient use of the terminals. Furthermore, to cope with the projected volume of containerization — 70% of available cargo is expected to be containerized by 1985 and above this figure by the year 2000 — a new deep-water Ocean Terminal to cater for the third generation container ships is being planned for development in the 1980-85 National Development Plan.

- (ix) With the stifling congestion still persisting, all efforts were directed at clearing the back-log of waiting ships.

No time was to be wasted to ensure very quick turn round of ships. Thus, there was a neglect of export in deference to import as depicted in the following figures:—

	EXPORT	IMPORT
1973/74	1,285,826	5,256,724
1975/76	810,266	8,476,048
1977/78	904,610	14,841,812

A lot of concern is being expressed about the continued neglect of export. To this end, efforts are being made by the Export Promotion Council of Nigeria and the Government to revive the once flourishing export of agricultural products. To be added to this also is the export of manufactured goods from the various industries in the country.

- (x) As part of the crash programme aimed at over-coming the congestion, several mooring buoys were laid in Lagos, Calabar and Delta ports in order to increase mid-stream discharge into barges and pontoons. This led to the investment of millions of Naira in the purchase of barges and pontoons. With the introduction of barges and pontoons into Nigerian ports, two new developments emerged. The first is that it opened up a vista of prospects of lighterage operation in Nigeria. The Government signified its intention and willingness to participate with the private sector in running a lighterage business. The second was consequent upon the first development. It has to do with discharging points for the lighter. Kirikiri, Ikorodu (both in Lagos), and Onne (in the Rivers) lighter berth terminals were constructed for this purpose.
- (xi) As a way of bringing about improved performance by the dock labour, the Government introduced integrated dock labour to remove all frustrating conditions encountered by them. To this end, the National Cargo Handling Company which provides 50% of dock labour in each of the Nigerian ports was established. Under this scheme, a few number of other stevedoring companies are given permission to operate dock labour in the remaining part of the ports and at private jetties. In addition the need to improve port efficiency as well as the service conditions and training of dock workers and thereby eliminate factors giving rise to industrial actions, influenced the country to establish a National Dock Labour Board. This Board is saddled with the responsibilities of seeing to the welfare, discipline, and training of dock workers. It is greatly hoped that the efforts of this Board would mean greater motivation of and higher productivity from the dock workers.

- (xii) No solution to port inefficiency can be achieved without the availability of sufficient skilled manpower. Like in the other sectors of the country's economy, there is a general lack of skilled manpower, particularly in the specialized arms of port services such as formulation of operational policies, pilotage, marketing and corporate planning strategies and engineering designs.

Realizing this problem, the Ports Authority embarked on training programmes both within and outside the country for all levels of workers within the Organization. In addition, while attracting trained and experienced personnel into its fold, various fringe benefits such as provision of furnished quarters, free medical facility and some others were introduced to induce those in the service to stay on. In the meantime, to provide for the deficiencies of local manpower as well as to strive to promote innovative techniques, a number of consultants both foreign and indigenous are engaged in the engineering, port operational, and general administrative aspects of the Organization's functions. The effect of this on the performance of the Organization is expected to be salutary. While affording experience to local personnel on the job, the consultants also provide them training in their home bases. All these efforts, except in some areas where Consultant recommendations cannot be applied to local conditions, have yielded increased productivity.

- (xiii) It is very interesting to note another trend in the Nigerian experience in port operation. There is at present an unprecedented under-utilization of the facilities. This condition had been brought about by the Government's policy of import restriction and supervision. Emerging from this is the immediate problem of how to scale down cost and at the same time cope with redundancy, particularly in the junior and unskilled cadre.

- (xiv) Since the Organization could not provide all the financial requirements of the massive port developments carried out, it had to rely on loans from within and outside the country. Loans from International Finance Organizations are always with strings attached, sometimes unfavourable to the aspirations of the borrowing body.

The Nigerian Ports Authority decided on the extension of the Apapa Quays by 6 berths. As against this the World Bank which was to finance the project decided it should be extended by 3 berths. The 6-berth extension cost ₦80 million out of which the Finance Organization provided ₦33 million. If the Nigerian Authority had not been able to provide the difference of ₦47 million, it would have been forced to accept the World Bank's recommendation of a 3-berth extension.

In another example, the Norwegian Government made available to Nigeria a grant of ₦4 million for the development of Calabar Port. As part of the condition of the grant, the Government named a firm of consulting Engineers and Planners to be employed to carry out the physical planning and design of the new port. Since this grant became far below a total of ₦85 million required for the development of the port, it was agreed that the ₦4 million should only be

used to finance the Consultancy Services provided by the firm nominated by the lending Government.

- (xv) Learning from the Nigerian experience, it is quite clear that investment in port development is very enormous. Since shipping technology is very dynamic more development demands will continue to be made on Port Authorities, especially for specialized structures to cope with changing shipping technology. Thinking of the prohibitive cost of construction and capital outlay, a number of countries would shiver to embark on such port development projects. To ease off the financial strain that might be brought upon countries which are not financially buoyant the adoption of the concept of port-outport relationship would be ideal. In this concept, the outport handles large ships and is specialized in nature while the inport becomes restricted to the handling of break-bulk cargoes.

In West Africa, regional ports on the basis of the concept analysed above could be adopted. Whilst some of the bigger ports could develop into major specialized ports, the smaller ones could at least prepare themselves as feeder ports. The only factor that poses barrier to the realization of this idea is the various political boundaries giving rise to various political learnings. These combine to influence the policy decision of the Government of each country. The solution to the problem posed by political considerations can however be found within the forum of the regional port grouping: the Port Management Association of West and Central Africa. Established with the sole aim of achieving mutual co-operation among all ports in the sub-region, the Association would eventually pool together all resources of member countries to be put to common use. A lot of advantages are to be derived from this regional grouping. Apart from the financial advantage to be gained by each port, the various ports stand to gain from seminars organized on modernizing port statistics, from the joint adoption of "System A" under the programme of the harmonization of navigational aids, from the study on unitization of cargoes, and from the study and policy on dredging.

In conclusion, there is a great need to stress the desirability of allowing understanding and co-ordination to prevail in the entirety of port industry. Experience has shown that no port can operate successfully in isolation. There must be mutual understanding and co-ordination between the ports and port users as well as the communities they serve. Since ports all over the world are striving to achieve the same goals, that of promoting world economy, it would be to the mutual benefit of the shipping world, and above all the whole mankind if they could maintain deep understanding and co-operation in all their endeavours.

Annual Report 1979 (Extracts): Nanaimo Harbour Commission

1. Chairman's Review (extract)

For the third successive year, 1979, revenues for the Port of Nanaimo have exceeded \$3 million and represent the second highest revenues in the history of the port's operation.

Lumber shipments continued to grow, increasing from some 420 thousand tonnes over the Assembly Wharf in 1978 to over 460 thousand tonnes in 1979.

Growing Lumber Market

Nanaimo is expanding as a collector port for the Central Vancouver Island region. There has been a steady increase in the movement of lumber from mills outside of Nanaimo and the trend is expected to continue.

At the same time, the Japanese and far eastern markets are growing and, in total volume, have now exceeded the U.S. market, traditionally shown as the largest importer since 1961, when full statistics were first kept for the Port of Nanaimo.

Port facilities are continually being improved and updated allowing the port to maintain the competitive edge in keep loading costs down.

In Summary, the marketing forecast for the port is for considerably increased lumber shipments, some increase in newsprint and approximately the same tonnage of pulp.

Summary of Cargoes

During 1979, 165 vessels with a total net registered tonnage of 2,005,602, entered the Port of Nanaimo to load or discharge cargo. Exports from the Assembly Wharf (metric tonnes):

Lumber	463,737
(340,784,687 fbm)	
Pulp	77,283
Plywood	16,512
Newsprint	6,698
Kraft linerboard	76
Shingles	81
Logs (Brereton)	5,489,275 fbm

Investment and Maintenance

Investment in the Port in 1979 increased fixed assets by \$802,935. The largest single item was for widening the approach trestle to B and C berths at a cost of \$310,300. Another major item was for paving, drainage and water lines on the Assembly Wharf totalling \$273,799, with all the work being contracted out to local companies.

New equipment was purchased for \$184,312 and total maintenance cost of all facilities, including automotive, was \$335,405.

Salaries and wages for Commission staff and longshoremen employed at the Assembly Wharf totalled \$1,475,806. With administrative, operating and maintenance expenses added to this figure it is estimated that over \$2,095,701 was put into the local economy by the Nanaimo Harbour Commission.

Port Users

During the year, the Commission continued to expand its user base, attracting the interest of Pacific Rim, U.S.

and European shippers through efficient, cost effective loading operations.

We appreciate the co-operation of the many shippers who, throughout the year, have made use of our facilities. I would also like to acknowledge with thanks the efforts of the various stevedoring companies with particular thanks to Westcan Terminals Ltd., our operating contractor.

Commercial Inlet Basin

During the year 3,600 pleasure craft registered at the Commercial Inlet Basin, with an average of 170 vessels using the mooring facilities every day. During the winter season the Commercial Inlet Basin was completely occupied with a total of 285 vessels - 200 commercial, including tugs, and 85 pleasure craft.

New Mayo Mill

The Mayo Forest Products lumber mill, built on the Assembly Wharf is now in operation. The mill produces specialty products to metric specifications from hemlock and cypress logs delivered to the mill by water. Its output of 85 million fbm a year, mainly for the Japanese market, will be shipped through the port and will significantly increase the total tonnage. The mill will cost approximately \$17 million, employ about 110 people and have an annual payroll of \$2.95 million.

Port Days

Port Days for Nanaimo were held on two days, Friday, September 28th and Saturday, September 29th. By means of newspaper and radio coverage, displays and tours of the harbour, the economic importance of the port and its activities were emphasized.

Some 300 students from Nanaimo Secondary School toured the Toki Arrow, loading lumber for Japan. Tours of the harbour by the Bastion City were popular and about 600 people took part. In a local shopping mall there was a closed circuit television display of how the Port of Nanaimo operates and on an outside parking area, a display of materials handling vehicles.

Development at Duke Point

Site preparation for the Duke Point dock and industrial park facilities is now continuing after a major delay during 1979. The Harbour Commission is confident in the future of this exciting new project which should see construction of deep sea dock facilities commence in mid 1980. Shipping capability through the Port of Nanaimo will be virtually doubled upon completion of the second phase of the development. Doman Industries, the first industry to locate at Duke Point, is expected to go into production early in 1980. Production from this mill combined with tonnage from other local manufacturers forms the base upon which the demand for expanded port facilities has grown. Clearly, the future of the Port of Nanaimo and of the Nanaimo area must be regarded with optimism.

Don J. Rawlins,
Chairman,
Nanaimo Harbour Commission

(Continued on next page bottom)

Annual Report 1979 (Extracts): Port of Corpus Christi

1. Director's Report (extract)

National environmental award appropriate climax for '70s

Winning the coveted American Association of Port Authorities' annual environmental improvement award for 1979 was an appropriate climax to the Decade of the Seventies for the Port of Corpus Christi.

The award serves as a symbol of the sensitivity to resource conservation and community concern that has been part of the Port Commission's business philosophy for generations.

Port-related enterprises continued to provide the foundation for economic vitality in South Texas during the decade and the Port Commission worked to provide the deeper channels and modern facilities needed as ships grow larger. The Commission spent the 1970s pushing phased progress on the 45-foot deepening project and devising environmental protection strategies necessary to return the Inner Harbor to full depth.

The Port is at center stage at the hub of a productive bay system and a scenic resort region. The 1980s will see continued efforts by the Commission to blend economic development and a spirited conservation ethic in the Magic Circle surrounding Corpus Christi Bay.

A landmark event in 1979 was the start of Inner Harbor maintenance dredging. By early 1980 full water depth had been returned to all general cargo docks. Construction was also initiated on the final disposal areas required to return full depth to the entire harbor. The maintenance dredging

paves the way for completion of the 45-foot channel which now reaches from the Gulf to a point just short of the Inner Harbor entrance. The entire Inner Harbor channel should be returned to a depth of 40 feet by early 1981. Deepening to 45 feet by the Army Corps of Engineers should be complete by the mid-1980s.

The Port of Corpus Christi is important to many — to the consumers of refined products and chemicals produced here, to the farmers who use it as an outlet to world markets, to the thousands of employees who work in the refining and petrochemical complex tied to the Port, to the thousands more who work in fabrication yards, ore processing plants and in the service industries tied directly or indirectly to the waterfront and to the longshoremen and others who work directly on the docks.

More than 50 years ago voters gave the Port Commission a charge — bring new jobs to South Texas. The Port has established a tradition of making industrial opportunities — and Jobs — happen for the area.

Meeting community needs with revenues, not taxes

While the Port's traditional role has been to provide service, deep water channels and economic stability, the Port Commission has always understood that financial health is a prerequisite to achieving all other goals.

The Port is a public agency set up under Texas law with authority to use property taxes to finance new facilities after voter approval. Most Port improvements have been made using revenue bonds retired by the fees collected from the users of these facilities. Port operations and public

(Continued from page 18)

2. Statement of Income for the year ended December 31, 1979

REVENUE	
Harbour dues	\$ 84,326
Property rentals	188,725
Commercial Inlet Basin	97,121
Assembly Wharf	2,700,334
Other	122,348
	\$3,192,854
EXPENSES	
Salaries and wages (less recovered)	\$1,127,846
Operating	315,650
Maintenance	335,582
Administration	313,772
Loan interest	2,851
(Depreciation)	(439,581)
NET INCOME FOR YEAR	<u>\$ 657,572</u>

3. Comparative Balance Sheet as at December 31, 1979 and 1978

ASSETS		1979	1978
CURRENT			
Cash on hand and in bank	\$1,075,431	\$1,194,104	
Accounts receivable	653,135	365,350	
Inventories (at cost)-materials and supplies	6,203	6,995	
Unbilled handling charges	81,019	74,523	
Prepaid expenses	1,775	1,775	
	<u>\$1,817,563</u>	<u>\$1,642,747</u>	

FIXED			
Fixed assets	\$8,382,380	\$7,579,445	
Less: Accumulated depreciation	3,209,922	2,780,892	
	<u>5,172,458</u>	<u>4,798,553</u>	

DEFERRED CHARGES			
Harbour development costs	236,387	60,187	
	<u>\$7,226,408</u>	<u>\$6,501,487</u>	

LIABILITIES AND EQUITY

	1979	1978
CURRENT		
Accounts payable	\$ 218,899	\$ 151,983
Principal payment of long-term debt due within one year	16,043	30,419
	<u>\$ 234,942</u>	<u>\$ 182,402</u>
DUE TO CONTRACTORS		
Holdbacks	38,569	
LONG TERM DEBT		
Due to Canada	\$ 16,043	\$ 46,462
Less: Portion due within one year	<u>16,043</u>	<u>30,419</u>
		16,043

EQUITY			
Government of Canada's Contribution	\$3,322,049	\$3,322,049	
Nanaimo Harbour Commission Accumulated earnings beginning of year	\$3,093,469	\$2,119,816	
Excess of revenues over expenses for the year	657,572	973,653	
	<u>3,751,041</u>	<u>3,093,469</u>	
Capital loss on disposal of fixed assets	\$ (120,193)	\$ (112,476)	
TOTAL EQUITY	<u>6,952,897</u>	<u>6,303,042</u>	
	<u>\$7,226,408</u>	<u>\$6,501,487</u>	

facility maintenance are self-sufficient. Commissioners have always sought to use revenue bond financing for projects needed to meet the diverse requirements of industrial users, the transportation industry and world trade. This resolve to remain self-sufficient and meet increasing costs required some increase in port charges in 1979.

Progress on the most extensive facility repair and revitalization program in the Port's history had a major impact on the Port's financial position. A total of \$5.9 million was committed to capital improvement projects in 1979 including \$2.4 million for dredge material containment levees and outfalls needed for the Corps of Engineer's 40-foot maintenance dredging. In 1978 this cost was shifted to the Navigation District as local sponsor.

Operating from revenues alone, the Port must accumulate working capital from year to year in order to have funds available for major capital projects. The accelerated 1979 improvements program required that some of this accumulated capital be used.

While the Port has been able to build capital reserves in recent years, present and projected income levels fall short of the massive financial demands of the 45-foot deepening project and the requirements that the Port upgrade or replace dock and cargo handling facilities to serve 45-foot-draft vessels. Filling this funding gap will require the selling of additional revenue bonds and consideration of seeking general revenue bond approval. The final phase of the 45-foot project alone will require \$10 to \$15 million from the Navigation District.

Rapidly increasing demand for services has made it increasingly apparent that the Port must produce more revenue to pay for channel maintenance and deepening, disposal sites, dock and warehouse construction and repair, grain elevator expansion, fire protection, security and administrative requirements.

Dock revitalization program hits peak

Port Commissioners have used revenues generated during the past three years to pay for a far-reaching program of dock revitalization.

