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# Ports & Harbors

April 1991
Vol.36 No. 3


The Publisher
The International Association of Ports and Harbors

Columbus Street Terminal. Columbus Street Terminal is the Port of Charleston's mixed-use terminal, handling container, breakbulk, and roll-on/roll-off cargoes. Pier-side rail and excellent heavy-lift capabilities have made Columbus Street the Port's primary site for moving dimensional and heavy weight cargo. For overall rail service, the Port of Charleston has the best rail clearances on the U.S. East Coast. Columbus Street also offers excellent container handling capabilities for some of the world's largest lines.


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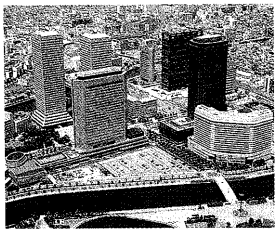
**Gate Way to Japan**
**The Port of Osaka**



Ports & Harbors
April, 1991
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# Ports & Harbors

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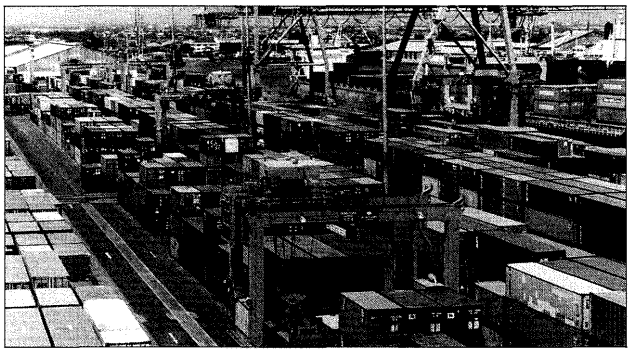
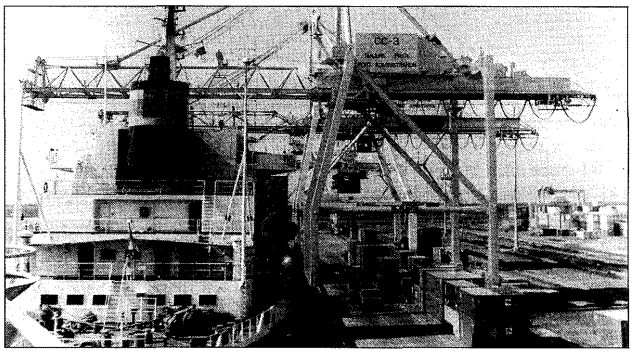
# Why don't you make direct call at the port of TANJUNG PRIOK instead of making unnecessary call elsewhere?





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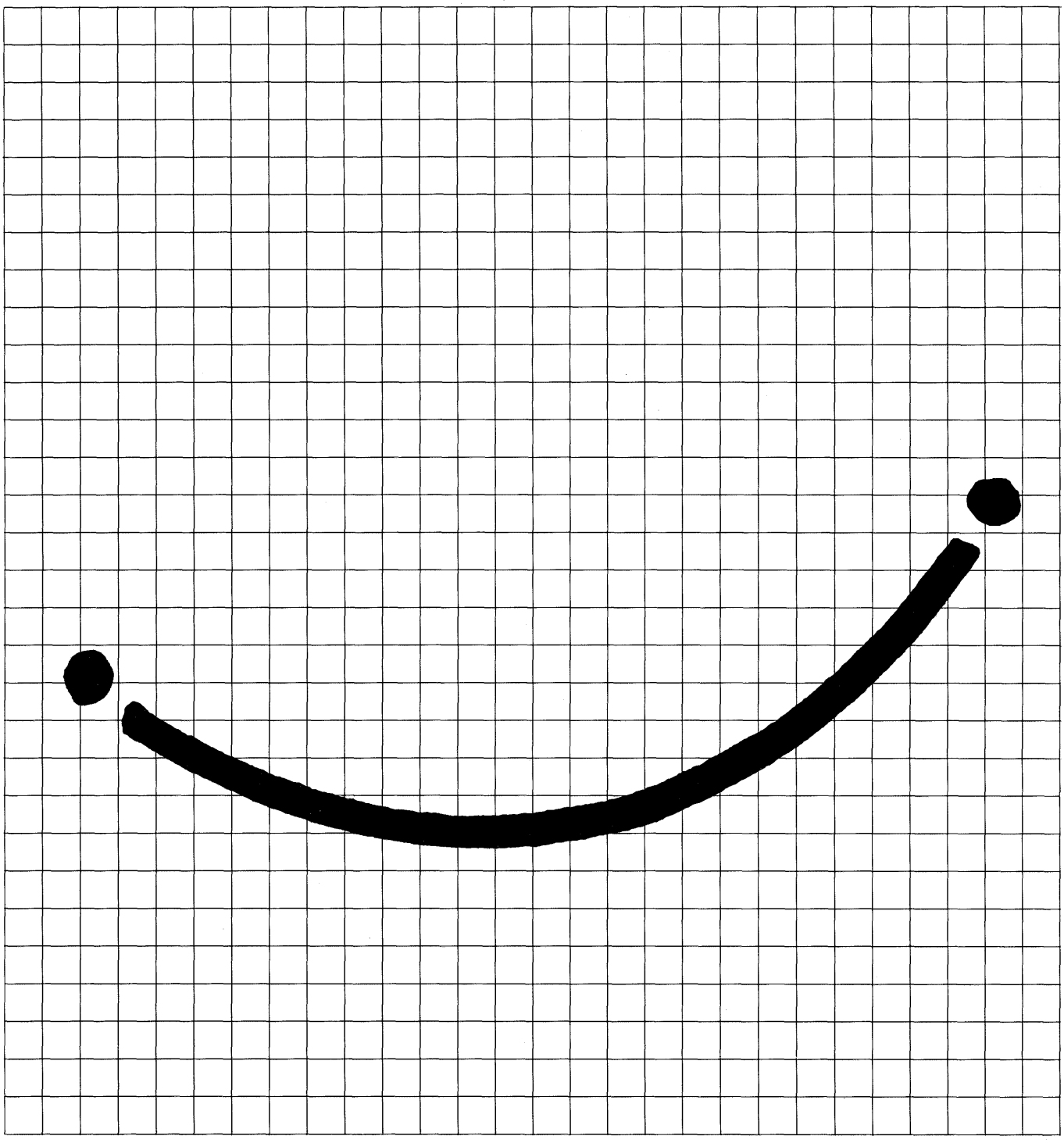