Included is a \$3 million cargo dock reconstruction effort that went into high gear in 1979 when repair contracts were awarded for Cargo Docks 1, 3, 4, 8, 9 and 10. While some of these docks are more than 50 years old, they play a vital role by providing employment in the community and assuring farmers access to international markets.

The Port's public oil docks and Corpus Christi Public Elevator are also involved in the revitalization effort. The four busiest oil docks are being upgraded to safely berth ships up to 150,000 DWT. Work on the first, Oil Dock 11, was done in 1978. Plans were completed and fenders and bumpers delivered for Oil Docks 4, 7 and 8 during 1979 and these terminals will be made stronger and safer berths in the next year.

The Army Corps of Engineers made real progress toward actual construction of the 45-foot deepening project in 1979, prompting Port planners to turn efforts toward development of plans for facilities able to accommodate vessels drawing 45 feet. To that end, preliminary concepts and costs for a complete new bulk handling complex have been developed. Plans were completed for a new grain bagging facility and investigations were reactivated on expansion of Corpus Christi Public Elevator — including an additional berth for deeper draft vessels.

Efforts to get final approval of DEEPORT, a deepwater

port project at the Port's Harbor Island Division, are continuing. The environmental Affairs Department spent 1979 preparing an information document to be used by the Corps of Engineers in preparing a final environmental impact statement. The five oil companies which would use the terminal are helping finance the detailed environmental clearance effort. The final environmental impact statement must be filed before the Corps of Engineers can issue a construction permit for the project which would serve very large tankers drawing up to 72 feet in a protected inshore harbor.

Dry bulk cargo helping set 60-Million-ton pace

The Port of Corpus Christi continues to make concerted efforts to expand the variety of commodities shipped across the docks and additional cargo diversification is apparent in 1979 figures.

Total tonnage moved through the Port in 1979 matched the busy pace of more than 60-million-tons set in 1977 and 1978. The 60.8 million tons year-end total compares with 61.2 million in 1978 and surpassed the 60.6 million tons in 1977.

Strong gains in dry cargoes and bulk chemicals in 1979 offset slight declines in petroleum and grain tonnage caused by world market pressures. Petroleum accounted for 74 per cent of total tonnage while dry cargo made up almost 13 per cent, grain 7 per cent and chemicals 6 per cent.

Tonnage figures reflect the pattern of activity and provide clues to the ebb and flow of changing consumer demands, the world political climate, global crop production and marketing strategies.

Trade development efforts in Mexico were intensified 1979. With Mexico beginning a major industrial expansion and promising to be a top U.S. trading partner, the Port staff will be working to establish an awareness of Port capabilities among key industrialists. The Port is in a position to compete in handling raw materials imported by Northern Mexico manufacturers from around the world.

Most of the tonnage destined for Mexico is likely to move across the Public Bulk Materials Dock. Activity at this facility during 1979 exceeded one million tons, up 70 per cent in one year, with much of the gain coming in new commodities such as iron ore pellets going to major industrial centers in the States of Nuevo Leon and Coahuila.

High demand for aluminum allowed Reynolds Metals to reopen its San Patricio Reduction Plant on the Port's La Quinta Division during the year. Reynolds sharply increased bauxite imports over its automated docks and moved a trial shipment of bauxite through the Port's Bulk Materials Dock at the Inner Harbor. The San Patricio plant had been closed for five years and the reopening meant an injection of new employment in the Port community.

Administrative changes emphasize efficiency

While harbor facilities were being revitalized and cargo continued to fill dockside tanks and sheds, the Port took major steps to streamline data processing capabilities, improve investment income, upgrade insurance coverage and retain valued personnel.

In a continuing effort to serve customers quickly and accurately, remote computer terminals were installed at both the Harbormaster's Office and the Corpus Christi Public Elevator. These remote terminals give operations

personnel the ability to enter data directly and have access to stored information. Additional systems were developed to assist Port Commissioners and the Navigation District staff in dock scheduling, budget analysis and planning maintenance and future capital construction.

Fiscal efficiency was improved in 1979 when depository requirements were changed to allow the Port to invest additional funds in U.S. Treasury Bills. During peak periods, this permitted the Port to earn as much as 12.6% return on the invested funds.

To protect Navigation District property and private inventories stored at the Public Elevator and elsewhere, Port property insurance was consolidated and the amount of coverage increased with reduced cost. The year marked a transition from carrying individual property insurance policies on each public facility to a blanket policy on all real property.

The Port adopted a new retirement program solely funded by the Navigation District. It is part of a continuing effort to attract and retain the talented personnel required to efficiently operate a world port in the 1980s.

Stepping into the new decade

1979 was the year when the Port of Corpus Christi moved onto a new plateau, having completed some long-needed facility maintenance and initiated new trade development efforts. The plateau provides the base to begin planning major capital improvement programs for the future, matching deeper water and new facilities with the needs of diverse new Port users. The Port Commission has set its sights on Capital improvements which will provide maximum operational safety and efficiency designed to meet the demands of tomorrow's world commerce.

The 1970s were years of transition and 1979 was a fitting climax for the Port of Corpus Christi — Premier Port of the 1980s.

2. Statement of Income

For the years ended December 31, 1979 and December 31, 1978

OPERATING INCOME	1979	1978
Wharfage		
Petroleum	\$ 2,232,306.21	\$ 1,885,323.15
Dry cargo	862,018.30	511,202.08
Dockage		
Petroleum	1,123,369.33	751,903.75
Dry cargo	583,028.00	425,086.22
Standby	175,072.78	37,503.34
Freight handling	634,962.83	330,339.13
Public Elevator	4,108,698.53	3,644,398.87
Other services	105,760.05	103,322.18
Property and building rental	377,300.57	273,089.52
Other income	88,546.42	99,699.41
Total Operating Income . .	10,291,063.02	8,061,894.65
OPERATING EXPENSES		
Port Direct	1,289,457.83	1,315,064.54
Public Elevator Direct . . .	2,703,978.46	2,435,447.71
Port Indirect	1,768,483.97	1,482,725.05
Public Elevator Indirect . .	329,848.35	259,217.28
Total Operating Expense	6,091,768.61	5,492,454.58
Net Operating Income	4,199,294.41	2,569,440.07
NON-OPERATING INCOME		
Investment income-unrestricted	800,802.64	648,815.21
Investment income-restricted	48,087.44	22,809.15
Bonded debt-service related expenses	(51,397.90)	(54,797.82)

Total Non-Operating Income	797,492.18	616,826.54
Net Income Before Depreciation Expense	4,996,786.59	3,186,266.61
Depreciation Expense	787,855.55	705,026.19
Net Income	<u>\$ 4,208,931.04</u>	<u>\$ 2,481,240.42</u>

3. Balance Sheet

December 31, 1979 and December 31, 1978

ASSETS	1979	1978
CURRENT ASSETS		
Total Unrestricted Cash and Temporary Investments . . .	\$ 10,818,304.57	\$ 9,088,874.91
Total Accounts and Note Receivable and Accrued Revenue	3,184,364.00	2,233,853.53
Inventory	179,599.25	76,462.41
Prepaid Insurance	182,524.67	322,483.32
Total Current Assets . . .	14,364,792.49	11,721,674.17
FIXED ASSETS		
Less: Accumulated depreciation	(16,579,999.12)	(15,816,168.92)
Net Fixed Assets	22,883,867.85	17,781,568.79
OTHER ASSETS		
Total Other Assets	42,557.55	42,557.55
RESTRICTED CASH AND TEMPORARY INVESTMENTS		
Total Restricted Cash and Temporary Investments	4,534,456.45	1,464,099.08
INSTALLMENT SALES RECEIVABLE		
Total Installment Sales Receivable	65,285,000.00	33,285,000.00
Total Assets	<u>\$107,110,674.34</u>	<u>\$64,294,899.59</u>
LIABILITIES AND RETAINED EARNINGS		
CURRENT LIABILITIES	1979	1978
Accounts payable and accrued expenses	\$ 1,095,393.34	\$ 507,864.39
Notes payable United States of America	2,405,000.00	
Total Accrued Interest Payable	1,199,378.72	819,670.37
Current Maturities of Long-Debt	105,000.00	100,000.00
Total Current Liabilities . .	4,804,772.06	1,427,534.76
RESTRICTED FUNDS PAYABLE		
Total Restricted Funds Payable	4,016,484.95	1,013,641.73
LONG-TERM LIABILITIES		
Less: Bonds currently due . .	(105,000.00)	(100,000.00)
Total Long-Term Liabilities	66,540,000.00	34,645,000.00
Total Liabilities	75,361,257.01	37,086,176.49
RETAINED EARNINGS		
Allowance for grain shrinkage	225,000.00	54,555.79
Operating surplus	31,524,417.33	27,154,167.31
Total Retained Earnings . .	31,749,417.33	27,208,723.10
Total Liabilities and Retained Earnings . . .	<u>\$107,110,674.34</u>	<u>\$64,294,899.59</u>

Annual Report 1979 (Extracts): Port of Seattle

1. President's message

1979 was a strong year for the Port of Seattle. Port revenues exceeded \$81 million. Air-passenger traffic at Sea-Tac International Airport was greater than that in 1978. The Seattle Harbor handled more waterborne cargo than in the previous year.

Decades make good markers for examining the work of public institutions. 1979 marked the close of a decade of major development for the Port. In 1969 the Northwest was in the midst of the Boeing recession. It was clear that the regional economy needed greater diversity. More than ever, the Port of Seattle was viewed as the catalyst for new economic growth.

The decade began with major improvements at Sea-Tac which were completed in 1973. New facilities also meant accepting responsibility for the impact of the Airport on its neighbors. The Sea-Tac Communities Plan, which included land acquisition, noise monitoring and continuing dialog with community groups, was the Port's response.

The waterfront also changed dramatically during the decade. During 1979 we dedicated the Terminal 37 complex, a massive new container facility. Throughout the decade we were determined to attract and serve major steamship companies. We were willing to innovate and compete.

1979 was the year we courted the China trade. Commissioners and Port staff worked to persuade the Chinese to choose Seattle as their main port of entry for United States-China trade. Seattle would be an excellent choice. We are the closest major U.S. port to the Far East, and we have the capacity to serve as the major distribution point for cargo destined for the eastern U.S.

During the year we reviewed our role as an employer. The quality of Port employees has been one of our greatest strengths. We reviewed our progress in meeting affirmative action goals and studied each Port job to make certain we were competitive with other employers in the region.

This past year and decade were good for the Port. We have diversified the economy of King County. Nevertheless, the decade ahead poses serious challenges. The transportation industry depends on fossil fuels. Rising prices and fuel shortages will seriously affect our work and the economy of the region. We must conserve our energy resources. At the same time, we must support efforts to develop new sources of energy.

Merle D. Adlum
President-1980

Port of Seattle Commission

2. 1979 Year in review:

The Port of Seattle has a reputation for anticipating future needs and preparing to meet them. It has invested in new facilities and equipment before they were needed to maintain a competitive edge.

Collaboration among various departments has created comprehensive research and planning for Port development. Systems and Data Processing and Marketing have assembled systems to keep track of commercial transportation. Plan-

ning and Research has completed groundwork for a major study of fishing-industry prospects and needs.

In any year, the Port of Seattle's departments carry out diverse tasks. 1979 was no exception. The Engineering Department monitored a 47-percent increase in the dollar amount of construction contract awards. Human Resources posted and filled 317 job positions—many of them promotions and transfers within departments. The Fire Department moved into a new fire station at Sea-Tac Airport. The Accounting Department reviewed 50 years of Port financial records to develop a means for determining the present value of Port property. Real Estate negotiated a host of leases, including an agreement with the Alaska Marine Highway System to use Pier 48 as its operations base. Renovation and construction of new offices at Pier 66 accentuated the momentum and variety of Port activity.

New construction and facilities

In March the Port dedicated the Terminal 37 complex—a massive container facility covering 88 acres. Construction and equipment for the project cost nearly \$50 million. Terminal construction began in 1977 and each of the finger piers (37, 38, 39, 42 and 43) was filled in to create a single 2,040-foot concrete apron. Eventually Terminal 46 will be incorporated into the project—which will mean five cranes will be able to move the full length of the concrete apron.

Japan Six Lines, a consortium of six pairs of container-ship lines, became the first tenant for Terminal 37. The full complex is scheduled for completion during 1980.

At Sea-Tac, the main runway was resurfaced in record time—a full week ahead of schedule—at a cost of nearly \$2 million. Careful planning and coordination meant few operating delays for air carriers.

The Port awarded a major contract for 12 satellite transit system passenger vehicles to Westinghouse Electric Corporation. All vehicles will be installed and operating by late 1982.

On the waterfront, the Port increased its container-handling capacity with the addition of four dockside container cranes and eight yard cranes. In 1980 the Port will purchase nine additional yard cranes. In mid-1979 two years of study and design resulted in a contract award for a crane-monitoring system. The system will monitor five dockside cranes at Terminal 18 with automated data collection from various mechanical and electrical systems. The information collected will be used for early detection and diagnosis of potential equipment failures.

Organizational changes

In late 1979 the name of the Personnel Department was changed to Human Resources to better reflect the scope of its activities. Among other projects, the department developed new training programs. In addition, the department—working with an outside consultant and employee committees—coordinated a review of all Port jobs. The Job Evaluation Audit, which took nearly 10 months to complete, provided descriptions for Port jobs.

The new Distribution Department was created by merging the Marketing Department OCP Consolidations Group and the Marine Terminals Warehousing Group. Distribution

overseas the Port's sophisticated consolidations system. The system not only tracks each piece of cargo into, through and out of the Port, but also allows consolidation for the best possible shipping rates. The computer-assisted system allows less-than-truckload, less-than-carload and single container shippers to take advantage of lower truckload, carload and multiple-tender container rates on import cargoes to midwestern and eastern destinations. The warehousing system used, with the consolidation system, allows shippers to store goods and then move them at favorable transport rates from Seattle to inland destinations.

Community relations and environment

In 1979 approximately 64 parcels of land were acquired for nearly \$4.4 million as part of the Extended Clear Zone Land Acquisition Program at Sea-Tac. The Port and community groups released plans for a new recreational facility on Port-acquired land north of the Airport.

Queen Anne and Magnolia residents attended workshops to review Port strategies for development of nearby Terminal 91.

The Port of Seattle and the City of Seattle became co-sponsors of the Seacrest Marina project in West Seattle. Each pledged \$1.5 million as matching funds for an Army Corps of Engineers' floating breakwater, which will enclose approximately 690 permanent and 50 temporary moorages.

Support for the fishing industry

The 200-mile fishing limit has created new opportunities for the fishing industry in the United States. For salmon fishing there was an unusual irony in the potential bounty. During 1979 the fish harvest off the Alaskan coast set new records, but the unusually large supply glutted the market and depressed prices. The fishing industry remains unsettled as it enters the 1980 fishing season.

The Port of Seattle initiated a study of the potential of the fishing industry, and its requirements for facilities. The study will guide the Port's planning of new facilities.

The Port's initial response to fishing-industry needs included a new fishing-boat pier at Terminal 115, which was completed in time for the beginning of the commercial salmon season. Fishermen's Terminal will increase its crab-moorage capacity with the addition of two new piers, scheduled for completion in 1980.

Waterborne cargoes

Waterborne cargoes handled by Port of Seattle piers reached 6,943,000 metric tons in 1979, an increase of 16.9 percent over 1978. Bulk grain tonnage increased by 55.7 percent over the previous year.

Container traffic

In 1979 domestic and foreign container traffic through Port and private facilities reached 670,000 TEUs (20-foot equivalent unit containers). Traffic in loaded and empty TEUs should increase by slightly more than 4 percent in 1980.

3. Statements of Operations

	Year ended	
	December 31,	
	1979	1978
	(in thousands)	
Revenue:		
Services	\$ 48,430	\$ 46,157
Property rentals	24,322	20,242

Other	8,330	4,876
	<u>81,082</u>	<u>71,275</u>
Expense:		
Operations	28,567	25,894
Revenue bond interest	13,059	11,861
Depreciation	11,456	10,421
Maintenance	10,265	9,123
Administration	9,111	7,554
Other	1,013	632
	<u>73,471</u>	<u>65,485</u>
EXCESS OF REVENUE		
OVER EXPENSE	<u>\$ 7,611</u>	<u>\$ 5,790</u>

4. Balance sheets

	December 31,	
	1979	1978
	(in thousands)	
ASSETS		
LAND, FACILITIES AND EQUIPMENT, at cost	\$534,415	\$474,868
Less accumulated depreciation	83,035	71,930
	<u>451,380</u>	<u>402,938</u>
Construction work-in progress	30,280	49,151
Cash, investments and accrued interest restricted for debt service and acquisition of land, facilities and equipment	69,105	22,122
	<u>550,765</u>	<u>474,211</u>
UNAMORTIZED BOND DISCOUNT AND DEFERRED FINANCE COST, net of accumulated amortization	3,869	3,948
LONG-TERM PORTION OF CONTRACTS RECEIVABLE	499	588
CURRENT ASSETS:		
Cash	2,999	3,813
Investments (including restricted amounts of \$5,990,000 and \$4,765,000)	13,386	9,091
Accounts and contracts receivable, less allowance of \$279,000 and \$324,000 for doubtful accounts	14,814	12,576
Taxes receivable	840	1,022
Maintenance supplies	1,154	1,067
Prepayments and other current assets	380	386
	<u>33,573</u>	<u>27,955</u>
	<u>\$588,706</u>	<u>\$506,702</u>

	December 31,	
	1979	1978
	(in thousands)	
LIABILITIES AND EQUITY		
EQUITY OF THE PORT OF SEATTLE FROM:		
Operations	\$ 32,176	\$ 23,958
Taxation	179,267	168,496
Grants and donations	40,975	36,420
	<u>252,418</u>	<u>228,874</u>
LONG-TERM DEBT,		
less current maturities:		
Revenue bonds, net	252,019	202,669
General obligation bonds	27,620	29,180
Second lien revenue bonds and warrants	25,345	15,670
Contract payable		1,000
	<u>304,984</u>	<u>248,519</u>

(Continued on next page bottom)

Annual Report 1979 (Extracts): British Transport Docks Board

1. Chairman's Statement (extract)

The net profit before tax earned by the Board in 1979 was £13.6m (1978 £14.6m) after interest and additional depreciation to provide fully for inflation.

The Board had a favourable cash flow from operations and other sources of £28m and were able, without re-borrowing, to repay to the Government tranches of the Board's original debt two years in advance of the due dates. The Board's contribution to the national Exchequer in 1979 was:

	£m
Repayment of loans	10.8
Interest paid	6.7
Tax paid	7.8
	<u>25.3</u>

On the basis traditionally used for monitoring State enterprises, the profit before additional depreciation and interest was £27m (1978 £30m) and the return on capital on this basis was 15.1% (1978 16.9%). The target agreed with Government when world trade was on an upward trend was 20% to be achieved by 1980. This objective can not, of course, be achieved in the present economic climate particularly when the Board are increasingly subject to subsidised competition from other ports which are receiving subventions from Government and Local Authorities.

The 1979 results were achieved in spite of severe difficulties facing the port and shipping industries in the United Kingdom as a result of the low level of overseas trade. These difficulties were exacerbated by the industrial troubles of the early months of the year—troubles from which the Board did not escape. The road haulage and, subsequently, the engineering disputes were particularly damaging to export traffics. Nevertheless, the total tonnage handled by the Board's ports rose by 4.2% to 82.2m tonnes, the main increases being in bulk materials and manufactured imports.

The impact of the adverse factors characteristic of 1979 was felt most acutely at Hull where, after years in which performance had steadily improved, there was an adverse swing of £5m, from a profit to a loss.

The BTDB in the 1970s

It is perhaps interesting to review the BTDB's progress in the seventies.

In 1970 there was a net loss before tax of £1.6m: at the

(Continued from page 23)

CURRENT LIABILITIES:

Warrants outstanding	1,754	2,504
Accounts payable	9,337	11,279
Payroll and taxes	5,272	3,763
Retention on construction contracts	775	570
Bond interest payable	4,614	3,000
Lease deposits and customer advances	387	348
Current maturities on long-term debt	9,165	7,845
	<u>31,304</u>	<u>29,309</u>
	<u>\$588,706</u>	<u>\$506,702</u>

end of the period the annual net profit was £13.6m. (These figures are after interest and additional depreciation for inflation). On the basis used for monitoring State enterprises the profit before interest and additional depreciation was £4½m in 1970 and £27m in 1979. At the beginning of the ten year period the return on capital was 3½% and in 1979 it was 15.1%.

The Board have been self-financing since 1972, generating sufficient cash from their operations to meet the net requirements of the investment programme, increased working capital and all loan repayments including those which have been made ahead of the due dates. Reserves have been built up from £8m to £86m.

On the commercial side, the Board's ports have become steadily more competitive. Because of changes in the UK industrial situation, especially the steel industry, and in world commodity markets, bulk traffics (ores, coal and oil) have fallen over the latter part of the period. On the other hand, there have been gains in general cargo, unit loads and vehicles. The Board have also secured growth by acquiring stevedoring companies in pursuance of the policy of extending their cargo handling activity. The combined effect of these changes has been for the Board to increase their share of port activities, expressed in terms of turnover, from under one-fifth to over a quarter of the UK total.

During the ten years new investment schemes costing £108m have come into operation. These include the Port Talbot Harbour and the progressive development of the Prince Charles Container Port at Southampton. There has been a large investment in roll-on/roll-off terminals and in the general re-equipment of the ports.

Ports Results in 1979

The Board's investment programme at Immingham has been an important factor in the port's consistently good performance. Profits improved in 1979, and would have been higher but for a strike of registered dock workers early in the year. Goole continued to perform exceptionally well and the Board have concentrated on utilizing the available port area to maximum effect.

At Southampton there was a substantial degree of recovery as a result of a year of more stable industrial relations and improving productivity: the net loss was substantially reduced. Southampton has the second highest operational surplus of all our ports but bears heavy financing charges arising from the high level of recent capital investment.

Cardiff's position also recovered and progress was made towards eliminating the 1978 loss which arose following the early closure of the East Moors steelworks.

The small ports again made a useful contribution to the Board's overall performance. All made profits despite the difficulties of the first quarter.

Following a net profit of £3.4m in 1978 Hull moved into a loss of £1.9m. Traffics were badly affected by the industrial action by registered dock workers, by the road haulage and engineering strikes, and by a decline in exports; and available traffic was slow to return to the port after the disruption of the earlier months of the year.

Subsidies to other Port Authorities

The Board remain concerned about subsidies made

available to other port authorities which enable them to attract business on uneconomic terms. Subsidies undermine the basis of fair competition and lead to the retention of obsolete facilities which could not attract traffic at economic rates. It cannot be right that taxpayers or ratepayers should provide funds to sustain ports whose costs are not met by users. The Board accept that there may be justification for some assistance towards meeting the costs of closures which some major ports have to face, though the BTDB have met all these costs unaided. But there can be no justification for paying subsidies to our major competitors, enabling them to offer uneconomic rates and charges. In contrast, the Board operates profitably and is making substantial cash contributions to the Exchequer.

Relations with Government

The Minister of Transport announced on 5 March 1980 that he had asked me to explore possible ways of introducing private capital into the Board's undertaking. At the time of going to press the Board had this issue under careful consideration. Meanwhile I have welcomed the Minister's assurance that a changed structure would not involve splitting up the Board's organization.

2. Consolidated Profit and Loss Account

for the year ended 31 December 1979

	1979 £000	1978 £000
Revenue		
Dues—Ships	23,565	21,668
—Goods	27,845	24,654
—Passengers	1,111	995
	52,521	47,317
Cargo handling	61,156	54,405
Cranes and plant	4,347	3,909
Warehousing and storage	2,050	1,506
Sundry services and facilities	2,324	2,111
Rents	6,966	6,671
Other income	1,788	1,775
	131,152	117,694
Expenditure		
Operating and maintenance	24,129	19,890
Dredging	5,405	4,385
Cargo handling	49,350	42,040
Administrative and other general expenditure	21,630	18,286
	100,514	84,601
Operating profit before depreciation	30,638	33,093
Depreciation based on cost to the Board	6,733	5,974
Less: Proportion of port modernization and investment grants	385	377
	6,348	5,597
Operating profit	24,290	27,496
Investment income		
Subsidiary not consolidated		
—loan stock interest	25	9
—share of profit	26	63
Quoted investments	3	3
Interest on short term deposits	2,424	2,081
	2,478	2,156
Profit before exceptional items and interest payable	26,768	29,652
Exceptional items	Cr. 3,315	Dr. 491
Profit before interest and tax	30,083	29,161

Additional depreciation (transferred to reserve) to reflect changes in purchasing power of money	9,930	8,103
Profit after additional depreciation but before interest and tax	20,153	21,058
Interest Charges	6,562	6,477
Net Profit for the year before tax	13,591	14,581
Taxation	6,785	8,901
Net Profit for the year after tax	6,806	5,680
Transfer to Reserves		
Capital reserve—stock redemption	40	39
General reserve	6,766	5,641
	6,806	5,680

as at 31 December 1979

	1979 £000	1978 £000
CAPITAL EMPLOYED		
Fixed Assets	152,204	147,024
Investments		
Subsidiary not consolidated at cost (plus undistributed post acquisition profits)	350	198
Quoted investments—Market Value £54,048 (1978—£55,342)	49	49
	399	247
	152,603	147,271
Current Assets		
Stores and materials (at cost less provision for obsolescence)	2,609	2,189
Port modernization grants receivable	935	256
Debtors and payments in advance	27,542	25,254
Certificates of tax deposit	8,700	7,652
Short term deposits	17,350	22,785
Bank balances and cash	913	584
	58,049	58,720
Current Liabilities		
Trade creditors and accrued liabilities	11,797	8,700
Creditors for capital expenditure	2,743	1,947
Interest due to Minister of Transport	1,713	1,977
Corporation Tax payable	15,431	16,436
	31,684	29,060
Excess of current assets over current liabilities	26,365	29,660
	178,968	176,931
Provisions	2,351	2,295
NET ASSETS	176,617	174,636
REPRESENTED BY:		
Capital Liabilities		
Minister of Transport:		
Balance of Commencing Capital		
Debt 1963	42,940	57,684
Borrowed since 1963	46,574	46,574
	89,514	104,258
Southampton Harbour Board Redeem- able Stocks Issued and Outstanding	919	932
	90,433	105,190
Reserves	86,184	69,446
	176,617	174,636

Annual Report 1979 (Extracts): Port of Copenhagen

1. Annual Report 1979

In 1979 the Port of Copenhagen had a cargo turnover of 9,625,551 t, a figure represented a decrease of 644,569 t—or 6.3%—as compared with turnover for 1978.

The three main groups were affected by the decline: dry cargo, with a fall of 407,932 t or 10.7%, tanker cargo, with a fall of 190,535 t, or 4%, and general cargo, with a fall of 46,102 t, or 2.8%.

The lower turnover figures were accompanied by a decrease in tonnage and in the number of vessels liable for levying of port dues, which produced figures of 12,239,362 NRT and 16,610 vessels, representing a fall in tonnage of 109,624 NRT, or 0.9%, and in vessels a decrease of 4,348, or 20.7%. This decrease is attributable mainly to Swedish, Dutch, Danish and Finnish ships. There was, however, an increase in the tonnage of Norwegian, Liberian and UK ships.

The Port's accounts for 1979 show a surplus of D.Kr. 7.5 mill., as against D.Kr. 5.1 mill. in 1978 and D.Kr. 4.1 mill. in 1977.

The Port's investments in construction activities in 1979 amounted to D.Kr. 19.1 mill., as against D.Kr. 17.1 mill. in 1978 and D.Kr. 18.5 mill. in 1977.

These investments, amounting to a total of D.Kr. 54.7 mill., were financed solely from the Port's own resources, put at disposal via the operations account.

Major Projects in 1979

The North Harbour

Further progress was made on reclamation of the area east of Ferry Port Nord. 80,000 loads of material from demolition sites were delivered, a volume sufficient for reclamation of some 35,000 m².

In the Outer Harbour—from the pierhead at the northern Kronløb breakwater—a stone-fortified dam has been built to facilitate reclamation work east of the Levant Quay. This construction makes it possible to remove the remaining sections of the old northern pier, thus considerably improving navigational access to the Orient Basin at a later stage. In 1979 expenditure on the breakwater amounted to some D.Kr. 0.7 mill.

In connection with its roadwork project for the new entrance to the Free Port, the Municipality of Copenhagen has—at the expense of the Port Authority—rebuilt the Kalkbrænderihavns- og Vordingborgsgade street junction and relocated the traffic lights. The Municipality itself bore the costs of introducing one-way traffic northwards along Kalkbrænderihavns- og Vordingborgsgade from Århusgade to Vordingborgsgade.

The Free Port

The operations area of the Levant Quay container terminal has been extended by a surfaced area of about 30,000 m². In conjunction with this scheme two new projector masts—50 m and 30 m in height—have been added to the lighting plant, and a stretch of 160 m of open railway track has been replaced by a grooved track laid in a reinforced concrete foundation. A control post has been established to handle operations in the area. Total expendi-

ture, including a few minor auxiliary schemes, amounted to some D.Kr. 7.2 mill.

A new Customs House—a 2-storey building with a roofed area of 373 m²—erected at the new entrance provides facilities for registration of goods, customs control and inspection, on the ground-floor. The officers on duty have at their disposal CCTV and remote control for opening/closing of the gates. The project involved expenditure of about D.Kr. 3 mill. in 1979.

Other Construction Activity

As part of its scheme to transfer its daily ferry traffic from Tuborg Harbour to Nordre Toldbod, Polish Baltic Shipping Company has inaugurated a new purpose-built floating ro/ro ramp. The ramp consists of an older pontoon, measuring roughly 16 m × 34 m, on which has been erected a superstructure which allows direct driving of vehicles from deck to shore—including semi-trailer combinations up to 18 m in length.

Merger of port's three largest stevedoring companies:

Formation of Københavns Frihavns- og Stevedoreselskab A/S (KFS, i.e. Copenhagen's Free Port- and Stevedoring Company Ltd.) by merging Københavns Frihavns- Aktieselskab (KFA, i.e. Copenhagen's Free Port Company Ltd.), Bil-Færge Terminalen A/S (BFT, i.e. Car Ferry Terminal Ltd.) and Holger Jørgensen A/S (HJ).

At the meeting of the Port Authority's Board—the Harbour Board—held on 30 March 1979 a motion to effect a merger of the three companies, KFA, BFT and HJ, as quickly as possible, on the basis of a proposal submitted by a 3-man committee, was adopted.

A motion was also adopted to the effect that the Port Authority should purchase properties from KFA for a sum of some D.Kr. 87.4 mill., to settle a major part of KFA's debt to the Port Authority, with particular regard to solution of the problems facing KFA's pension fund. At a meeting of the Harbour Board held on 29 June 1979 a further motion was adopted to the effect that an application should be submitted to the Ministry of Public Works for a prior commitment with regard to the granting to KFS of a concession for free port operations in the Port of Copenhagen.

Upon adoption of the merger proposal, a new company, Københavns Frihavns- og Stevedoreselskab A/S, was formed the 3 companies, KFA, BFT and HJ. The merger was effected on 1 July 1979, and on 12 July 1979 the Ministry of Public Works issued authorisation to the new company to conduct free port operations in accordance with the currently valid Free Port concession until completion of the merger facilities.

The problems pertaining to KFA's pension fund were finally dealt with through the purchase by the Port Authority of the requisite annuities in "Pensionsforsikringsanstalten" (Pension Insurance Institute) for a total sum of D.Kr. 17.3 mill.

It transpired, however, before completion of the final accounting procedures for the merger that, as had been expected, the premises on which it has been based had altered considerably. The result was that in drawing up its first balance sheet KFS had to take account of a deficit of

over D.Kr. 5 mill. for KFA in 1978 and additional deficits for the 3 companies for the first half of 1979: D.Kr. 2.6 mill. for KFA, D.Kr. 1.9 mill. for BFT, and D.Kr. 0.2 mill. for HJ. And the sum of D.Kr. 18 mill. previously set aside for pension commitments had to be increased by a further sum of about D.Kr. 4.5 mill., as a consequence of raising loans etc.

Ultimately, the Port Authority had to pay a purchase price of some D.Kr. 107 mill. for the KFA properties, as it was decided to adhere to the initial decision that KFS should start with a positive net capital of D.Kr. 12.3 mill. Additionally, the Port Authority and KFS concluded an agreement on a number of amendments to the premises on which KFS's conditions of work were to be based subsequent to 1 July 1979. The former KFA area was divided so that the Port Authority took over the entire area south of warehouse 44 in the Free Port territory—with the exception, however, of certain buildings which were placed temporarily at the disposal of KFS. The area lying between warehouse 44 and the northern boundary of the Free Port was taken over by KFS, which is to undertake leasing activities in this area in the future. KFS also took over, as originally planned, the areas used hitherto by BFT and HJ. KFS thus had a further area of some 60,000 m² placed at its disposal, bringing its total at present up to 280,000 m².

Finally it was agreed that KFS—as a practical measure and for other reasons—should purchase the Conmax building, and Den Bla Terminal, and pay for the new surfacing at the Levant Quay.

The relevant agreements etc. were adopted at the meeting of the Harbour Board held on 26 October 1979.

The formal merging was finally adopted at the annual general meetings of the respective companies on 7 November 1979.

On 31 March 1980 the Ministry of Public Works granted the actual concession for a period of 40 years, with effect from 1 July 1979.

Port Dues

The rates valid for 1978 were adjusted with effect from 1 June 1979, with an average increase in ships' dues of 17.8% and in cargo dues of 15.8%.

Container and trailer traffic, via the Port of Copenhagen—1979.