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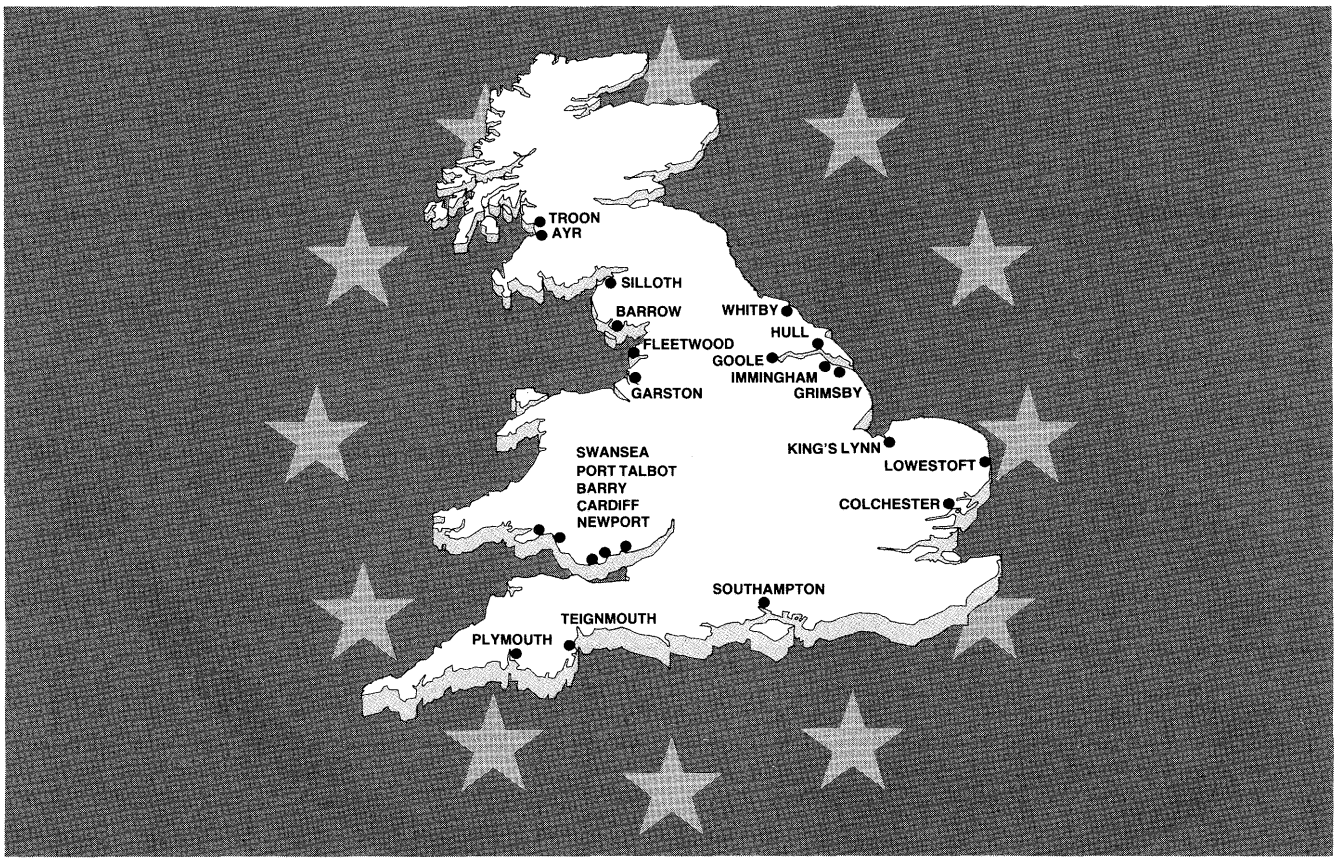
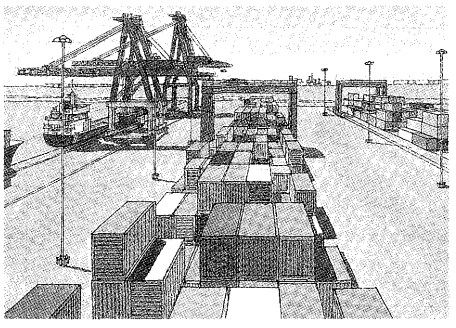
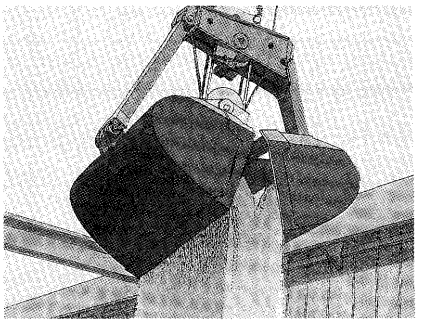
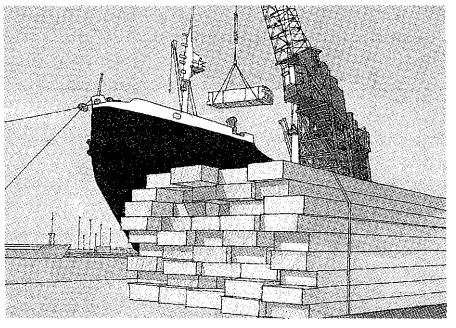



## Your Link With Britain







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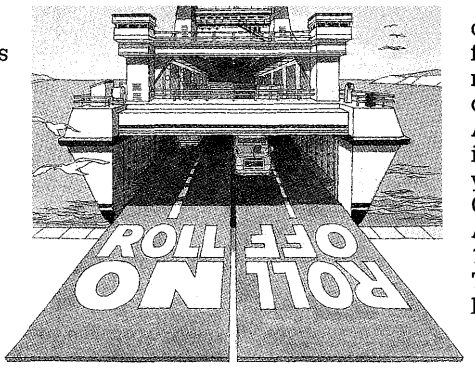


Contact: Ken Bell or Terry Hare
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150 Holborn, London EC1N 2LR
Tel: 071-430 1177 Telex: 23913
Fax: 071-430 1384

ABP ASSOCIATED BRITISH PORTS

BRITAIN'S LARGEST PORTS BUSINESS

ABP 281

# IAPH ANNOUNCEMENTS AND NEWS

## 17th World Ports Conference in Spain

### May 4 - 11, 1991

## Spain's King Carlos Honorary President

According to news recently received from Dr. Juan-Aracil, Executive Secretary of the Organizing Committee, His Royal Majesty King Juan Carlos of Spain has accepted the Honorary Presidency of the 17th Conference of IAPH. Our host has indicated that the Mayor of Barcelona will be one of the speakers at the Official Opening Ceremony.

## Participants Asked To Send Pictures

The Organizing Committee has decided to ask every participant to send the Committee two color frontal passport pictures, size 40 x 30 mm. The pictures are to be used for identification of all the passengers on board the EUGENIO COSTA. Although the Organizing Committee will arrange for picture-taking in Barcelona at the Hotel Princesa Sofia and at the Maritime Station near the boarding place, Dr. Juan-Aracil remarks that priority for receiving boarding documentation will be given to passengers who have sent their pictures to the Organizing Committee in advance.

## 600 Registrants

The Organizing Committee announces that as of February 27, 1991, the number of registrants has overpassed 600 with the 340 cabins already filled. Dr. Juan-Aracil says, "We have no more Double Cabins available in the upper decks. We have only Double Inner Cabins still available in decks BORDIGHERA and CAPRI".

## Conference Agenda Submitted to Board

To formalize the agendas of the plenary sessions of the 17th World Ports Conference of IAPH in Spain, Secretary General Kusaka, under the authorization of President McJunkin, called for a meeting of the Board of Directors by correspondence to be held on April 15, 1991. He asked the members to vote on the provisional agenda for the First and Second Plenary Sessions, which we reproduce later in this issue together with those of both the pre- and post-Conference joint meetings of the Board and Executive Committee. Also introduced is the updated programs as confirmed by the Conference Host as of the end of February, although our Host admits that there will be slight changes in the speakers for the Working Sessions.

## Seattle-Tacoma Will Invite '95 Conference

In response to the call by the Secretary General for offers to host the 19th World Ports Conference of IAPH to be held in the American Region in 1995, the Ports of Seattle and Tacoma have proposed to jointly host the Conference.