In 1979 container turnover fell to 51,810 TEUS, a decrease of 770 TEUS, or 1.5%. Incoming containers rose by 1,261 TEUS or 4.9%, whereas outgoing containers fell by 2,031 TEUS, or 7.6%. Trailer turnover rose to a total of 4,319, an increase of 728 or 20.3%. The distributed figures show an increase of 253, or 17.4% in incoming trailers, and an increase of 475 or 22.2% in outgoing trailers.

2. Profit and Loss Account for the Year 1979

	1979 D.Kr.	1978 D.Kr.
Income from operations, excluding interest:		
Cargo dues	20 492 632	18 794 974
Ships' dues	8 808 674	7 932 976
Rent from properties	31 501 047	26 566 052
Rent from equipment etc	2 163 493	1 248 777
Other income	5 952 733	3 404 620
	<u>68 918 579</u>	<u>57 947 399</u>
Operating expenses:	55 410 423	50 051 748
Salaries, wages etc.	37 763 764	33 782 273
Allocation to pension fund	7 584 969	7 437 248

Consumer materials	2 214 379	1 689 158
Maintenance materials	7 345 520	7 049 232
Expenses on properties	13 714 178	12 857 612
Office and admin. expenses	2 368 423	2 522 394
Repayments	÷15 580 810	÷15 286 169
Profit before depreciation and interest etc.	13 508 156	7 895 651
Depreciations:	9 171 090	8 011 093
Port establishments	6 069 333	6 209 495
Properties	2 265 271	956 000
Work-sites, equipment etc.	836 486	845 598
Profit before interest etc.	4 337 066	÷115 442
Interest earnings:	11 964 602	12 958 043
Bonds, bank, saving bank, P.O. account	11 367 676	12 416 332
Interest on repayments, capital investment	596 926	541 711
Interest paid:	8 503 479	7 399 901
On loans	5 529 479	4 424 901
Pension fund interest	2 974 000	2 975 000
Net interest	3 461 123	5 558 142
Profit before adjustments	7 798 189	5 442 700
Final adjustments:	333 000	333 000
Allocation to pension fund etc.	0	0
Allocation to icebreaking fund	300 000	300 000
Depreciation of loss in market value of bonds loan	<u>33 000</u>	<u>33 000</u>
Surplus for the year	<u>7 465 189</u>	<u>5 109 700</u>

3. Balance Sheet at December 31, 1979

	1979 D.Kr.	1978 D.Kr.
Assets		
Liquid assets		
Cash in hand, assets held in banks, savings banks, P.O. giro account	13 708 776	18 262 820
Bonds	29 273 688	30 153 515
Outstanding accounts re. port operations	13 992 556	11 044 561
Copenhagen Free Port- & Stevedoring Company	3 154 988	3 188 327
Other outstanding accounts	6 121 439	3 209 594
Stocks	1 113 845	1 160 109
	<u>67 365 292</u>	<u>67 018 926</u>
Fixed assets		
Shares in the Copenhagen Free Port- & Stevedoring Company	8 908 099	4 000 000
Other shares	135 000	12 338 353
Loans to the Copenhagen Free Port- & Stevedoring Company	27 037 813	93 644 003
Other outstanding accounts	11 324 534	12 186 432
Port establishments	25 475 000	27 145 000
Properties	201 002 651	97 521 000
Work-sites, workshops and equipment	5 786 000	5 921 000
Capital invested in projects initiated (as yet uncompleted)	47 473 214	38 415 352
	<u>327 142 311</u>	<u>291 171 140</u>
	<u>394 507 603</u>	<u>358 190 066</u>
Guarantee liabilities: D.Kr. 17 655 280		

	1979 D.Kr.	1978 D.Kr.
Liabilities		
Short-term debts		
Debts to suppliers	11 377 574	10 004 562
Other amounts on demand	4 702 212	2 684 405
Cash credit	5 231 237	3 995 475
	<u>21 311 023</u>	<u>16 684 442</u>
Long-term debts		
Debenture loans etc.	66 255 061	46 170 296
Mortgage debts	6 023 708	178 229
Pension fund	69 414 958	69 414 958
Relief fund	504 241	547 013
	<u>142 197 968</u>	<u>116 310 496</u>
	<u>163 508 991</u>	<u>132 994 938</u>

(Continued on next page bottom)

Annual Report 1979 (Extracts): Port of Gothenburg

1. Summary (extract)

The National economy

The Swedish GNP increased by 4.1% between 1978 and 1979. Between the years 1977 and 1978 an increase by 2.4% was registered. The volume of production in industry was in 1979 6% higher than in 1978.

The following table illustrates Sweden's sea-borne international trade in 1979 as against 1978:

	1979 mill tons	1978 mill tons	Change in %
Exports excl iron ore	31.7	29.8	+ 6.4%
Exports excl iron ore & excl mineral oil	27.8	26.7	+ 4.1%
Imports, total	56.1	48.5	+15.7%
Imports of mineral oil	32.2	28.4	+13.4%
Other import cargo	23.9	20.1	+18.9%

The total net register tonnage of foreign trading vessels was 15% higher in 1979 than in 1978.

The number of passengers arriving by vessels to Swedish ports decreased from 1978 to 1979 by 0.4%.

Port trade

The following table illustrates traffic to and from Port of Gothenburg in 1979 as compared with 1978.

	1979 mill tons	1978 mill tons	Change in %
Throughput of Cargo			
Exports			
(incl transshipment)			
Mineral oil	0.73	0.41	+78 %
Other export cargo	4.22	3.94	+ 7 %
Total exports	4.95	4.35	+14 %
Imports			
(incl transshipment)			
Mineral oil	9.92	9.25	+ 7 %
Other import cargo	3.15	2.76	+14 %
Total imports	13.07	12.01	+ 9 %
Domestic trade			
Mineral oil	4.96	4.09	+21 %
Other domestic cargo	0.06	0.06	± 0 %
Total domestic trade	5.02	4.15	+21 %
Grand total	23.04	20.51	+12 %
Shipping			
	mill NRT	mill NRT	
Vessels in foreign trade	62.1	58.1	+ 7 %
Vessels in domestic trade	6.4	6.8	- 6 %
Total	68.5	64.9	+ 6 %

(Continued from page 27)

Net capital		
Icebreaking fund	4 735 000	4 492 000
Quotation value adjustment fund	0	0
Reserve fund.	226 263 612	220 703 128
	<u>230 998 612</u>	<u>225 195 128</u>
	<u>394 507 603</u>	<u>358 190 066</u>

Ship's Passengers

Number

Unit Load Traffic

Containers and flats
(20 ft TEU)

Roll on/Roll off vehicles

Total (excl palletised
cargo and packaged
forest products)

	mill	mill	
Number	3.62	3.71	- 2 %
Number	Number		
256,000	244,000	+ 5 %	
256,000	229,000	+12 %	
512,000	473,000	+ 8 %	

The total unitised cargo trade represented 78% of Gothenburg's general cargo trade in foreign traffic (as against 76% in 1978).

Gothenburg's share of total Swedish sea-borne exports (excluding oil and iron ore) rose from 14.8% in 1978 to 15.2% in 1979. A comparison with respect to general cargo only, shows that exports via Gothenburg represented 16.5% of Sweden's total sea-borne exports (in 1978 15.2%).

Out of total Swedish sea-borne dry cargo imports, Gothenburg had a share of 13.1% in 1979 as against 13.7% in 1978. General cargo imported by sea to Sweden passed at 19.8% via Gothenburg in 1979 (1978 21.6%).

In spite of the increased import of oil via Gothenburg, 1979 resulted in a decreased share of Sweden's total sea-borne oil import, from 33% in 1978 to 31% in 1979.

Out of total Swedish oil export, 19% passed via Gothenburg (1978 13%).

Main composition of traffic over the Port in 1979:

	Imports mill tons	Exports mill tons	Domestic mill tons	Total mill tons
1) Crude oil and oil products				
a) Crude oil	7.8	0.2	—	8.0
b) Oil products	2.1	0.5	5.0	7.6
Total oil traffic	9.9	0.7	5.0	15.6
2) Dry cargo:				
a) General cargo	2.8	3.8	—	6.6
b) Break bulk cargo	0.4	0.4	—	0.8
Total dry cargo traffic	3.2	4.2	—	7.4
3) Grand Total	13.1	4.9	5.0	23.0

Improved Facilities

The Port Authority's expenditure on fixed capital in 1979 amounted to a total of 54.9 mill SEK.

Works carried out resulted, i.e., in the following improvements/additional facilities:

Skandia Harbour

As from 1980, the name Skandia Harbour has been adopted to represent also what was formerly called Elfsborg Harbour. The latter is now a division of Skandia Harbour under the name of Elfsborg Terminal. Consequently, the Skandia Harbour includes, from east to west, the Tor Line Terminal, the Skandia Terminal, the Elfsborg Terminal, and the North Sea Terminal.

In the Elfsborg Terminal, berth No. 713 has been taken into operation. Two other berths, Nos. 710 and 702, are under construction.

Road and railroad works have been carried out, and the marshalling areas are being extended.

In the Skandia Terminal, berth Nos. 613–615 have been deepened.

At berth No. 615, the ro/ro-platform has been reconstructed.

The Free Port

The formally separate Free Harbour and Lundby Harbour have been put together into a larger Free Port area, called the Free Port and equipped with a single entry gate. The former Free Port area has been thoroughly modernized in order better to serve port users.

Ferry Terminals

On the southern banks of the Göta River, and extension of the two ferry terminals, serving ferry lines to Denmark and the German Federal Republic, has been decided on to serve the new jumbo ferries, ordered by the ferry line operators. Construction work will start in early 1980.

Forecast

The Swedish National Budget anticipates for the year 1980 increases in exports (volume) by 4% and in imports by 5% as against 1979.

As for Port of Gothenburg, estimations indicate an increase in foreign trade of dry cargo by some 5% during 1980. A further concentration to Gothenburg of dry cargo traffic may, however, result in a greater increase. For the next three years, the preliminary prognosis indicates an annual increase of about 3%. These figures take into consideration the risk of a recession, starting in 1982.

2. Profit and Loss Account

For the years ended December 31, 1979
and December 31, 1978

	1979 kkkr	1978 kkkr
Operating Revenue	107,213	94,932
Works on contract	16,794	14,468
	124,007	109,400
Operating and General Expenditure	–78,576	–66,567
Operating profit before Depreciation and Interest	45,431	42,833
Depreciation	–16,880	–15,351
Interest on loans	–25,271	–21,613
Net Profit	3,280	5,869

3. Balance Sheet

For the years ended December 31, 1979
and December 31, 1978

	1979 kkkr	1978 kkkr
Assets	000 SEK	000 SEK
Current Assets		
City of Gothenburg	89,477	95,532
Cash Balance	16	15
Postal Cheque Acct Balance	364	116
Bank Balance	6,556	4,042

Accrued Income	28,379	17,335
Accounts Receivable	9,414	12,028
Stores and Materials on Hand	498	427
Total	134,704	129,495
Fixed Assets		
Long Term Receivables		
City of Gothenburg (Net Profits, Amounts Accrued)	543	543
Gothenburg Free Port Ltd	1,855	1,855
Facilities		
Land, Buildings, & c.	528,380	494,692
Cranes, Vessels, Dredgers, & c.	35,674	36,613
Total	566,452	533,703
Grand Total	701,156	663,198

	1979 kkkr	1978 kkkr
Liabilities, Capital Reserves and Net Profit	000 SEK	000 SEK
Current Liabilities		
Accrued Expenses	33,699	22,836
Creditors	7,053	18,567
Reserve for Depreciation of Stores and Materials on Hand	285	220
Total	41,037	41,623
Capital Liabilities		
Share of Municipal Bond Loans	365,550	327,550
Capital Reserves, & c.		
Reserves tied up in Fixed Assets	198,504	203,755
Fixed Capital Expenditure Fund	95,522	89,727
Budget Equalization Fund	543	543
Total	294,569	294,025
Grand Total	701,156	663,198

–Port of Nagoya
(Turned back from page 47)

time.

For these reasons, in January 1979 we issued a report on "A Plan for Systemizing Export Cargo Information." This plan concentrates on systemizing the procedures followed in export shipments and is based on the handling of all clearance papers and bills of lading from the moment that the owner of the cargo entrusts a shipping company with its transportation to the completion of lading. The terminals of each enterprise and the computer of the Port Information Center (tentative name) are linked on-line and exercise centralized information control.

By so doing, it will be possible to eliminate duplication of work, speed up and automate information transmission, shorten and improve the accuracy of data processing, make multipurpose use of information, and lower data processing costs. To create an environment which will lead to further improvement of the function of port administrative activities, lower port terminal costs and shorten mooring time, will expand cargo handling capacity and thus benefit the region's economy.

This plan is shown in schematic form in Figure 4. Though the development of this system is urgently needed, its completion is unfortunately not yet in sight.

Annual Report 1979: Wellington Harbour Board

Chairman's address (extract)

I have pleasure in reviewing the operations of the Board for the year ended 30 September 1979.

SHIPPING ARRIVALS for the year totalled a record 8,243,573 net register tons, an increase of 763,532 tons or 10.2% on last year's figure of 7,480,041 tons.

The MANIFEST TONNAGE of cargo passing through the port totalled 5,659,182 tons, an increase of 198,214 tons or 3.6% on last year's tonnage of 5,460,968. Principal increases were in General Cargo inward from Australian (69,685 tons) and other Overseas ports (80,748 tons), General Cargo outward to other Overseas ports (46,943 tons) and outward Bulk Oil (19,987 tons). Decreased tonnages were recorded for General Cargo inward from Coastal ports (56,834 tons), Inward Bulk Cement (17,885 tons), and Inward Bulk Oil (19,575 tons).

The ANNUAL ACCOUNTS which will come formally before the Board after the completion of the Government Audit show a balance of \$1,810,650 in the Working Account as compared with \$54,982 last year. However, after meeting loan repayments, payments to Sinking Funds and contributions to Special Funds, there was a deficit of \$53,172 in the Appropriation Account compared with a deficit of \$1,534,625 last year.

Income rose to \$17,346,073 (last year \$13,928,482), due to a combination of higher charges being set in October 1978 which were further increased in July 1979, increases in tonnages of cargo handled and shipping arrivals and a review of lease rentals at Hutt Reclamation. The Container Terminal throughput continued to climb and the increase of 6,123 loaded TEU's handled represents a rise of 12.4% over last year.

Working expenditure rose to \$9,626,795 (last year \$8,656,626). Expenditure on repairs and maintenance \$2,077,965 (last year \$1,729,318) reflects the escalation in costs of wages, materials and services necessary to keep the Board's assets in good condition.

All loan money necessary for the completion of the Thorndon Container Terminal development has now been raised and interest charges should stabilise for a period except for those loans raised since the increase in the local body borrowing rates in April last. Depreciation continued to rise as new assets were employed. Loan redemption (sinking funds and loan repayments) rose significantly with the first instalment to the Sinking Fund for the second overseas loan being made during the year.

The Board's total wages and salaries inclusive of capital works increased by \$1,536,241 (18.39%), making the total cost \$9,891,486, (last year \$8,355,245). The current year however contains 53 pay weeks which increased the total by \$179,000 and the percentage increase by 2.15%.

Loan money raised during the year amounted to \$2,700,290 and loan liability now stands at \$39,756,615 (last year \$38,966,196).

Capital expenditure totalled \$2,781,741 of which \$1,691,739 was provided from loan money, \$400,000 from reserves and the balance, \$690,002 from revenue sources.

The principal items of capital expenditure were:

Thorndon Wharf Development	\$1,580,910
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Purchase Wellington Stevedoring Co. Ltd.

Building	\$ 400,000
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New Electricians Shop	\$ 136,828
-----------------------	------------

Container Crane 'B' Spares	\$ 123,650
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Other than Renewal Loans, Local Authorities Loans Board sanctions granted during the year were \$166,000 for Kaiwharawhara Development and \$141,000 for escalation costs of the Seaview Wharf project.

These bare statistics record the financial year ending in the one hundredth year of the Board's history but it is appropriate for me to comment upon the salient features of a year that may fairly be described as a milestone and a watershed in the affairs of the Board.

The major and urgent plan of container terminal development decided upon by the Board in 1975 is now substantially complete including three container cranes. Further developments and improvements will no doubt require to be considered but the basic infrastructure adequate for the probable demands of container shipping for the next two decades has now been established and is operating effectively and efficiently.

Seaview Wharf after long delays was brought into use first on 24 May 1979 and the port now has a well sited and constructed modern oil wharf capable also of serving the major oil industry installations at Seaview for many years.

Looking ahead to whatever possible future demands may be made upon the port, as the basis of trade and hence of growth, employment and prosperity in the region, a major study into the environmental impact and feasibility of future port development at Kaiwharawhara, as I reported last year, had been received by the Board in March 1978.

This independently prepared study confirmed previous studies and the already existing policy of directing port development northward. Its conception was adopted by the Board. At the same time the long awaited maritime planning provisions of the new Town and Country Planning Act 1977 had been enacted by Parliament and the Board decided that its long term purpose in securing, in conjunction with other planning authorities, an accepted Port Development Zone at Kaiwharawhara should now be pursued through the provisions of the maritime planning legislation.

Having full regard to those provisions, necessarily requiring several years to develop into an operative maritime planning scheme, the Board also decided in April 1979 to apply to the Minister of Transport for authority by Order-in-Council to reclaim 3.9421 hectares at Kaiwharawhara. The purpose of the proposed reclamation is to provide the essential access for the construction of a new oil wharf in substitution for the existing oil berth at Aotea Quay and the ability to develop land already reclaimed in the area. That application by its timing caused many people to suspect that the Board was attempting to bypass or commit in advance any publicly accepted maritime planning scheme. That understandable concern has caused the Minister to require to be fully satisfied as to the justification for the Board's application and his decision is still awaited.

At the final meeting of the Harbour Survey Advisory

Committee in December 1978 it was my pleasure to announce the completion of the Harbour Survey, commenced in 1973, and to thank all those who had participated in the completion of its nine sub-committee reports. The survey provides the base knowledge now being utilised in the initial stages of preparing a maritime plan.

In pursuance of the new maritime planning legislation an Order-in-Council on 31 July 1979 established a Wellington Harbour Maritime Planning Area and appointed the Board the Maritime Planning Authority for that area. In September the Board appointed five members of the Board to the Maritime Planning Committee to be established under the legislation and invited the Minister of Works and Development, the Wellington Regional Planning Authority and the Wellington Regional Water Board to appoint the representatives on the Committee for which they are respectively authorised by the legislation. When the Committee is then enabled to proceed its task will be to consider the preliminary statement to be published on the matters to be provided for in a maritime planning scheme and submissions thereon by the public.

Following a full review of the Board's financial position in February 1979 the Board approved a general increase in charges, with the exception of the Harbour Improvement Rate, of approximately 20% with effect from 1st July 1979. Charges for the hire of tugs and of container cranes were increased with effect from 1st April 1979. The continuing escalation of all costs, particularly of labour costs, remains of concern and will require regular review of costs and charges.

It was a matter of concern and regret to me as to the Board that the continuing difficult trading and financial circumstances have prevented the hope for commencement of the agreed plan of boat harbour development at Lowry Bay. Some satisfaction can be taken, however, in the bringing into use during the year of a second fixed mooring pier in the Evans Bay Boat Harbour. It will be recalled that this pier, comprising 54 fixed mooring berths, was financed in substantial part by money invested by prospective occupiers of the berths in a loan floated for the purpose.

I wish to extend my thanks in particular to Mr. S.H.J. Duff, who was appointed Deputy Chairman in April, for deputising for me during my period of absence, to Mr. B.H. Barraclough, Chairman of the Port Committee, Mr. P.A. O'Brien, Chairman of the Staff Committee and to all Members of the Board for their continued support and co-operation. To the General Manager, Chief Engineer and other officers and staff in all departments I wish to extend my sincere appreciation for the manner in which they have carried out their duties during the year.

H.A. JAMES,
Chairman.

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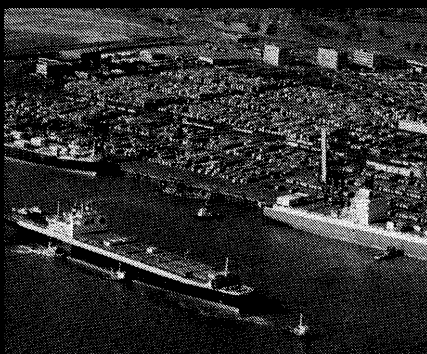
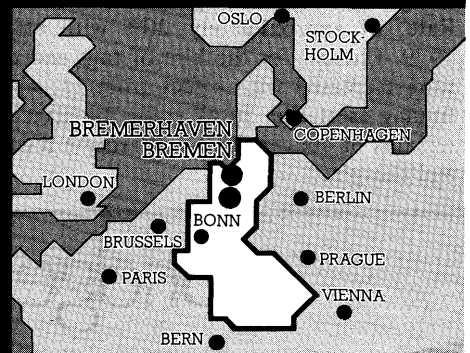
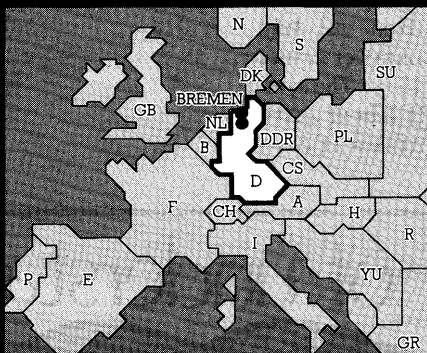
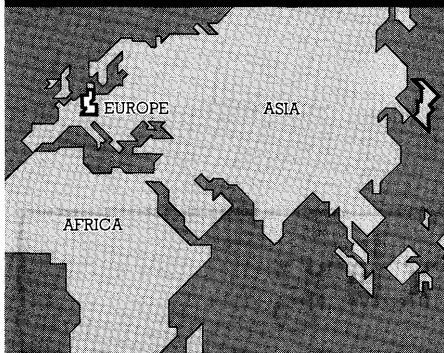
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International maritime information:

World port news:

World economic outlook, 1980-1981: UNCTAD secretariat (TD/B/783/Rev.1)

THE OVERALL OUTLOOK

This is a preliminary report on the economic outlook for 1980 and 1981. It has been prepared by the UNCTAD secretariat on the basis of preliminary forecasts of Project LINK and consultations with experts.

The estimates included in this report as well as policy implications emerging from the outlook for 1980-1981, will be the subject of discussions at the 21-23 May 1980 meeting of governmental experts in pursuance of the Trade and Development Board decision 144 (XVI). In the light of those consultations the secretariat intends to submit a revised report on this outlook for 1980-1981 to the twenty-first session of the Trade and Development Board.

Following a sluggish recovery from the severe 1974-1975 recession the world economy began a major growth slowdown in 1979 which is expected to intensify in 1980 before recovering slightly in 1981. OECD countries are expected to experience GDP growth rates of 1.1 per cent in 1980 and 2.7 per cent in 1981 compared with a 3.3 per cent growth rate in 1979. Most developing countries will find it difficult to achieve annual growth rates of GDP significantly above 5 per cent per year during the period 1980-1981. Annual growth rates of net material product (NMP) of about 4 per cent and 6 per cent are expected for the socialist countries of Eastern Europe and the socialist countries of Asia respectively.

The volume of world exports is expected to increase at a significantly slower pace than in the past, namely, to between 2.5 and 3 per cent in 1980 before accelerating to about 5 per cent in 1981. On the other hand, world export prices are expected to advance at the fairly rapid rate of 21 per cent in 1980 and 9 per cent in 1981. The terms of trade for primary commodities (excluding petroleum) vis-à-vis exports of manufactures, are expected to continue their declining trend in 1980 and 1981.

The terms of trade of non-oil-exporting developing countries, which exhibited little change in 1979 from the low level reached in 1978, are expected to deteriorate in 1980 and 1981. The combination of declining terms of trade and poor prospects for growth in export volumes will lead to substantially increased current account deficits in both years in spite of restraints on imports. This deficit is expected to increase from \$46 billion in 1979 to \$68 billion in 1980 and \$73 billion in 1981 (see Table 1).

Table 1

Balance of payments on current account 1978-1979,
and forecasts, 1980-1981
(billions of US dollars)

	1978	1979	1980	1981
Developed market economy countries	30.6	-6.6	-49.1	-43.7
United States of America	-9.3	4.8	-4.8	-8.7
Federal Republic of Germany	13.4	2.5	-5.6	-9.7
Japan	17.6	-7.4	-20.3	-14.9
Other major OECD countries	15.3	5.9	2.6	4.0
Other countries	-6.4	-12.3	-20.9	-14.4
Developing countries and territories	-28.7	13.9	63.6	43.5
Major surplus developing countries	20.9	55.7	110.6	108.9
Other oil-exporting developing countries	-12.1	3.7	20.6	7.7
Non-oil-exporting countries	-37.5	-45.5	-67.6	-73.1
Socialist countries	-9.7	-6.0	-11.0	-11.4
Statistical discrepancy	-7.8	1.3	3.5	-11.6

Current account balances were subject to enormous changes among major country groups between 1978 and 1979, as may be seen in Table 1. The substantial increase in the current account surplus of major surplus developing countries combined with a reversal from deficit to surplus on the part of other major oil exporters was reflected in a swing in the current account of OECD countries from a surplus of \$31 billion in 1978 to a deficit of \$7 billion in 1979 and in a worsening of the current account deficits of non-oil-exporting developing countries. In 1980 and 1981 this pattern is expected to persist, with very much larger current account deficits of OECD countries and non-oil-exporting developing countries forming the counterpart to a major build-up of current account surpluses on the part of major surplus developing countries and other oil-exporting developing countries.

Within the OECD group, the major imbalances which had persisted from 1974 through 1978 were reduced significantly in 1979. During the next two years, however, the current account balances of the Federal Republic of Germany, Japan and the United States of America are expected to exhibit large deficits. These developments are due to the reduction in the rate of growth of GDP of the United States relative to its major trading partners in 1979 and 1980; and the likelihood that the increase in the oil import bill of the Federal Republic of Germany, Japan and the United States in 1980 and 1981 will be only partially offset—at least in the immediate future—by increased exports to oil-exporting countries.

It is unfortunate that these adjustments within the OECD area are expected to come about at the cost of considerable unemployment. Inappropriate adjustment policies in the past seem to have forced OECD countries to "plan" a major slowdown as the only remedy to accelerating inflation. Apart from the extreme nature of this policy, it may not be viable since the necessary structural adjustments require high and sustained levels of investment which are normally not forthcoming under conditions of low rates of GDP growth.

Despite the slowdown in GDP growth expected in 1980 for the OECD area, inflation as measured by the consumer

price index is expected to accelerate from 7.6 and 8.5 per cent in 1978 and 1979, respectively, to 10.7 per cent in 1980 before falling back somewhat to 9.4 per cent in 1981. This acceleration in the rate of inflation is expected to be considerably more pronounced in the case of the United States and Japan than in most other OECD countries.

United Nations Convention on International Multimodal Transport

The UN Convention on International Multimodal Transport of Goods was adopted by consensus on May 24, by a Conference of Plenipotentiaries convened by the General Assembly under the auspices of UNCTAD, marking a successful conclusion to more than seven years of negotiations. The Final Act was signed thereafter by the participating states. The first part of the Conference was held in November 1979.

Gamani Corea, Secretary-General of UNCTAD, told the final plenary meeting of the Conference that the subject of the Convention — the introduction of a single liability regime, based on presumed fault or neglect, for the transport of goods involving more than one mode of transport and the regulatory role of governments in such transport — had “exercised the minds and energies of economists, lawyers, entrepreneurs, users of transport services and governments for some thirty years”. These earlier attempts to find a solution at the level of private institutions had failed, leading to the decision of the United Nations Economic and Social Council in 1973 to establish an Intergovernmental Preparatory Group (IPG) for the elaboration of a convention on multimodal transport under the auspices of UNCTAD. The IPG held six sessions between 1973 and 1979 and drew up a draft Convention which was submitted to the Conference and adopted with some amendments. Mr. Corea urged countries to ratify or accede to the Convention as quickly as possible. The new instrument will be open for signature in New York as from 1 September 1980 until 31 August 1981 and could be acceded to thereafter. The Convention will enter into force internationally twelve months after 30 states become contracting parties thereto either by definitive signature, ratification or accession. The depositary of the Convention is the Secretary-general of the United Nations.

Mr. Corea paid tribute to the positive contribution towards consensus which had been made by representatives of the 83 participating countries during the negotiations, and stressed the effective mediatory role played by Erling Selvig (Norway) who had presided over the Conference and the IPG “with patience, dedication and, if I could say so on his behalf, commitment to the ideals of UNCTAD”. He trusted that the success achieved at the Conference would encourage the other efforts being made in UNCTAD and elsewhere to bring important international economic issues to a fruitful conclusion; and noted finally that by adopting the Convention the Conference had proved the viability of UNCTAD to achieve concrete results in the elaboration of technical instruments.

The spokesmen for the regional groups and China also emphasised, in their closing statements, the important role which the Convention would play in international trade in its modern context. The representatives of several states said, however, that although they had subscribed to the

adoption of the Convention by consensus, and the Convention permitted no formal Reservations, their countries, nevertheless, still found some of its provisions not entirely acceptable, despite the efforts that had gone into the final agreements that had been reached. They would be discussing such provisions further with concerned interests in their capitals.

The Convention will be mandatorily applicable to international multimodal contracts. It imposes an agreed system of liability to govern the contractual relationship between consignor and the multimodal transport operator (MTO) for the entire transport of goods from the time the MTO takes them in charge until delivery, irrespective of the different modes of transport that may be involved; and responds to the need to accommodate modern technological developments in transport, such as containerisation and multimodal systems, with an appropriately restructured legal, documentary and regulatory regime. The concept of “through liability” which it establishes has up to now been applied only under commercial contracts, and being embodied for the first time in an international convention, ensures that its provisions cannot be derogated from by the stronger party to a multimodal transport contract. Under existing conventions, liability is segmented with each unimodal carrier being responsible for his own specific leg of the journey. Together with a preamble setting out principles, the Convention has eight substantive parts dealing with: general provisions encompassing regulation and control of multimodal transport; documentation; liability of the multimodal transport operator; liability of the consignor; claims and actions; supplementary provisions; customs matters and final clauses. The Convention also sanctions the use of a new type of document, the multimodal transport document, and states what its basis contents should include to facilitate multimodal carriage.

The new Convention is the second international treaty in the field of transport to be concluded under the aegis of UNCTAD. The first was the Code of Conduct for Liner Conference which contains specific provisions for the participation of developing countries in liner shipping. Adopted in 1974, it is expected to come into force soon. In addition, UNCTAD was the catalyst for the Hamburg Rules, adopted in 1978, which revised the liability regime for the carriage of goods by sea. The President of the Conference, in his concluding statement, noted that the three Conventions had all been elaborated within the United Nations with the full participation of countries from all parts of the world, and that “the chief responsibility for the work has been placed upon UNCTAD”.

Further noteworthy features of International Multimodal Transport Convention are: 1) recognition of the right of each state to regulate and control at the national level multimodal transport operations, including the right to take measures relating to consultations, especially before the introduction of new technologies and services, between MTOs, shippers, shippers' organizations and appropriate national authorities on terms and conditions of services; licensing of MTOs; participation in transport and all other steps in the national economic and commercial interest; and 2) establishment of agreed limits to monetary liability of the MTO.

Status of IMCO's Conventions as of 1 May 1980

Instrument	Date of Entry into Force
International Convention for the Safety of Life at Sea, 1960 and amendments thereto: 1966, 1967, 1968, 1969, 1971 and 1973 Amendments: (These amendments are incorporated in the text of SOLAS 1974)	26 May 1965 Not yet in force
International Convention for the Safety of Life at Sea, 1974:	25 May 1980
Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974:	Not yet in force
Convention on the International Regulations for Preventing Collisions at Sea, 1972:	15 July 1977
International Convention on Load Lines, 1966: Entry into force: 1971 Amendments: 1975 Amendment: 1979 Amendment:	21 July 1968 Not yet in force Not yet in force Not yet in force
International Convention on Tonnage Measurement of Ships, 1969:	Not yet in force
Special Trade Passenger Ships Agreement, 1971:	2 January 1974
Protocol on Space Requirements for Special Trade Passenger Ships, 1973:	2 June 1977
International Convention for Safe Containers, 1972:	6 September 1977
Torremolinos International Convention for the Safety of Fishing Vessels, 1977:	Not yet in force
International Convention on Standards of Training, Certification and Watchkeeping, 1978:	Not yet in force
International Convention on Maritime Search and Rescue, 1979:	Not yet in force
International Convention for the Prevention of Pollution of the Sea by Oil, 1954, as amended: 1962 Amendments: 1969 Amendments: (a) 1971 (Great Barrier Reef) Amendments: (b) 1971 (Tanks) Amendments:	26 July 1958 18 May and 28 June 1967 20 January 1978 Not yet in force Not yet in force
International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969:	6 May 1975
International Convention on Civil Liability for Oil Pollution Damage, 1969:	19 June 1975
International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971:	16 October 1978
International Convention for the Prevention of Pollution from Ships, 1973:	Not yet in force
Protocol relating to Intervention on the High Seas in Cases of Pollution by Substances other than Oil, 1973:	Not yet in force
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972: (a) 1978 Amendments on procedures for the settlement of disputes: (b) 1978 Amendments on the prevention and control of pollution by incineration of wastes and other matter: (Except for the Federal Republic of Germany and New Zealand)	30 August 1975 Not yet in force 11 March 1979
Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973:	Not yet in force
Convention on Facilitation of International Maritime Traffic, 1965	1967
Civil Liability in the Field of Maritime Carriage of Nuclear Material, 1971	1975
Carriage of Passengers and Their Luggage by Sea, 1974	Not yet in force
Convention of the International Maritime Satellite Organization (INMARSAT), 1976 & Operating Agreement	1979
International Conference on Limitation of Liability for Maritime Claims, 1976	Not yet in force

ICHCA XV Conference, Edmonton, Canada, June 1981

With organising committees functioning in Ottawa, Ontario; Edmonton, Alberta; and Vancouver, British Columbia, planning is in high gear for the XV Biennial Conference of the International Cargo Handling Coordination Association (ICHCA) which will be held at the Edmonton Plaza, Edmonton, Alberta, Canada, June 7-12, 1981.