The letter, jointly signed by Mr. Zeger J.J. van Asch van Wijck, Chief Executive Officer, Port of Seattle and Mr. John J. Terpstra, Executive Director, Port of Tacoma, was sent to the Secretary General at the Tokyo Head Office by fax on March 5, 1991.

The invitation will be formally made to the Board and EXCO at its post-Conference meeting in Spain.

## Charleston Set to Host 1992 EXCO Meeting

Mr. W. Don Welch, Executive Director, South Carolina State Ports Authority, has recently informed the IAPH Officers that his Port is willing to host the mid-term meeting of the Executive Committee in Charleston in 1992.

It was not the first time for the Port of Charleston to

*(Continued on Page 7, Col. 1)*

## The IPD Fund: Contribution Report

**Contributions to the Special Fund**
**For the Term of 1990 to 1991**
**(As of March 10, 1991)**

| Contributors | Amount Paid: |
|---|---|
| **Paid** | **(US$)** |
| Associated British Ports, U.K. | 3,000 |
| UPACCIM, France* | 1,989 |
| Port of Copenhagen Authority, Denmark | 1,000 |
| South Carolina State Ports Authority, U.S.A. | 1,000 |
| Vancouver Port Corporation, Canada | 1,000 |
| Puerto Autonomo de Valencia, Spain | 1,000 |
| Port Authority of New York & New Jersey, U.S.A. | 1,000 |
| Osaka Prefecture, Japan | 585 |
| Kobe Port Development Corp., Japan | 584 |
| Osaka Port Terminal Development Corp., Japan | 584 |
| Nagoya Container Berth Co. Ltd., Japan | 554 |
| Penta-Ocean Construction Co., Ltd., Japan | 502 |
| Marine Department, Hong Kong | 500 |
| Port Authority of Jebel Ali, U.A.E. | 500 |
| Port of Montreal, Canada | 500 |
| Port Rashid Authority, U.A.E. | 500 |
| Stockton Port District, U.S.A. | 500 |
| Port of Tauranga, New Zealand | 500 |
| Port Autonome de Dakar, Senegal | 480 |
| The Japanese Shipowners' Association, Japan | 438 |
| Japan Port & Harbor Association, Japan | 400 |
| Public Port Corporation II, Indonesia | 300 |
| Japan Cargo Handling Mechanization Assoc., Japan | 280 |
| Fraser River Harbour Commission, Canada | 250 |
| Port of Melbourne Authority, Australia | 250 |
| Port of Palm Beach, U.S.A. | 250 |
| Port of Quebec, Canada | 250 |
| Saeki Kensetsu Kogoy Co. Ltd., Japan | 250 |
| Bintul Port Authority, Malaysia | 200 |
| Gambia Ports Authority, the Gambia | 200 |
| Nanaimo Harbour Commission, Canada | 200 |
| Port of Redwood City, U.S.A. | 200 |
| Public Port Corporation I, Indonesia | 150 |
| Port Authority of the Cayman Islands, West Indies | 100 |
| Port Authority of Thailand, Thailand | 100 |
| Mauritius Marine Anthority, Mauritius | 200 |
| Pacific Consultants International, Japan | 238 |
| **Total** | **US$20,534** |
| **Pledged** | |
| Ghana Ports & Harbours Authority, Ghana | 250 |
| Empresa Nacional de Puertos S.A., Peru | 100 |
| **Total** | **US$350** |
| **Grand Total** | **US$20,884** |

* *Union of Autonomous Ports & Industrial & Maritime Chamber of Commerce (the Association of French ports) on behalf of the Ports of Le Havre, Bordeaux, Dunkerque, Marseille, Nantes-St. Nazaire, Paris and Rouen*

# Membership Notes:

## New Member

### Temporary Member

**Port of Sacramento** (U.S.A.)
Mailing Addressee: Mr. Michael Vernon
Port Director
Address: P.O. Box 815, West Sacramento CA 95691
Tel: 916-371-8000
Fax: 916-372-4802
Port Director: Mr. Michael Vernon

### Associate Member

**Mr. M. Bennett** [Class E] (Netherlands)
Address: Associate Vice President
Frederic R. Harris, Inc.
Badhuisweg 11, 2587 CA The Hague
Tel: 31-70-3501181
Fax: 31-70-3524834
Telex: 32209 HARL NL

### Changes

**Port of Montreal** [Regular] (Canada)
President & Chief Executive Officer:
Mr. Dominic J. Taddeo
Vice-President, Administration:
Mr. Roger Dube
Vice-President, Marketing:
Mr. Normand Fillion
Vice-President, Operations:
Mr. Michel Lesage

**Marine Transport Authority** [Regular] (Ethiopia)
General Manager: Commander Zeleke Bogale
Planning, Research & Programming:
Mr. Bisrat H. Michael
Assab Port Manager: Mr. Mekonen T. Abe
Massawa Port Manager:
Mr. Tsegaye Tegene
Engineering Service: Mr. Tesfaye W. Selassie
Head of Public Relation and Training:
Mr. Negash Balcha

**Flushing Ports Authority** [Regular] (Netherlands)
Mailing Addressee: Ir. A. de Best
Managing Director
Tel: 01184-68080
Fax: 01184-67020
Managing Director: Ir. A. de Best

**Fuji Logitech, Inc.** [Class A-1-1] (Japan)
(Formerly Suzuyo Warehousing Co., Ltd.)
Address: 11-17 Koya-machi
Shizuoka 420
Tel: (Shizuoka 054) 253-7830
Fax: (Shizuoka 054) 253-4983
President: Mr. Takeo Suzuki
General Manager, International Department:
Mr. Michifusa Kohga

# OPEN FORUM

## Port of Newcastle Building on Its Great Strengths

The leading coal export port in Australia is increasing demand for containerised, unitised and general cargoes. The Port of Newcastle is ready to meet that demand.

It was coal that was Australia's first export and it was from the Port of Newcastle that it was sent.

The strength of the Newcastle and Hunter Valley's coal industry has helped maintain the port in this premier position.

Chairman of the MSB-Hunter Ports Authority (HPA), Mr. Bruce Thomson, said the expressed views and needs of port users — clients, shipowners, and the community — are the major priority of the Authority. These needs are being met while the port environment is preserved.

HPA was created in 1989 by the NSW Government, with an independent Board of Directors, to manage the affairs of the Port.

The Government's wish was to increase the extent of private sector involvement in development and ownership of port facilities and services, and to reform its Maritime Services Board along commercial lines.

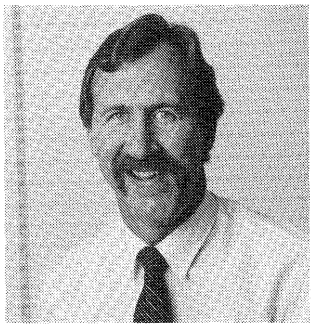
In less than two years such reforms have led to a 50 percent reduction in the Authority's work force.

### Port Development

HPA plans to centralise all administration and general cargo areas to a single site at the Eastern Basin and former Dockyard sites. This will enable valuable city-side foreshore land to be incorporated into an integrated urban renewal program.

A working party of representatives from the HPA, Port Waratah Coal Services, the NSW Coal Association and BHP Transport is co-ordinating a study of vessel size and throughput in the port.

*Mr. Bruce Thomson*
*Chairman of the Hunter Ports Authority*



*Mr. Geoff Connell*
*Managing Director of the Hunter Ports Authority*

Tenders have been called for the management and operation of Kooragang No.2 Bulk Berth.