The Conference theme "Changing Concepts in Transportation Systems" will be covered in five major sessions—Marine, Energy, Ports & Surface, Air Cargo and Facilitation developments.

National port assessment 1980/1990

The U.S. Maritime Administration has released its National Port Assessment, 1980/1990. The report inventories U.S. port facilities, both deepdraft and inland, assesses their capacity to handle projected traffic loads, and estimates future facility needs and capital requirements. It also looks at port construction and operating costs (including those attributable to federal legislation) and significant technological trends in breakbulk, containerized, dry bulk, petroleum, liquified gas, other liquid bulk, and slurry cargo movements.

Regarding seaports, it reports, among other things:

- the U.S. deepwater port industry consists of 1,456 marine terminals, located in 189 seaports, and comprising 2,939 deepdraft berthing facilities;
- 49 percent of these berthing facilities are publicly owned and 51 percent privately owned;
- 42 percent of the facilities are located in 15 port cities with populations of 500,000 or more and just four percent in cities of 2,500 or less;
- waterborne commerce through U.S. seaports will increase 32 percent over the next decade;
- the actual cash value of all marine terminals (in 1977 dollars) is \$40.4 billion and estimated replacement cost is \$54 billion;
- mandated costs average \$42 million annually for the public port system, and are expected to increase by 53 percent;
- 58 percent of all U.S. deepdraft port facilities are rated as being in good physical condition, 29 percent fair, 11 percent poor, and two percent not recorded;
- the equivalent of 247 new facilities will be needed by 1990: 27 additional breakbulk berths, 111 more container facilities, 10 more grain berths, 11 new coal berths, 12 new ore facilities, 25 additional other dry bulk berths, 22 new petroleum berths, six new liquified gas facilities, and 19 new berths for other liquid bulk cargoes;
- total capital requirements for marine facilities in U.S. deepwater ports in the 1980s are estimated at over \$5 billion.

U.S. DOT completes port connectivity study

The U.S. Department of Transportation has completed an analysis of landside transportation connectivity problems at U.S. ports, focusing particularly on physical deficiencies of rail and highway links with port terminal

areas. Inspired by an address delivered by DOT Secretary Neil Goldschmidt last November, the report (Landside Transportation at Ports—A Preliminary Assessment of Transportation Connectivity Problems at U.S. Ports) concludes that numerous problems do exist, the more significant being:

A. Rail

1. Track geometry constraints; e.g., weight limits, track radii, clearance.
2. Bottlenecks, such as heavily trafficked bridges and tunnels.
3. Poor yard location in relation to marine terminals.

B. Truck

1. Bottlenecks, such as bridges, toll booths, signalled intersections.
2. Limited truck parking areas.
3. Deficient signs and otherwise poor communications with truck drivers.
4. Congestion, conflicts with other traffic.
5. Conflicts with residential and industrial uses.

C. Joint Rail/Truck

1. Rail/truck interference: e.g., grade crossings.
2. Remote location of ramp points.

While most such problems are relatively small, the principal difficulty, according to the study, arises from poor communication between port officials who are aware of the situation and the state and local government agencies that have the resources to deal with them. Programs offered by the Economic Development Administration and the Federal Railroad Administration are suggested as possible sources of federal assistance in correcting rail deficiencies. The report also recommends that the Departments of Transportation and Commerce organize demonstration programs involving specific on-site analyses of connectivity problems at two or more ports.

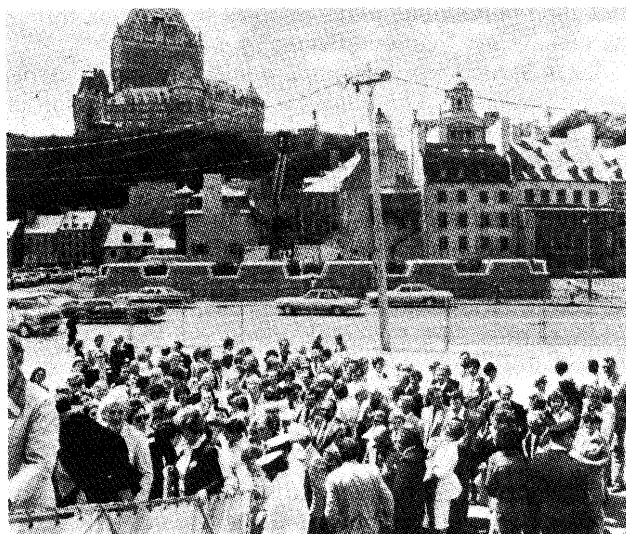
Twenty large U.S. ports and port regions were selected for study on the basis of data gathered and reported to DOT by Manalytics, Inc. The latter, relying on the 1976 survey of domestic and international transportation conducted by the Bureau of the Census, identified the hinterlands served by each port both in geographic and demographic terms. Based on those findings, Manalytics concluded that:

- Only one-third of a port's own traffic originates or is destined for areas outside the state where the port is located;
- Trucks are the predominant mode for port traffic moving within the port's own state;
- Rail predominates for traffic moving between the port and outlying states of its hinterland;
- A higher volume of export shipments is handled by comparatively smaller ports, while individual shipments seem to move more frequently through the larger ports;
- The North Atlantic and California ports are primarily import-oriented. The South Atlantic, Gulf, Northwest and Great Lakes ports are used mostly for exports.

Port of Québec Day

The Port of Québec Day was an unqualified success for two reasons: the enthusiastic participation by the port users and the obvious interest shown by the general public. More than 25 000 people visited the stands and the firms established in various sectors of the port.

In fact, the success of the Day has been such that already it has been suggested that next year a Port of Québec Weekend should be held instead of a Port of Québec Day.



The invited guests at the opening of the National Transport Week which coincided with the Québec Port Day. They later cruised the St. Lawrence aboard the Luis-Jolliet.

Dundalk Marine Terminal to add 13th berth: Maryland Port Administration

Dundalk Marine Terminal, heading for a record tonnage year at three of its 12 cargo berths, will soon add a 13th "super" berth to meet the needs of shippers during the 1980s.

The first phase of the new facility is expected to cost a total of \$40 million; Completion of phase one is slated for mid-1983, and the total project a year later. The new berth will add 30 acres for container storage and permit the export and import of 750,000 tons of cargo annually.

Berth 12 at Dundalk Marine Terminal set a record in the port of Baltimore in 1979 by moving a million tons of cargo. It is expected to repeat that performance in 1980, along with Berths 8 and 11.

During the first six months of this year, Berth 8 handled 483,975 tons of cargo, Berth 11 moved 540,779 tons and Berth 12 handled 401,366 tons.

New record of 122 million tons shipped in 1979: Port of Houston

A record 122,383,558 tons of cargo moved through the Port of Houston in 1979 for a substantial 12 per cent increase over 1978, according to final U.S. Commerce Department statistics released by the Port of Houston Authority.

The double-digit increase is all the more significant since tonnage of the major commodity handled at the Port, imported crude petroleum, declined for the first time in recent memory. Indicating the U.S. appetite for gasoline and other refined petroleum products may be diminishing, total imports of crude oil to Houston refiners and processors decreased to 31,027,265 tons in 1975, a decline of six per cent from the 1978 total of 33,043,018 tons.

Despite the reduction in oil imports, the Port's overall foreign trade tonnage, including both imports and exports, was up almost four per cent from 62,479,095 in 1978 to 64,882,288 last year. Imports totaled 41,862,126 tons and were valued at \$9 billion. Tonnage and value totals for exports were 23,020,162 tons and \$9.5 billion.

These figures should assure that the Port of Houston was again the second largest U.S. port in foreign trade and third largest in total tonnage.

Container freight tonnage jumped over 30 per cent, with 2,068,046 tons in 1979 compared to 1,587,742 tons in 1978. The number of containers shipped increased from 183,680 TEUs (20-foot equivalent units) to 266,250 TEUs.

Not surprisingly, the most impressive gains in cargo handling were recorded at the Port Authority's Barbours Cut Terminal, the Port's major container handling facility.

Tonnage increased 97 per cent at the modern, intermodal terminal from 864,362 tons during 1978 to 1,701,586 tons last year. Barbours Cut handles LASH barges and roll-on/roll-off cargoes as well as containers.

Jun Mori elected president, Roy S. Ferkich vice-president: Port of Los Angeles

Attorneys Jun Mori and Roy S. Ferkich were elected recently as president and vice president, respectively, of the Los Angeles Board of Harbor Commissioners for one-year terms. Mori, senior partner in the Los Angeles firm of Mori and Ota, was vice president of the Commission for the past year.

In May 1979 he was appointed to President Carter's Export Council, a 40-member group which makes recommendations to the President on export expansion. A San Francisco born Japanese American, Mori also serves on the advisory board of the State's Office of International Trade.

San Pedro resident Ferkich is the Harbor Commission's sole member to serve continuously since appointment in 1973 by the then newly-elected Mayor Tom Bradley. Ferkich has previously been president of the Commission for one term and vice president for two.

Port of Los Angeles approves, with four exceptions, Port Master Plan as certified by California Coastal Commission

The Los Angeles Board of Harbor Commissioners recently approved, with four exceptions, the Port Master Plan as certified on May 29, 1980, by the California Coastal Commission.

The California Administrative Code requires that the Port take this step before the Plan can become effective. When the Harbor Commission's approval has been received and accepted by the Coastal Commission, the authority to issue coastal development permits for the projects covered in the certified plan will be delegated to the Board.

The Port Master Plan is a multi-phase, long- and short-term development program. The five-year plan's short-term program involves an estimated \$434 million in capital projects. The plan additionally provides for long-term segregation of port areas by compatible functional uses.

The Board of Harbor Commissioners took exception to four modifications included in the Coastal Commission's certification: The first involved the planned relocation of hazardous cargo facilities; The Coastal Commission's second modification involves restrictions on the use of the Port's West Bank development; The third area of dispute involves facilities in Fish Harbor; The Coastal Commission's fourth modification specified a two-year extension of the Port's eight-year least term mitigation plan, to 10 years.

The Harbor Commission's approval marks its final step in obtaining a certified Port Master Plan to guide the Port's future development. The Plan must now be submitted to the Coastal Commission for its acceptance of the Board's final approval of the plan as certified.

Port Authority of NY & NJ to sponsor a special trade exhibit in Tokyo early next year

The Port Authority Trade Exhibit will be held at the U.S. Trade Center in Tokyo in January 1981. It will give local manufacturers an opportunity to meet with potential buyers in Japan and gain first hand knowledge of Japan's marketing possibilities. Some 1,500 manufacturers of industrial products located in New York and New Jersey, many of whom have never engaged in export sales, now are being solicited to participate in the exhibit, which is being planned by the Port Authority in cooperation with the U.S. Department of Commerce.

"Japan is a large, lucrative and growing market," Chairman Sagner stated, noting that in 1979 Japan's imports of manufactured products increased by nearly 50% to \$14 billion. The United States share of this total represented nearly 30% or \$4.1 billion.

The Port Authority's Tokyo Trade Development Office has identified six related industrial products that have a high sales potential in Japan. These products are electronic components, computers and peripherals, communications equipment, electronics industry production and test equipment, electromedical equipment and analytical instruments.

Chairman Sagner explained: "The decade of the 80's will be one of increasing competition for American businessmen with the fastest growing markets overseas. A key strategy for doing business in the 80's will be to design and market products for worldwide competition. The Port Authority Tokyo Trade Exhibit program presents an excellent opportunity for our New York and New Jersey manufacturers to meet this challenge."

Ocean shipping returns to Portland

Operations at the Port of Portland's marine terminals and the Portland Ship Repair Yard have resumed at near-normal level.

By June 13, 145 vessels had transited the six-mile section of the Columbia River channel that was partially blocked above Longview, Washington, as a result of the May 18 eruption of Mount St. Helens. Between five and 10 ships daily have been navigating the area, including grain, bulk, tanker, general cargo, automobile and container

vessels. This includes the 13-vessel naval fleet of U.S., Canadian and New Zealand ships which attended the annual Portland Rose Festival in early June.

The largest ship in Portland at the time of the eruption, the tanker B.T. ALASKA, sailed June 4. This ship is 956 feet long and 166 feet wide.

The U.S. Army Corps of Engineers predicts the Columbia River channel will be dredged to a depth of 39 feet 2 inches with a channel 300 feet wide by the end of July — which will handle all vessels calling at Portland. The full project depth of 40 feet will be restored by September, with the full 600-foot width returned by October, through the six-mile area that was affected by shoaling.

Liner service has been rescheduled by most carriers serving Portland. The Japanese six lines, a consortium service of larger vessels with heavier loadings, is expected to return to Portland in July.

Geological reports from the mountain appear to be positive, with very little likelihood of further mud slides affecting the Columbia River.

On May 25 and June 13, Mount St. Helens dusted Portland with ash fallout. This subsequent volcanic activity did not affect the Columbia River, nor did it slow up channel dredging.

Georgia Ports Authority continues impressive growth

Fiscal year 1980 tonnage statistics for the Georgia Ports Authority show a continuation of the growth trend established in recent years. Total activity for the year reached 5,770, 599 tons for an increase of 1,192,738 tons or 26 percent.

CONTAINERPORT volumes played an important role in the overall growth pattern. Containers handled rose from 940,504 tons last year to 1,416,676 tons for fiscal 1980. This represented an improvement of some 51 percent, actually exceeding last year's impressive 47 percent.

Georgia Ports Authority continued to make a major contribution to the equally impressive growth of the overall Port of Savannah. The Savannah maritime community has combined an aggressive team spirit and posture of customer orientation to develop Savannah into the leading foreign commerce port on the South Atlantic. Georgia Ports' five year figures, which show a doubling of tonnages, indicate that the growth trend is no short term proposition.

Authority officers named

Georgia Ports Authority has named its officers for the coming year. P.E. Clifton, Sr. of Savannah was named Chairman succeeding Jack P. Turner, Jr. of Dalton who served as Chairman for the past year. Clifton has served on the Authority since his appointment in 1974 by Governor Carter. He has served as Chairman of the Port Development Committee since 1979. He is President of Steel Erectors, Inc., and has served in various executive capacities with a number of local civic groups.

L.P. Greer, Jr. of Toccoa, a member of the Authority since 1975 and a former Chairman, was named Vice Chairman for the coming year.

Savannah heavy lift capabilities—a quantum leap: Georgia Ports Authority

Heavy lift capabilities in Savannah received a gigantic boost with the introduction into service of a new gantry crane at G.P.A.'s Ocean Terminal. It boasts a 175 ton capacity at a radius of 45 feet, and is capable of turning through a complete 360°. Cost of the project was \$1.8 million.

Track mounted, the new crane will be able to serve seven berths (14 through 20). In addition, the gantry rail configuration will permit it to access a large open storage area located immediately adjacent to the berthing area. This arrangement will allow handling of heavy lift cargoes to and from rail cars and trucks in marshalling areas as well as during ship operations.

Handling improvements will continue with the completion of a 100 ton gantry crane in mid-summer of this year. It will serve the same area as the 175 ton crane including the open storage locations. The crane will lift maximum capacity to a radius of 65 feet. Like its big brother, it can rotate through a full 360°. Cost for the second crane will run approximately \$1.76 million.

Total gantry availability at Ocean Terminal will be doubled, while maximum lift capacity will jump to 275 tons. G.P.A. will be able to handle a much wider range of heavy and project cargoes.

Save London's River—An appeal for help to clean up the River Thames

THE DRIFTWOOD PROBLEM

All the concern in the past over the polluted state of the river during the 1930s and 1940s was in connection with the water itself, and its oxygen content. No thought was given to the surface of the water, except by those who used London's river for commerce or pleasure. So with all the improvement below the surface, at times on the surface itself, it still looks like London's dustbin. Timber, from huge baulks and sleepers down to waste rubbish; beer crates and plastic in the form of sheets, bags and rope. All floating along and just below the surface with other debris. Filthy, unsightly and dangerous when it fouls the propeller of commercial and pleasure craft, or damages the hull or sinks rowing eights and sailing dinghies.

The DRIFTWOOD COMMITTEE of the Port of London Authority was formed in 1974, following a meeting of all those concerned regarding the deplorable state of the surface of the River Thames. The Port of London Authority undertook to supervise the clearance of this driftwood and this committee was formed to monitor the work. A special catamaran 'Driftwood I' was constructed to collect the worst of the floating debris, and for five years has patrolled the river between Tilbury and Brentford collecting up to 1,500 tons a year. Other rubbish on the foreshore has been burnt representing another 500 tons a year. This collection work has cost from £110,000 in 1976 to



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£170,000 in 1979, jointly contributed by the Port of London Authority, the Thames Water Authority, the Greater London Council and the London Boroughs Association. Latterly a large amount of plastic sheeting and bags has added to the problem, and in spite of the high collection rate the river can still become dangerous with flotsam during dry periods when there is no flood water from the upper reaches to wash it away.