Australian Cement will soon begin construction of a $14.5 million multicell silo at Kooragang No.2 Berth. This development will provide initial new trade of 170,000 tonnes per year, leading to 400,000 tonnes per year.

### Coal

Sophisticated and versatile coal loading facilities ensure that ships as small as 10,000 tonnes or as large as 230,000 tonnes can have cargoes assembled and loaded in a reliable and efficient manner.

The largest coal loading company in the world, Port Waratah Coal Services, presently loads about 33 million tonnes of coal a year with a future planned capacity of 80 million tonnes.

Recent micro-economic reform and privatisation of coal loading has resulted in a 100 percent improvement in productivity. This improvement has led to repeated reductions

## Charleston Set to Host —

*(Continued from Page 5, Col. 2)*

offer to host the IAPH EXCO meeting, but Mr. Welch previously gave way to other candidate ports when the EXCO members were in a position to select one venue from among several invitations. In fact, Charleston was already there as a willing host for the EXCO meetings in 1982.

Mr. Welch, prior to the formal presentation of his invitation to the EXCO Meeting at its post-Conference meeting in Spain, says in his recent letter sent to the IAPH Officers, "We are confident that an enjoyable and productive meeting can be held in Charleston, and we look forward to the opportunity to host such a distinguished group of people."

The dates for the meetings will be determined after the Executive Committee accepts the invitation in Spain on the basis of Charleston's proposal.

## Captain Watson Chairman of Marine Safety Sub-Committee

On page 5 of the previous issue, Captain John J. Watson, Chief Executive of the Dundee Port Authority, U.K., was introduced as the newly appointed Chairman of the Marine Safety Sub-Committee, COPSSEC. However, since his photograph reached the Tokyo Head Office after the March issue had gone into the final stage of printing, we take pleasure in presenting it in this issue.

*Captain Watson*

*The Port of Newcastle will have a new look when all administration and general cargo areas are centralised on the Eastern Basin as this artists' impression shows*

in the price of loading at PWCS's two loaders over the past year. It now stands at $4.50 a tonne.

Despite the growth in tonnages in the past few years there has been a significant reduction in the average turnaround times because of quick dispatch of vessels.

Success of the Port of Newcastle has resulted from the development and strengthening of the Hunter Valley Coal Chain -- a unique involvement of coal producers, unions, road and rail transporters, coal loading and the HPA to improve port facilities, develop markets and better service clients.

## Diversity

While coal has always dominated the activities of the Port of Newcastle, HPA Managing Director, Geoff Connell, points out that trade in the 1990s reflects the more diverse economy of Newcastle and the Hunter Region and its ability to prepare for its future.

The aluminium trade continues to strengthen as the Region's two smelters attain greater recognition as world leaders.

More than 730,000 tonnes of the alumina are shipped to the Port for use by Alcan and Tomago smelters.

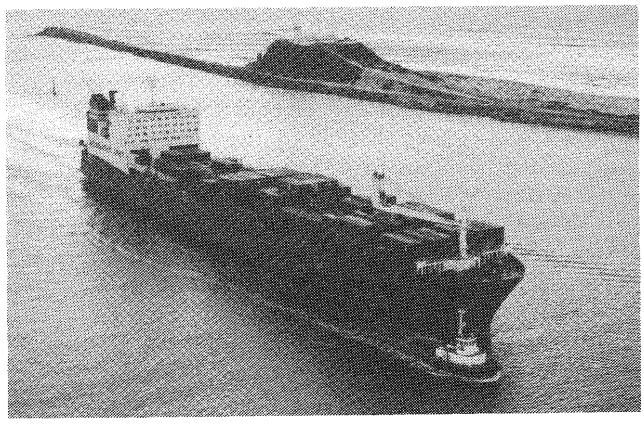
Tomago has just begun a $600 million expansion of the smelter that will bring total production from 240,000 tonnes of aluminium a year to 385,000 tonnes. Most of this production is shipped overseas from the port.

Imports of iron ore total about 2 million tonnes, and export of wheat is about 1 million tonnes a year.

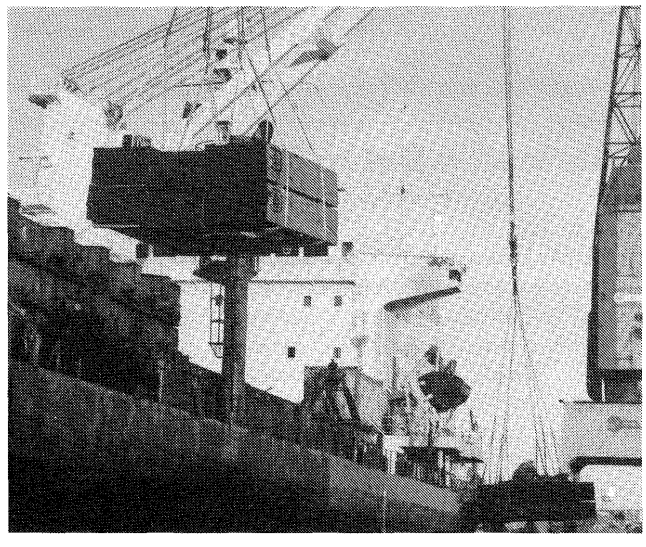
The Kooragang No.2 Bulk Berth handles about 700,000 tonnes a year of which about half is wood chip. In the past year the flexibility of the berth facilities has been demonstrated by the 11 different products handled.

Mr. Connell said these products include fertilisers, bauxite, soya beans, fluorspar, sodium sulphate and fishmeal.

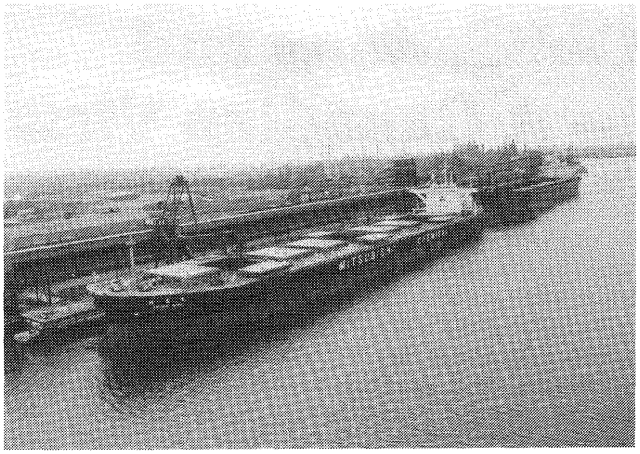
Timber imports through Newcastle began in 1989 and have doubled to 90,000 cubic metres. To facilitate the movement of timber the HPA works closely with the timber importers and a local company R & H Transport, to ensure



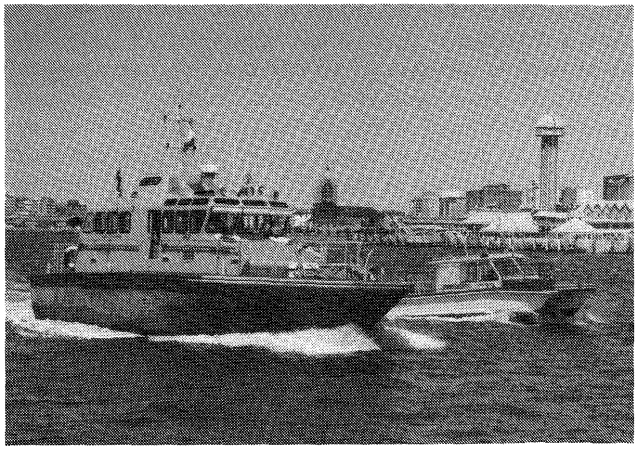
*Some of the world's largest general cargo ships regularly call at Newcastle for aluminium, steel and other products. The Taiko enters Newcastle*



*Timber exports have developed in the past two years following the introduction of a more efficient handling and dispatch system at Newcastle*



*The world's largest coal-loading company ensures that ships as large as 230,000 tonnes can have cargoes assembled and loaded in Newcastle. Here, the Sakaide Maru and the Orinoco are loaded*



*The Hunter Ports Authority's pilot cutter, E.C. Close, and pilot tender, Robert Whitmore, pass the Queen's Wharf entertainment area of The Foreshore — a revitalised harbourside for Newcastle*

timber is dispatched quickly from the Eastern Basin area to the end user.

Mr. Connell said other cargoes handled in the Port include machinery for industries, equipment for defence forces, chilled meat and general containerised products.

An exciting prospect for Newcastle is the proposal to use the Port as the east coast centre for the importation of motor vehicles. This gateway concept is being discussed with a number of prominent motor vehicle producers.

### The Future

Mr. Thomson believes there is a bright future for the Port of Newcastle.

The Authority has concentrated on being more market focussed, and has developed a business strategy which it has provided to its employees and customers. Included in those strategies are:-

- Initiation of feasibility studies with private enterprise for new trade opportunities and better ways of transporting existing commodities. (Identified opportunities include containers, refrigerated cargo, timber, livestock, plant and machinery).
- Creation of a secure port precinct in the Eastern Basin area.
- Establish linkages with overseas port authorities to facilitate cargo forwarding.
- Further enhance the bulk discharge capabilities of the Port.
- Research into the channel configuration and review of the shiphandling guidelines.
- Commitment to micro-economic reform of port operation and management.
- Commitment to environmental control — e.g. oil spill management, discharge control

Mr. Thomson believes such strategies will enable the Hunter Ports Authority to achieve two major goals — provision of a superior value delivery system to customers and an effective contribution to the Australian import/export trade.

The Authority's strategies have been developed, as a consequence, to find new markets, strengthen existing markets and in doing so achieve both goals.

The HPA recognises that to achieve these goals, it must provide a sustainable competitive advantage its customers and their customers in the East Coast Australian shipping market.

Mr. Thomson says this approach is typical of the Newcastle Region's approach to its future. Such thinking dominates its planning in social, industrial, commercial and economic terms.

MSB-Hunter Ports Authority is confident the Port of Newcastle will remain one of the world's best ports.

**MSB-Hunter Ports Authority**
**cnr Scott & Newcomen Street**
**Newcastle NSW 2300**

**Telephone: (049) 27 2400**
**Facsimile: (049) 26 4596**
**Telex: MSB AA 28761**

## Efficiency and ambience

Ports around the world have traditionally fallen into two general categories — those that conjure up visions of exotic travel and people and those that are dominated by the bustle of cargo.

With some notable exceptions, most ports have not been able to present both efficiency and appealing ambience.

One port, however, Newcastle, which has for almost 200 years has been a busy industrial port, is changing as it continues to provide more efficient operations and yet is adding special attractions for its citizens and visitors. The MSB Hunter Ports Authority has worked with the NSW Government in providing harbour foreshore area for development of parkland and entertainment areas.

A two kilometer strip near the entrance to the port has been turned by Newcastle City Council into an award-winning park and entertainment centre and more is to come.

Through its improvements in port efficiency the Ports Authority is now developing plans to move general wharves to more effective sites in the harbour. This will allow for further tourism, commercial, retail and entertainment development in the city.

The Central Business District of Newcastle runs along the southern foreshore and the new park and planned developments already attract thousands of people each week.

Residents and visitors pack the park, and restaurants to watch the movements in one of Australia's busiest ports.

# Ports' Environmental Obligations and Rights — A Canadian View

**By Dr. Frederik K. DeVos (IAPH Associate Member, Member of CLPPI)**

As 1989 recedes farther into the past and is widely recognized as an unmistakable **Annus Mirabilis,** comparable in its historical significance to 1789 whose bicentennial anniversary it also happened to be, the whole human community appears to have definitively grasped the fundamental importance of our planetary environment. And, in doing so, it has unhesitatingly added this new basic concern to the centuries-old longing for individual political and philosophical freedom already cherished in so many parts of the world, and notably by the ancient Greeks. Quite obviously, without these freedoms any efficient of our world's environment is unthinkable.

*Dr. DeVos*

As a matter of fact, how else could one explain that in January 1990, the Soviet Russian Minister for the Environment Nikolai Vorontsov was able to welcome, at a World Forum held in Moscow, over one thousand delegates from 83 countries — including several high-ranking religious, scientific and political personalities — with the aim of discussing the best ways and means of countering the growing threats to the planet's environment? Or that this gathering was also addressed by President Gorbachev, who stated that in his view the time had definitely arrived to set up an international mechanism of technical cooperation targeted at environmental protection of the entire world?

In other words, it now appears (early in 1991) as if a genuine concern for a strengthened preservation of the global environment in all its biophysical and quality-of-life aspects has finally become universally accepted, and is in fact recognized even within the highest levels of national governments as well as of a majority of private enterprise bodies. Ever since 1985, Mrs. Gro H. Brundtland's United Nations Commission has clearly played a key-role in this regard.

Inevitably, however, the thrust of implementing these laudable policy resolutions varies greatly in earnestness and effectiveness as between continents, regions and countries. And, certainly in Canada, governmental agencies are generally leading the private sector in ensuring that adequate environmental impact assessment and review procedures accompany all development projects and on-going operational activities likely to have significant repercussions on socio-economic, biophysical or quality-of-life interests concerned.

Even so, the "global village" of business management has already shown many explicit signs of having decided to follow the same path, as any perusal of today's media regularly confirms. For instance, such authoritative business and financial periodicals as FORTUNE, have gone as far as predicting that future long-term success of large corporations will increasingly hinge on the degree to which they are genuinely conscious of the environmental aspects of their operations and their marketing!

As IAPH members are well aware, the world ports community is already in the forefront of this concern for preservation and even enhancement of the local environment and quality-of-life within their jurisdictions. Under the overall guidance of the 24 Executive Committee officers, representing ports and harbors in the three Regions, more than 80 countries are active within the purview of the well-known COPSSEC technical committee — itself comprised of four subcommittees and a task force. Twelve of the 82 COPSSEC members specialize in Port Safety and Environment, another 18 work in the closely related Port Planning Subcommittee while, in fact, all in one way or another constantly alert to the importance of protecting world port environments. In addition, of course, the International Association of Ports and Harbors is doing its share in this respect within the framework of its responsibilities and, co-sponsored a major Environmental Port Planning Conference of the IMO at Baltimore in October 1988. As well, the many members of the Public Affairs Committee, Cargo Handling Operations Committee, CLPPI and IAPH Liaison Officers are also monitoring the numerous environmental facets of their subject matters on an on-going basis.