So where does it come from?

Without a doubt it comes from us, the public, who still see the river as a convenient dustbin. It is therefore up to us to do something about it.

The campaign includes taking the Press, TV and Radio out onto the River to see the problem for themselves, and providing the media with all assistance so that they can help by telling Londoners, and all those using the river from source to estuary, of the problem and the way to solve it.

All industrial and commercial companies alongside the river will be contacted, and material supplied to them, so that every worker is made aware of the dangers, and penalties, of dumping rubbish into the river. Local Councils will also be contacted to give their support.

£15,000 is needed NOW to save our river

Please give it some thought. This is a once only appeal. The more we raise the better can be the education and publicity to make London's river one that we can be proud to see, and use, in fine dry weather as well as when it is flush with fresh water. Just send your donation to:

**The Driftwood Committee,
Port of London Authority,
Directorate of Marine Services,
Thames House, Gallions Reach,
London E16.**

Research program cuts dredging costs

Dredging cost Britain's largest port authority, the British Transport Docks Board, over £5 million last year. But the cost would have been higher, and dredging effectiveness lower, without the work of the Board's London-based Research Station.

Dredging studies formed a major part of the BTDB's research programme last year, and these studies are described in detail in the Research Station's Annual Report for 1979.

The BTDB own and operate 19 ports around the coasts of England, Scotland and Wales. Maintaining the channels leading to these ports is a large task, but it has been kept within bounds by the use of new techniques of precision dredging developed by the Research Station. Electronic position-fixing systems are used to produce charts showing precise areas to be dredged. Dredgers are then able to remove sediment from specified areas only, avoiding the high costs of carrying out dredging over wider areas where it is not really needed.

BTDB scientists, together with marine officers of the Board, carried out a number of studies of the effectiveness of dredging vessels. These studies form part of a programme designed to ensure optimum deployment of the Board's

fleet of dredgers.

The trend towards larger ships means that new port developments increasingly take the form of open-river berths rather than traditional enclosed docks. But such berths can affect tidal flows, and therefore siltation, in the rivers where they are built. It is, therefore, essential to be able to make the best prediction of the dredging costs likely to result from different engineering proposals: these predictions are sometimes the decisive factor in choosing which of several alternative schemes is the best one — or indeed whether to proceed at all.

To increase the accuracy of these predictions, the Research Station carry out field studies and experiment with hydraulic models built at the West London research headquarters. In the Humber estuary, a comprehensive field investigation was carried out last year which involved taking 3,000 sediment samples from the river, analysing them and processing the data using specially written computer programmes.

The Research Station's hydrographic section worked on the development of a fully automatic method of producing sounding charts. The use of electronic position-fixing systems and echo sounders in hydrographic surveying is well-established, but by introducing a combined Digitizer/Field Data Logger, this information can now be put onto a standard cassette tape and fed into a computer which then automatically draws the survey chart.

Jamaica Terminal brings new jobs at Newport: BTDB

It was almost Jamaican weather at Newport, warm sunshine and clear blue skies, when BTDB's new Jamaica Terminal was inaugurated by the High Commissioner for Jamaica, Mr. Ernest G. Peart, C.D. The ceremony was attended by some 150 guests, including about 50 UK export shippers interested in seeing at first hand what the new service has to offer.

The terminal, costing £800,000, has been built to meet the needs of new weekly shipping service between Britain and Jamaica. Imports through the terminal consist mainly of bananas and other agricultural produce, while westbound traffic comprises highly diversified general cargo.

The emphasis at the official opening was on the vital role the terminal will play in the expanding legal trade between Jamaica and the UK.

Speaking at the inaugural ceremony, Mr. Peart said that the new terminal would play a vital role in this growing trade. He stressed the great importance that the Jamaican Government attaches to commercial and trade relations with the UK, as an essential part of Jamaica's programme of economic development.

After welcoming guests to the inauguration ceremony, Keith Stuart, the Board's deputy chairman and managing director said that the new terminal meant valuable new business for the port, over 100 new jobs, and the fastest shipping service between the UK and Jamaica.

Mentioning the 'well publicised problems' in some of Wales's basic traditional industries, Mr. Stuart said: 'Our policy is to use the opportunities we have, and the Jamaica terminal follows hard on the heels of other encouraging new trades won in recent years by the BTDB's South Wales port. We particularly hope to see an upsurge in British

exports through Newport, as well as a rising volume of banana imports'.

Mr. Stuart stressed the value of partnership between docks management and all BTDB employees, and the importance of Newport's reputation for good service in successfully competing against other ports to win the new business.

Changing pattern of general cargo trade: Port of Le Havre

The statistics for the general cargo trade over the last ten years are highly revealing. To start with, total non-bulk traffic has almost doubled since 1970, when it stood at 4 million tons. The 1979 figure was 7.6 MT.

In 1970, 59.6% of all general cargo was conventionally packed, with only 19.4% going ro-ro and 21% in containers. In 1975, 5.3 million tonnes of general cargo passed through the port, of which 1.7MT was conventionally packaged (34%), with 1.5MT travelling ro-ro (28%) and 2MT in containers (38%).

In 1979, 57% of all general cargo was containerised (4.3MT), 25% went ro-ro (1.8MT) and 18% (1.3MT) was conventionally packaged.

1983 ICHCA Biennial to be held in Bordeaux

Following the proposal made by Mr. Pierre DEBAYLES, Director General of the Port of Bordeaux Authority, which had been requested by the Board of Directors, the Executive Bureau of I.C.H.C.A. (International Cargo Handling Co-ordination Association) decided during its latest meeting in Tel-Aviv, to hold the 1983 Congress in Bordeaux (from the 23rd to 26th May).

I.C.H.C.A. which regroups—on a worldwide basis—the management of the major companies concerned by the problems of handling, organize this type of Congress once every two years.

In 1981, the I.C.H.C.A. Congress will take place from the 7 to 10th June in Edmonton (Alberta, Canada).

The principal theme listed for the 1983 Bordeaux Symposium is: "The role and importance of a port in regional development". The choice of Bordeaux—a town which was born of and developed with its port—could not be more appropriate. As for the container terminal of Le Verdon—delegates at the Congress will, of course, have the opportunity of visiting it—it has become the essential tool of trade for Greater South West France for its overseas trading.

Upward trend in number of goods in first half of '80: Port of Hamburg

In the first six months of this year, the Port of Hamburg handled 32,966,000 tons of goods of all kinds, an increase of almost 10 percent compared to the same period of the preceding year (30,041,000 tons), according to the Tokyo Office of Hamburg City.

In this connection, the handling of suction goods occupied a large portion of the total. From January to June this year 6.7 million tons of grain, oleaginous fruit and



In the first six months of this year, the Port of Hamburg, the biggest German port, handled 32,966,000 tons of goods of all kinds, an increase of almost 10 percent compared to the same period of the preceding year.

oilseeds were loaded and discharged at the Port of Hamburg's terminals. This was 2.6 million tons or 63.5 percent more than in the comparable period of last year.

There was also an upward trend in regard to general and bagged cargo which, because of its labour intensity, is of prime importance to the port's working capacity. A 4.5 percent rise brought the total of this type of cargo to 9.2 million tons (as against 8.8 million tons in the first half of 1979).

The growing trend towards containerization is at the expense of conventional handling. Thus growth rates in container traffic are also clearly higher than those of conventional general and bagged cargo. 376,461 containers (TEU) with a total weight of 3.4 million tons (first half-year 1979=305,701 TEU at 2.8 million tons) were shipped via the terminals of the biggest German seaport, which corresponds to a rise of 23.1 percent numerically and 24.3 per cent by weight.

Expert operatives in Port of Hamburg; All-purpose specialists for fast and reliable cargo handling

Adaptation of the port to new handling techniques has highlighted the fact that it is not enough to build new facilities—for instance, for container or roll-on/roll-off traffic—and to equip them with the appropriate apparatus. There must also be intensive training of the labour force in the port. More than in the past, the operatives have to be prepared for their new special tasks if they are to cope with them efficiently. A few years ago a comprehensive advanced education and training programme was developed in the Port of Hamburg to this end; it is already possible to say that the programme is having the hoped for results.

In order to ensure in the future smooth transport processes with the usual degree of speed and care in an age of constant technical and organisational changes, port operatives nowadays have to possess farther reaching, and in

particular theoretical knowledge.

They acquire this knowledge firstly in their respective firms. The companies have for this reason been training their operatives for several years by way of intensive internal courses.

Secondly there is the newly created opportunity of qualifying as a port specialist operative. Port workers interested in this professional advancement have to take part in courses of the "Port of Hamburg Further Education Centre". After successfully passing their examinations at the Hamburg Chamber of Commerce they receive the expert operatives certificate.

The Further Education Centre was established in 1976 by the port businesses in conjunction with the appropriate trade unions and with the support of the Hanseatic City's authorities. The port businesses will shortly set up their own port specialists school, which will also feature special training facilities; the latter will enable the potential port specialist operatives to learn those subjects which are difficult to fit into the work process of the individual firms.

The further education programme has encountered considerable interest with the port businesses as well as with the port workers. The 500th port worker recently received the port specialist certificate. The port workers have appreciated the fact that bound up with this qualification is not only increased recognition of their responsible work, but also at the same time an improved social and legal grading and safeguarding of their workplaces.

From the port businesses' point of view, this move towards better quality port work makes it possible to achieve maximum handling of the seaborne cargo entrusted to them, and greater exploitation of their technical equipment and appliances. This strengthens Hamburg's position in seaport competition; for the port's clients can act on the assumption that here the goods are just as much in the hands of experts as in their own works.

How to become a port specialist operative

Anybody intending to qualify as a port specialist operative should if possible possess, in addition to good physical condition, the ability to react quickly, perceptiveness for technical processes, the ability to follow organisational procedures, and skill in dealing with people.

The initial knowledge and accomplishments are acquired by the dock worker in his firm—a form of training which in the past and at the present time holds a definite place in the entire vocational training system because of its direct connection with practical work. In this regard, he learns the operational working processes, the lashing and expert treatment of the goods and the operating of the dockside transporting and lifting appliances, from the forklift to the van carrier, and from the loading winch to the container crane.

For new recruits, the first theoretical training begins with a three-day course, in which they learn about the structure of the port and such details as handling of goods, accident prevention etc.

Port workers have to undergo all other further training measures only if they wish to become specialist port operatives. This means in particular that they should not only make use of the further training facilities provided in their firms, but also attend the Further Education Centre courses.

In two courses each lasting four weeks the prospective port specialist operatives are instructed mainly on points concerning the packing technological and cargo sectors, as well as the proper way to complete and use port and ship's papers. In addition there are lessons on the expert discharging and loading of seagoing ships, inland waterway vessels, railway waggons and lorries. The instruction also covers the organisation of cargo handling in the port, and goes into the related economic aspects. Finally the curriculum also includes the treatment, storage and stowing of dangerous cargoes.

The port worker has to provide evidence of this abilities in a written, practical and oral examination held by the Hamburg Chamber of Commerce before he is presented with the port specialist operative's certificate.

Maritime cargo traffic reaches 146 million tons for the first six months of 1980: Port of Rotterdam

Goods transshipment in the port of Rotterdam during the first six months of this year reached 146.1 million tonnes, approximately one per cent up on the first half of 1979. Converted to an annual figure (by doubling the half-year result), 1980 transshipment would amount to 292 million tonnes, which is one million tonnes above the estimate published on 21 December 1979. Figures are based on forms used for payments of port charges.

Rotterdam maritime commodity transport—January through June 1980 as compared with 1979

	in 1,000 tonnes		
	1979	1980	1980 as compared with 1979
Crude oil	69,111	64,841	— 6%
mineral-oil derivatives	17,505	17,936	+ 2%
ores	18,285	21,377	+ 17%
coal	4,307	5,893	+ 37%
other bulk goods	17,532	17,752	+ 1%
general cargo ⁺	18,293	18,275	—
All commodities	145,033	146,074	+ 1%
⁺ including:			
lash	799	725	— 9%
ro/ro	1,765	1,963	+ 11%
containers	9,087	9,628	+ 6%
conventional general cargo	6,642	5,959	— 10%

Major chemical plant opens at Sharjah's Port Khalid

The Dow Chemical Company's new Al Miyah plant, situated within Sharjah's Port Khalid in the U.A.E. has been officially opened by the ruler, His Highness Sheikh Sultan Bim Mohamed Al Qasimi.

The purpose-built plant has been sited in Sharjah to fully meet the anticipated demand for effective thermal insulation materials throughout the Middle East.

It is sited within Port Khalid's Free Zone industrial area—a facility which has proved very successful since its introduction three years ago.

Sharjah Port Authority's Managing Director Mr. Philip Forrest commented: "Companies developing their operations in the Port are finding that an alongside manufacturing or assembly facility makes good sense. It saves money, and facilitates inland trucking and the exporting of finished products. We are pleased that yet another major international company has made a substantial investment in the Port's Free Zone operations".

Planning to meet the needs of a new decade: Port of Melbourne Authority

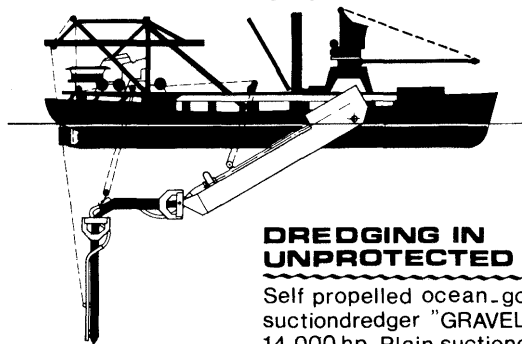


A new decade has begun—a decade which already promises to see the introduction of many new developments in the world's shipping and trading spheres. Ports will play a key role in these changes—changes which will necessitate the construction of modern specialised facilities, the provision of ancillary services such as adequate cargo handling areas, efficient centralised road and rail arteries linking the hinterland and sophisticated communications systems to service the needs of shippers, traders and others engaged in the complexities of world commerce.

To meet these anticipated changes Port development and modernisation programmes are a constant on-going aspect of the Port of Melbourne Authority's administrative organisation. This clear understanding of the need to keep Melbourne's port at the forefront of the world's ports has been a keystone in the Port Authority's policies since its inception a little over a century ago.

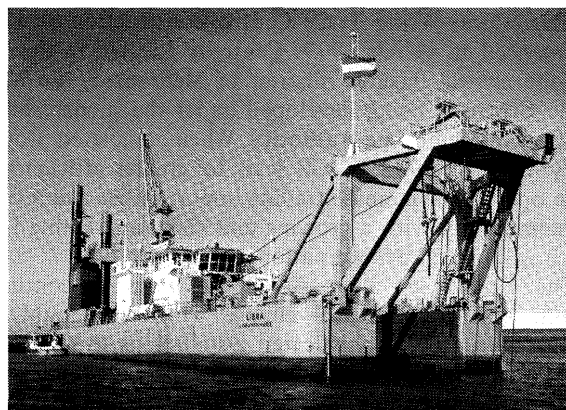
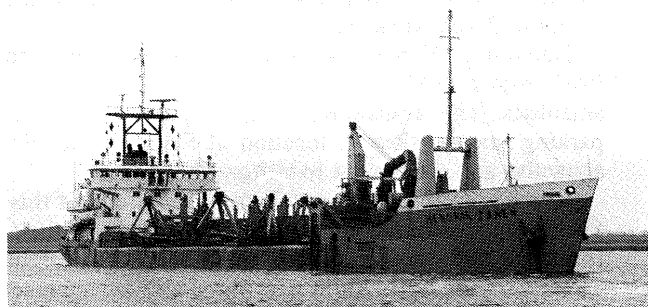
By coincidence the advent of the 1880's saw the Port Authority (then known as the Melbourne Harbor Trust) about to embark on a massive port development programme. Little more than two years old, the Authority was considering plans for the carving of a canal to make navigation of the river easier for the larger types of ships arriving in Melbourne, and the construction of a complex of docks where an odious swamp lay close to the growing business

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centre of the city.

As the years went by existing facilities were enlarged or modernised. In 1911 Princes Pier was constructed; then in 1924 the entrance to Victoria Dock was realigned; by the early 1950's Appleton Dock, commenced in the 1920's, was completed; Webb Dock, the first roll-on roll-off facility in the Port, was completed in the 1950's and then construction of Swanson Dock, the Port's overseas container complex, commenced.

In addition to these major capital works, other areas of the Port were being developed to meet the growing needs of shipping as Australia gradually became a major world trader. In conjunction with the building programmes in the Port, dredging and deepening the channels proceeded until today the maximum guaranteed depth of water of 13.1 metres has been reached.

At the end of June 1979 assets of the Port of Melbourne were valued at more than \$171 million and capital expenditure for the 1978/79 financial year was in excess of \$20 million. All finance for these works has come from revenue or loan moneys raised and serviced by the Authority.