There can thus be no doubt that our Association is bending every possible effort in this deserving cause, and might perhaps expect to receive full recognition for its endeavors. Unfortunately, experience in many parts of the world does not always bear this out and, at least in Canadian context, it has been realized that, for a public environmental impact assessment review process to work successfully, there is an essential need for old-fashioned "fair play" and for a willingness on the part of **all** participants to submit their views and concerns candidly and sincerely before the review panelists.

A parallel requirement albeit more specifically of interest to port authorities and regarding the great need for their vigilance, was recently underlined by the IAPH Representative in Europe ("Ports and Harbors", December 1990, p.18) where he warned that: "Experience tells us that if Ports remain silent when logic insists that firm representations be made in advance of decision-taking by Governments, the consequences are invariably unrealistic and to the Port's disadvantage ..... The enlightened self-interest of port managements suggests that it is now best to anticipate problems and look for innovative ways to resolve them."

## Governmental and Human Interactions

Canada's federal system, and particularly its regulations covering navigation and ports, have for the past twenty years been very conscious of the principal environmental risks inherent in these marine operations, as well as in their accompanying planning instruments, i.e. port master plans. In this specific area, it may be of some interest to note that the first public enquiry and hearings ever held on the subject of a port expansion project — in Canada and possibly worldwide — were ordered by the then Minister of Transport

Jean Marchand as early as 1971. The harbour involved happened to be Nanaimo, on Vancouver Island in British Columbia, and the proceedings were presided over by the vice-chairman of what was then the National Harbours Board. Technical assistance was given by experts seconded for that new task by the Canadian Department of Oceans and Fisheries, at that time the federal agency responsible for environmental protection related to Canadian inland and coastal waters. Incidentally, those very first public hearings in due course led to the port expansion proposal being relocated to a new site outside the Nanaimo river estuary.

Within two years, the Canadian federal government established a structured Environmental Assessment Review Process (EARP) and soon thereafter the Province of Ontario enacted a law concerning environmental assessments, which thus became the first comprehensive legislation and also covered non-marine proposals. At the end of the 1970s, the majority of Canada's various levels of government had equipped themselves with legislation or well-structured policies regarding environmental impact assessment and review, all of these complemented by increasingly efficient and integrated processes. Much the same, of course, can also be said of Western Europe, the United States and the industrialized regions of the Pacific Rim.

The maturing and more widespread acceptance of environmental impact assessment and review has witnessed an evolution of the roles and mutual perceptions assumed by proponents, government review bodies and the public at large. In the mid-1970s there existed a negative triangle of suspicion between these three principal "players". Thanks, however, to personal interaction amongst the various parties involved, each gradually began to view the others no longer as remote faceless protagonists but rather as human beings, who generally hold rational albeit differing positions which may well, at first sight, subjectively appear unreasonable.

The main preliminary conclusion emerging from these few observations would seem to be that Canada's federal environmental assessment review process has managed to become essentially aimed at respect for and enhancement of the human element in the course of all its administrative and public proceedings — before as well as during and following the public meetings and hearings. This objective is pursued mainly by means of the following policy **Guidelines:**

Complete freedom to participate, to submit argumentation, and to intervene in discussions is assured to all those expressing a written or verbal interest; an informal public hearing process without cross-examination; complete publicity given to all interventions, studies, argumentations and other elements of the assessment and review dossier; and finally, publication of a complete **verbatim** transcript of the proceedings at public meetings and hearings held by the Review Panel Members.

Even a casual reading of the Canadian records shows clearly how the often diametrically opposed statements and arguments of a large number of deeply concerned participants, including obviously those submitted by the proponents, gradually and almost imperceptibly contribute to a better mutual understanding, if not to an enhanced comprehension by the general public of the numerous environmental factors and aspects at stake. Quite inevitably, the extreme complexity of many of these aspects obscures the true nature of the essential issues involved, and thus hinders the kind of objective and dispassionate global perception that is so crucial in reaching an optimum compromise solution by means of the Panel's final report and recommendations. By this particular characteristic the environmental assessment review process and its final result may perhaps validly be compared to the classical Greek tragedy whose purpose it was to instill into the spectators a so-called **katharsis,** i.e. a purification of their emotions!

As a matter of fact, when the port expansion proponent, for instance, has heard and clearly understood the genuine concerns and objections raised by all those whose environmental interests his project might damage, unless some modifications were agreed to — and these concerns could include such seemingly insignificant activity as e.g. a children's day-care home; when the assorted participants have eventually grasped the many "pros and cons" in the bio-physical, socio-economic and quality of life sectors, it will not come as a surprise that the impact assessment review panel is usually able to work out an overall compromise solution. Ideally, such a solution and its recommendations will take into account the numerous interests involved and optimize the proposal in all its aspects while ensuring that the negative impacts will be effectively minimized by means of suitable mitigation and surveillance provisions and that, concurrently, the greatest possible environmental benefits will be derived from those impacts, including those achieved through ingenious project modifications, which have been generally recognized as being positive.

There are, not only in Canada but throughout the maritime world, numerous concrete examples of enlightened port authorities having succeeded in deftly reconciling "public pleasure and private profit", i.e. combining the preservation, or even enhancement, of the local environment and private enterprise projects engaged in the handling of goods and passengers by water transport. However, in order to obtain these favourable results, the port authority as well as the various publics, which its activities may affect, must be fully informed about all the interests involved and issues at stake. Canada's Environmental Assessment Review Process was created precisely with this goal in mind, and its **modus operandi** is currently still being scrutinized with a view to further improvements.

Finally, we ought to bear in mind one crucial **sine qua non** condition for satisfactory implementation of any regulatory review process of this **open** nature. It must be necessarily be animated throughout its proceedings by a sincere public spirit, one mindful of the teaching handed down to us over the centuries by the aphorism: "Why beholdest thou the mote that is in thy brother's eye, but perceivest not the beam that is in thine own eye?"

When, therefore, as is the case only too often, the main pollution in ports is caused by external agents such as industries located nearby or upstream, shipping or indeed regional/municipal sewage, the logical question arises whether the time has not come for the world's port authorities to draft a commonly agreed document in which, along with their strict environmental and safety guidelines already adopted and published by COPSSEC through IAPH, the Ports' legal environmental **rights** that flow quite logically from these voluntarily assumed **obligations** are also clearly recorded. In other words, the port authorities' "motes" should no longer be allowed to divert public attention from the "beams" lying entirely outside their jurisdiction and control.

# The City and Its Port—an Economic Appraisal

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**Abstract:** Following a brief examination of the role of ports as foci for industrial and urban development, this paper discusses four major changes—the scale of international trade, structural changes in port activities, port industrialization, and traffic origin and destination—which are acting to alter the relationship between ports and their urban areas. Attention is then focused on the redevelopment of docklands and the need to inform public and political opinion of the importance of port activities to the development of local, regional and national economies. The use of economic impact studies to highlight the multiplier effects of port activities is discussed.

> But every coastal town did not become a city, nor did communities exist wherever there was a good harbour, nor did every port city have a good harbour: there are mysteries about why men have chosen to live in cities, to occupy certain sites, and to link their destinies to the movements of ships that cannot be entirely explained by economic, social and political events . . . (Josef W. Konvitz, *Cities and the Sea*).

There is a special relationship between ports and the cities that live around and from them. As ALONSO (1964) explains, seaports are a prime example of points of transhipment which provide an excellent opportunity to process materials as they are being taken off one carrier and before they are put onto another. For instance, the American Midwest ships wheat to Buffalo by water, where it is milled into flour, and the flour shipped by train to the bakeries of the Eastern markets. Other examples are petroleum which is brought by ship to New York, where it is refined, and the petroleum products sent to other cities, or cattle which are brought from the Argentine interior by rail to Buenos Aires, where they are slaughtered, tinned or frozen, and shipped to foreign markets.

Although mostly defined as a place where the mode of transportation changes from land to waterborne systems, a seaport is primarily important as a central place of economic and cultural interchange: "It originates and grows in response to demands that arise, and as a reflection of relationships that extend, over a wide international area" (HOYLE and PINDER, 1981). Transport integration is the essential port function, but at a modern seaport node within a multimodal transport system there develops a major urban center, an industrial focus, an important source of employment, and an influential factor in national and regional development. For this reason, a close association normally grew up in the past among seaports, cities, and transport systems in both the more-advanced and the relatively less-developed ports of the world. The prosperity of coastal cities largely depended on the sea, and maritime trading links, which in turn fostered regional economic growth.

Around the world, many of the transforming influences that have shaped modern economies have come by sea, and have entered through the ports. Thus, the growth of urban and port systems is closely interrelated, and many city ports clearly owe much to their historical antecedents. After a time, however, the urban component frequently reaches a stage of self-sustained growth; a variety of manufacturing and service industries being attracted by locational factors which have little or nothing to do with the port function. Seen in this way, ports account in large

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measure for the existence of many great cities in the world, such as Tokyo, New York, London, Buenos Aires, Rio de Janeiro, Shanghai, Haifa and not least Antwerp.

Analysis of capital cities throughout the world reveals that a great number were originally ports; some 51 port cities are still their nations' capital. This is mainly true (for some 40 of these 51) in developing countries in Africa, South America and Asia, where foreign trade and foreign culture were brought in by ship through the ports.

The number of port cities around the world probably exceeds 10,000 (KARMON, 1980). Of the 258 cities in the world with more than 500,000 inhabitants, 99 have a seaport (not including an inland port). In Japan, about one-half of the population lives along the coastline, which produces about 60% of that nation's industrial output. Of the 10 largest cities in Japan, with populations over 1 million, only two do not have their own port (JAPAN PORTS AND HARBOUR ASSOCIATION, 1979).

Port cities support a wide variety of maritime activities: changes in these activities have still-unforeseen implications for urban development, and for the welfare of countries like the U.S.A. whose port cities are their most important cities (KONVITZ, 1978). In the U.S.A., some 53% of the population lives within 80 km of the coastline (including the Great Lakes), and about 50% of the country's total expenditure on industrial production facilities occurs at water-oriented sites.

## Effect of Changes

*Scale of international trade*

As is well known, maritime transport has been subject to fundamental changes over the last four decades, not the least important of which has been the tremendous increase in the scale of world shipping, with international maritime traffic having doubled every 10 years. With the exception of the year 1982 (when a 4% decline over 1981 was registered), a 3% average annual growth has been experienced. If this continues until the end of the century—not an entirely unrealistic prediction (MULOCH-HOUWER, 1986), since an average increase of 3.7% per annum was registered over the period 1977–1986—then world trade will have grown by 50% between 1987 and the year 2000.

This situation has had, and will have, several important consequences for the ports and port cities. Uniform cargo streams led to the increase in the scale of ships: in turn this has sometimes led to the development of other port sites in the neighborhood—e.g. closer to the entrance of the estuaries or in nearby bays. Some examples are Fos near Marseille, Antifer near Le Havre, Maasvlakte in Rotterdam, Ymuiden for Amsterdam, Tilbury docks in London, Marghera and Venice, Voltri and Genova, Bagnoli and Naples, and Manhattan and Port Elizabeth in New York/New Jersey. In ports in the developing world, completely new harbors had to be built, such as Tin Kan Island in Lagos, and Yambu and Djeddah in Saudi Arabia.

This process, however, was due not only to the increase in the size of the vessels using the port but also to new cargo traffic that developed, based on the export and import of basic raw matrials, such as oil, iron ore, coal, phosphates and grain. As most port cities were born around the port and gradually developed in such a way that the port could not be extended, other locations in the neighborhood, though distant from the central business district, had to be sought. This tendency has been analyzed in Bird's Anyport model (BIRD, 1971), and can easily be illustrated by the development of the Port of Antwerp.

*Structural changes*

A second major change in the development of maritime transport and the port industry arose as a consequence of rapid mechanization and specialization. Car carriers bringing 6400 Japanese cars at a time require considerable storage space as the vehicles cannot be sent immediately to their ultimate destinations. No one dealer has enough room or capital to maintain large stocks of each model. Forest products come onboard vessels of 35,000 tons from Canada, the U.S.A., South America, or the Far East, and it is not possible to transfer these cargos by means of some 1000 trucks, each carrying 35 tons, straight to the distribution centers in the interior of the country. Coal is now transported on vessels of 100,000 d.w.t. or larger, but power stations want to receive much smaller quantities at any one time. Roll-on-roll-off berths are space-intensive, and this is even more the case for container terminals. At the beginning of the container revolution, Antwerp had for a mooring length of 250 m a depth of land of some 400 m, giving some 10 ha for one berth. The new Delwaidedock in Antwerp now has a surface of some 20 ha, i.e. 250 m of berth length by 800 m depth of land.

Ports have thus become very space-intensive (HAYUTH, 1988) and gradually are also becoming more capital-intensive and less labor-intensive. The number of dockers has been reduced in ports all over the world (in Antwerp from 14,500 in 1965 to 12,500 in 1975 to 9000 in 1985). Although there can be alternative employment in other service industries (e.g. filling and stripping containers, container repair and leasing, etc.) as will be explained later on, the transition is not an easy one, given the traditional attitudes of dockers. Sociologically they find themselves more akin to industrial workers, who happen to be employed in a port area, rather than real dockers. Vigarie has discussed this subject under the heading of "port ecology" (VIGARIE, 1983, p. 106).

In the same framework of changing activities, attention should be drawn to the ports as centers of physical distribution. During the Middle Ages, vessels arrived in port when God and the winds allowed them to do so, and the cargo had to be stored in the well-known warehouses to be distributed throughout the year to inland destinations. Nowadays, there again exists a discontinuity in the arrival of cargoes, which are unloaded in big volumes in the port and have to be shipped gradually to the dealers or customers in the interior of the country. This new physical distribution aspect is bound to become one of the most important characteristics of ports in the years to come (HAYUTH, 1987). It is of great importance to Japanese and American companies that want to penetrate into the Common Market and, for this reason, have to maintain a stockpoint in the area. For the ports, it creates employment, financial services, inland transport, etc. It should also be considered in the 'Kan Ban' or 'just-in-time' delivery perspective.

*Port industrialization*

A third factor that has influenced ports is the rapid industrialization that took place in most developed countries immediately after the Second World War. In a port such as Antwerp, some 3000 ha have been allocated to industry (ores, chemicals, vehicles etc.), which employs more than 30,000 people and represents an investment of more than 250 billion B.fr. In oil refining, the port has attracted such great names as Petrofina, BP and Exxon, as well as smaller independent companies. The chemical industry includes the major German firms, such as BASF, Bayer, Degussa, Henkel and Halterman, and the Americans, such as Union Carbide, Monsanto, Amoco, Essochem etc., as well as the Belgian, Solvay, the French, Rhone Poulenc, the Canadian, Polysar, etc. In the automotive industry, General Motors and Ford have constructed assembly plants for cars and tractors.