Looking ahead to the next decade, and beyond, major capital works which will meet the foreseeable requirements of Port users have already commenced. The first stage of the 16-21 Victoria Dock multipurpose general cargo berth is scheduled for completion in September this year; construction of a fifth berth at Webb Dock has commenced and planning for a sixth berth is in hand; the extension of East Swanson Dock has commenced and tenders for three container cranes, at a total cost in excess of \$9 million, have been let.

Of far-reaching importance to Australia, and as an integral part of future Port administration and service, is the Melbourne World Trade Centre, construction of which commenced in March 1979. Centrally located to the Port and the central business district of Melbourne, the World Trade Centre is being developed under the sponsorship of the Port of Melbourne Authority. When completed progressively through 1982 it will lead to greater efficiency of trade operations; increase trading opportunities and provide the community with a growing and viable marketing force which will in turn benefit national growth.

The 1980's and beyond will be years of continued growth and technological change which no doubt will require even more sophisticated installations to service the needs of the nation's commerce. The current capital works programme within the Port, and other developments in the planning stage, will ensure the Port of Melbourne will be ready to serve those needs as and when they arise.

Official opening of Kaunikuila House



Kaunikuila House, the new Head Office of the Ports Authority of Fiji, was officially opened by the Prime Minister, the Rt. Hon. Ratu Sir Kamisese Mara, KBE, on 11 July 1980.

The following is a message addressed by Mr. Loh Heng-Ke, Director-General:

The Ports Authority of Fiji (PAF) has two important responsibilities. One is to provide a courteous and efficient service to port users. The other is to ensure that its employees who provide this service are properly motivated and trained.

Since PAF's inception five years ago, the ports under its control have been re-organised. There is now faster despatch of shipping and cargo. Various schemes and training programmes have also been introduced to improve working conditions at the wharves and to upgrade the skills of the staff and workers.

Kaunikuila House is another project which will provide PAF officers and staff with modern office facilities and amenities. The availability of good public transport and parking space makes its location at Flagstaff (Kaunikuila) attractive and convenient to visitors and clients.

It is hoped that staff members will be proud of this new facility and continue to improve the quality of their performance and service. I wish them success and a happy career with the Ports Authority. May I also extend greetings to our port users and thank those who have assisted us.

Present and Future Development of Port EDPS in the Port of Nagoya(2)

Contents

1. Introduction
2. The Navigational Traffic Control System
 - (1) Transmission Route for Information on Ship Movements in the Port
 - (2) Outline of the System
3. Prospects for the Future Development of the Port EDPS

2. Outline of the System

The navigational traffic control system centrally controls the movements of ships as they enter and leave the Port of Nagoya. It is an on-line, real-time computer system with terminals (equipped with display, keyboards and printers) in each section of the Marine Affairs Bureau of the Authority — Registry, Tugs, Signals, and Radio — and that inputs information from each section regarding ship entries and exits. Through the establishment of this system it became possible to know immediately the state of berth occupancy anywhere in the Port of Nagoya and to follow the movements of the ship in question.

The information supply function of this system, as shown in Table 2, is composed of four parts: ship control, berth control, tug control, and information service. Information concerning ship control is outputted on the terminals (printers, linked on-line with the computer) of Toyo Signal Communications Co., so that shipping agencies, stevedores, forwarders, pilots, port traffic communication, ferry water supply, and other services can be immediately contacted by telephone, contributing to the smooth accomplishment of port business.

Figure 3 outlines this system with respect to the services performed. They are divided into three stages according to navigational periods: the day before the ship enters the port, the day of arrival, and the day of departure.

i. Up until the day before entry

— The shipping agency comes to request mooring space (and to request the use of a tugboat, if required for that vessel). Upon receipt of the request, this information is entered at the Registry and Tug sections.

At this stage, the berth that the ship will enter has not yet been decided; berth availability data (tables listing the ships that are scheduled to enter port on the following day and the ships scheduled to remain) is printed out by the computer, and port authorities meet to decide on the basis of this data which berths will be taken by which ships entering on the following day.

— The information concerning berth decisions is entered into the computer by the Registry Section. This information is then shown in tabular form on the plasma display panel so that it is possible to see at a glance what ship will enter the port at what time and moor at what berth. This plasma display panel is 2.7 meters in height and 15.5 meters in width and can show a total of 363 berth placings.

— The computer draws up a port entry schedule for the next day. This table is sent by radio facsimile to the signal

Table 2. Information Functions of the Navigational Control System

Ship control	Controls ship-related information from the moment that information is received that the ship will enter the port: e.g., passage of Kamishima Island and high tide breakwater, mooring and undocking, estimated time of arrival, estimated time of departure.
Berth control	Controls berth-related information from the moment of receipt of request for use of mooring facilities for ships that are already or will be moored in the Port of Nagoya.
Tug control	Controls tug-related information from the moment of receipt of request for use of a tug: e.g., scheduling of tug use, notification of tug assignments, time of dispatch and return to base.
Information service	Provides information in response to inquiries from those concerned regarding the ship, its berth, tugs, etc.

Table 3. Number of Processing Screens and Documentation Cards in the Navigational Traffic Control System

Section	Number of display screens		Number of printouts
	Input screens	Control screens	
Registry	11	6	10
Tugs	7	3	5
Radio	6	2	7
Signals	4	6	5

Note: These numbers represent those needed for work processing; other control data are also printed out.

stations on the high tide breakwater and Kamishima Island for use when they supervise navigation the next day.

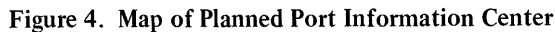
At the Tug Section, the computer will draw up a table of scheduled tug users. On the basis of this table, the Section will contact tugs on the following day to place them on standby.

ii. The day of arrival

— As soon as the ship comes within radio range of the Port of Nagoya, it contacts the Radio Section by radio or ship's telephone that it will enter the port. This information is entered into the computer.

— The ship then passes Kamishima Island and about two hours later passes the high tide breakwater to enter the port. Those in charge at the Signals Section input into the computer the information received from the signal stations that the ship has passed Kamishima and the high tide breakwater. The tug that was assigned to this ship the day before is informed of the ship's arrival.

— All this information is entered into the computer, which constantly displays the latest information on the plasma display panel. At the same time all needed informa-



By centrally controlling the enormous mass of information produced in the course of the port's services and functions by computer, the port EDPS will be able to contribute to greater effectiveness in the use of port facilities and in physical distribution. Moreover, it will promote efficiency and labor-saving in port services, expedite the improvement and modernization of all of the Port of Nagoya's functions as a port and terminal, and contribute to the expansion of its regional economy.

Therefore, with the presently functioning navigational traffic control system as a base, we will come to grips with the following tasks in the future.

i. Ship EDPS

The navigational traffic control system was developed as an integral part of the port EDPS and is a subsystem forming the basis of the ship EDPS.

Therefore, by installing on-line terminals at their offices, it will become possible for the agencies to input their requests for mooring space and tugs, and to retrieve information on relevant ship movements, directly. (This is to computerize the manual processing shown by the solid lines in Figure 3.) Furthermore, information from the pilot on board the ship or information on control of ship routes from the port manager can be added, thus improving and enlarging the ship EDPS.

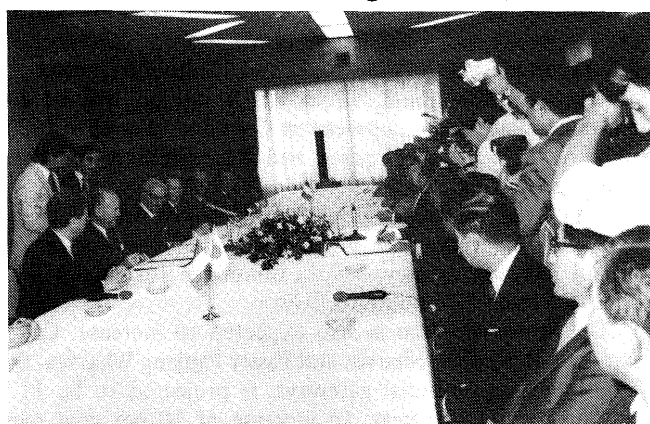
ii. Cargo EDPS

A port represents the confluence of physical distribution with the movement of commercial goods. Especially in processing the movement of commercial goods through port services, the irregularity and duplication of information in the past gave rise to a great number of problems: duplication of data preparation, service delays all over the port due to errors in the transfer or entry of clerical items, low reliability due to inadequate transmission or control of information, etc.

Some years ago a number of individual port enterprises began to computerize their operations independently and systemized their documentation to improve their management of information. But when information is transmitted in document form, it must be handled manually; the independent processing of information by individual enterprises did not solve the problems of duplication and loss of

(Turn back to page 29)

Port of Osaka and Port of Le Havre conclude the twinning



President Le Chevalier and Mayor Oshima, signing

Port of Osaka signed the Twin Port Affiliation with Port of Le Havre on July 15, 1980, when the 113th Anniversary of Port of Osaka was at the same time celebrated. The signing ceremony was held 1:00 p.m. in Mayor's Mansion placed in Miyakojima-ward of Osaka City.

The ceremony was attended by the Delegates from Le Havre Port Authority proceeding to Osaka for this signing, Mr. F. Le Chevalier, President, Administration Council of Le Havre Port Authority, Mr. J. Dubois, Director General, Mr. R. Pélicant, Director of External Relations, Mr. J.A. Monnin, Far East Representative, Mr. J.P. Bonon, Vice-Chairman, Le Havre Chamber of Commerce and Industry. And it was joined by Mr. De La Chevalerie, French Ambassador to Japan, Mr. A. Brunet, Consul General, Consulate General of France, Kobe, and messieurs.

On behalf of City of Osaka Mr. Yasushi Oshima, Mayor, Mr. Nobuo Fujioka, Chairman of City Council, Mr. Isamu Saeki, Chairman, Osaka Chamber of Commerce and Industry, Mr. Shinzaburo Fukuyama, President, Osaka Port Promotion Association, and messieurs attended the ceremony.

Headed with the introduction of attendants, Mr. J. Dubois and Mr. S. Takama, General Manager of Port & Harbor Bureau, City of Osaka, co-declared as follows: "We here conclude the twinning of Port of Osaka and Port of Le Havre to actively develop the measures for promoting both ports in the ways that the ports activate the mutual exchange of informations and cooperate for the public relations activities as well as further promote goodwill and friendship between both ports". The President Le Chevalier and Mayor Oshima respectively signed the Note of Declaration and firmly shook hands.

Succeedingly the congratulatory address was extended by Ambassador De La Chevalerie: "The twinning affiliation of both ports has been realized earlier than I expected, and it is so impressive that heavens enabled us to sign on the day of our Festive Anniversary of the Revolution. Both ports have long histories and resemble also in the aspects of geographical situation and port size. I certainly hope for their future developments." With the champagne toast, all attendants swore each other the prosperity and friendship of both ports.

Commemorating the signing, the puppet of Bunraku Doll Play was presented by Mayor Oshima and the water color painting Port of Le Havre in 19th century by President Le Chevalier in the reciprocal gesture. And this concluded the signing ceremony.

Memorial reception for the twin port signing was held in Mayor's Mansion 5:00 p.m. the same day hosted by Mayor Oshima. Studed with a hundred and some dozens of attendants who are the people from main trading and shipping related firms in Osaka, officials, home and foreign journalists, and messieurs, the reception was successfully over after having the addresses by Mayor Oshima and President Le Chevalier.

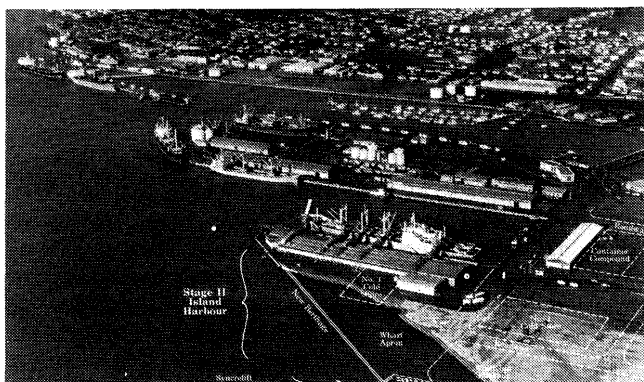
Meanwhile around Nakanoshima Park area the "Festive Evening for Osaka and Le Havre" was presented, organized by City of Osaka and Osaka Port Promotion Association. On the floating stage specially made over Tosabori River

the chanson show enchanted the audience, and besides, the bazaars selling French wine and brandy, the open air market in French style, and the relaxing café terrace emerged. Getting together with the citizens, Mayor Oshima, Ambassador De La Chevalerie and the delegates from Le Havre Port Authority enjoyed the Evening at Nakanoshima Park.

Panel Discussion titled "Japan-Europe Trade and the Role of Port of Le Havre" was carried out in the building of Osaka Chamber of Commerce and Industry 1:00 p.m. July 16, 1980, organized by City of Osaka and Le Havre Port Authority and supported by French Ambassador in Japan, Osaka Chamber of Commerce and Industry, and Japan External Trade Organization (JETRO). On the opening Mr. Sadao Takama and Mr. Jacques Dubois gave their addresses. Memorial lecture was, in the next place, extended by Mr. Yusuke Fukada who is the Deputy General Manager of Public Relations Department, Japan Air Lines, and also known as a best-seller writer of "Shin Seiyō Jijō" (The West Now). Mr. Fukada lectured with his finely molded humor on the difficulties in international exchange standing on his own well stuffed experiences when living abroad, and it turned out to impress the participants surpassing one hundred.

After the memorial lecture, picture slide projection introducing Port of Le Havre and lectures by panelists followed. "Present Condition of Japan-France Trade" was spoken by Mr. Denis Souchon, Commercial Delegate, Consulate General of France, and by Mr. Tsuneo Katoh, Deputy Director, Business Library, JETRO Osaka. And "Present Condition of Port of Le Havre and the Counter-measures for its Promotion" was done by Mr. J. Dubois and by Mr. J.P. Bonon. Questions and answers were exchanged among participants, and the discussion was over. With the panels introducing Port of Le Havre exhibited in the discussion room, this panel discussion certainly made out great effects on propagating Port of Le Havre to the people of trading and shipping businesses in Osaka.

Harbour development plans unveiled: Southland Harbour Board



The stage has been set for the most significant development Bluffs since the manmade Island Harbour was built 20 years ago.

Permission has been given for the Board to spend \$5.2 million on the construction of new berthage and for the creation of large cargo storage components.

The New Zealand Ports Authority gave the green light earlier this year and the Local Authority Loans Board recently issued the necessary sanction for financing the works.

"Studies by the Board's staff clearly demonstrate these growth industries need this berthage and storage," Mr. Armstrong said.

They will be sited on six-and-a-half hectares of reclamation which has been acquired over several years from the spoils of routine maintenance dredging.

The reclamation is on the northern side of the Island Harbour. A portion of that land has already been set aside for the Board's syncrolift-drydock ship repair complex.

The programme, known as Stage II of the Island Harbour, provides for 230 metres of berthage at a low tide dredged depth of 12 metres. The berths will accommodate large specialised and multi-purpose vessels.

The loan also permits the existing 1,000-tonne cold store at the joint venture fishing pier to be expanded by 10,200 tonnes capacity. The larger cold store will house palletised products in separate compartments so that temperatures can be varied to suit individual client needs.

There will be a 16,500-square-metre lot near the syncrolift for stockpiling of forest products with 6,000 square metres held in reserve for this industry. And a space of 21,000 square metres north of the railway lines has been allowed for the location of fish processing plants and log and sawn timber storage.

The berths will be constructed by sheet pile walls tied to high-level concrete relieving platforms founded on steel piles. The aprons will be backfilled and paved with asphaltic concrete.

Unlike the existing berthing configuration at the Island Harbour, the new layout will extend southeast and align with what are described as berths 3A and 7.

"This departure from open-rectangular basins is necessary for modern vessels and their cargo handling requirements," Mr. Armstrong said.

PSA to spend \$82 million on new equipment

The Port of Singapore Authority (PSA) will be spending about \$82 million to purchase additional cargo handling equipment to improve its level of service and to serve the three new container berths, scheduled to be completed in phases from 1982 to 1984.

This investment is over and above the \$76 million committed last year on nine container stacking gantry cranes, seven van carriers, 44 prime movers, 222 forklift trucks, nine heavy forklift trucks and 12 mobile cranes.

Of the \$82 million, about \$76.4 million will be for container handling equipment at Container Terminal, \$3.3 million for Keppel Wharves and \$2.3 million for Pasir Panjang Wharves.

Containerised cargo growth is projected to be 20 per cent for the next few years. With the new equipment complementing the new berths, Container Terminal will be able to handle 1.76 million TEUs.

Conventional cargo is also expected to increase. Cargo handled at Keppel Wharves and Pasir Panjang Wharves, the two main conventional gateways, is projected to be 11.7 million tonnes this year, an increase of 10 per cent over 1979.



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