Development has been equally impressive in other ports, such as Rotterdam, Le Havre and Marseille. Industries of the types mentioned above need space, which cannot be found near the old port facilities: the new MIDAS (Maritime Industrial Development Areas) therefore lie at some distance from the old city centers. In other words, the link between the port and the city becomes weaker.

*Traffic origin and destination*

Considerable changes have occurred in the patterns of traffic origin and destination. Antwerp, for example, used to be the port for the Belgian–Luxembourg Economic Union (BLEU): until 1970, 81% of the port's total cargo turnover had the BLEU as origin or destination, and only 19% was international transit traffic to and from neighboring countries. Gradually, under the influence of the European Common Market and, later on, through a world-wide shift in the role of sea–sea transhipment, international transit traffic became more important, amounting in 1986 to some 47.5% of total cargo turnover. As for general cargo, 67% of Antwerp's total turnover in this category, including containers, is international transit traffic (the growth and spatial distribution of this transit traffic is illustrated by Table 1).

## Redeveloping Docklands

Antwerp has thus become a world port in the full meaning of the word, but in doing so it became less of a local port, and the ties between the community in

**Table 1.** Total transit cargo handled by port of Antwerp, 1953–1985 (000 tons)*

| Area | 1953 | 1963 | 1973 | 1983 | 1985 |
|---|---|---|---|---|---|
| West Germany | 2606 | 3341 | 9052 | 11,316 | 12,186 |
| France | 2696 | 3319 | 5347 | 6684 | 8706 |
| Netherlands | 408 | 751 | 1613 | 2953 | 3248 |
| Great Britain | 365 | 872 | 1519 | 3953 | 4342 |
| Switzerland | 840 | 404 | 632 | 1695 | 1640 |
| Italy | 291 | 313 | 392 | 639 | 436 |

*Source: Port of Antwerp.

which it operates and the port became looser. As the previous section suggests, Antwerp is not alone in experiencing a rapidly changing relationship between port and city over the years.

Much has been written about the redevelopment of ancient waterfronts. Jane Jacobs, in her famous book, *The Death and Life of Great American Cities*, made these comments:

> Waterfronts, too, can be made to act more like seams than they ordinarily do today. The usual form of rescue for a decayed waterfront vacuum is to replace it with a park, which in turn becomes a border element usually appallingly underused as might be expected and this moves the vacuum effect inland. The only way, I think, to combat vacuums in these cases is to rely on extraordinarily strong counterforces close by. This means that population concentrations ought to be made deliberately high (and diverse) near borders . . . that potential street use be extremely fluid, and that mixtures of primary uses should be abundant (JACOBS, 1961, p. 268).

Abandoned dockland does not only pose problems, it also offers opportunities, usually near the old city center and the central business district. The development near St. Catherine Docks in London provides a good example: the project is certainly the biggest redevelopment in London since the Great Fire of 1666. The Canary Wharf Complex will eventually reach 10 million square feet of offices on about 70 acres, the cost will exceed £22 billion, and some 57,000 jobs are to be created. Three office complexes, a new railway link, a small-aircraft airport, new hotels, etc., will be built along docks where, before containerization, ships used to unload.

Nearly all the ports in the world seem to be competing to have the nicest marina in their vacated docklands: one of the best examples being the port of Baltimore. 'Ocean Village', which recently opened for business at Southampton, is yet another example, as indeed is 'Le vieux Port' in Marseille. There is usually a lot of pressure from the cities themselves, not only for more parking lots, parks, and green space near the central business districts, but, as in the case of London, also for new office space.

Many inhabitants of port cities hardly realize there is still a port that lies at the basis of the economic development of their community. Not only has a worker in one of the port industries a different attitude toward the port than does a docker, but inhabitants of port cities very often perceive only the environmental nuisances of the port without understanding the benefits derived from it. The 'community attitude' can become a limiting factor in port growth: for example, in the case of Rotterdam, where a steel mill and an LPG terminal were refused planning permission, or in Amsterdam, where Profil could not develop as a result of community pressure (PINDER, 1981).

When the inhabitants of the city express a particular attitude toward the port, it is also manifested in local politics. Where previously residents were willing to contribute toward the expense of their city's port and/or even finance its extension, they nowadays want the port either to finance part of the city's development or at least to contribute to some of the general expenses the city has to bear because it has a port on its territory. In Oslo, for example, the municipal authorities earmarked some port property for a number of non-port activities, but it then faced the enormous task of relocating and rearranging traffic without losing trade and customers. In other countries, the port authority has become more a real-estate operation, making capital out of abandoned dockland. This is particularly the case in Anglo-Saxon countries, especially the U.S.A. and Great Britain. However, in countries that rely on the 'Code Napoleon', with its principle of 'domaine public', it is less easy to sell abandoned dockland for other than 'public uses.' These few examples explain why so many studies illustrating the economic importance of ports have been published in recent years.

## Economic Impact Studies

American ports have for years published economic impact studies. Since these ports are very often financed by tax-free public bonds and/or by grants from local or state authorities, they had to prove that these bonds or grants were in the public interest and that port development was extremely important for the whole community.

A 1953 report (DELAWARE RIVER PORT AUTHORITY, 1953) states that each ton of cargo loaded or unloaded at one of the area's ports produces a direct dollar expenditure. Based on the total tonnage for Delaware River ports in 1954 (assuming the same commodity relationship as in 1953 and using the revised dollar values per ton of cargo), it was estimated that the 79,507,731 tons of cargo handled brought about a direct income of over $610,000,000 to the area. This study was updated in 1962 and, based on the port's foreign general cargo tonnage that

year of 5.2 million short tons and a general cargo ton value of $16.21, it was estimated that a direct income of about $84,000,000 was realized for the area's economy.

A study prepared for the New York area (PORT OF NEW YORK AUTHORITY, 1966) claimed that waterborne commerce generated the following economic spillover effects: port jobs provided a livelihood for at least 430,000 people, one in every four people who live in the Port District were directly or indirectly dependent on the port functions, and more than a quarter of the total wages were earned in the Port District. The detailed figures are given in Table 2.

Table 2 illustrates not only how and where money was earned, but also how it was spent, since it is in this way that the port affects the community. A study of the Port of San Francisco (ARTHUR D. LITTLE INC., 1966) provides further evidence of the importance of port functions in generating economic development in an area:

> . . . the direct and indirect impact of the Port on the economy of San Francisco . . . (accounts) for between 11 and 14 per cent of the city's employment. Total port attributed payroll is responsible for a total of $390,490 million of income and 52,000–67,000 jobs. There are 23,000 jobs directly attributable to Port activity, involving $195,000 million in payroll annually.

Very similar conclusions were also reached in a 1967 study of Portland conducted by the Bureau of Business and Economic Research at the University of Oregon. The total payroll generated by the port was calculated to be some $103.8 million, taking account of both direct port employees (7631 persons) and the associated employment in import- and export-oriented firms (17,624). Disaggregation of this payroll by expenditure classes (food, clothing, housing, medical care, transportation etc.) then gave an indication of the port's indirect impact on the whole community. The estimated direct revenue generated per ton of cargo for specific cargo classes in 1965 is listed in Table 3.

A further interesting insight into the nature of economic spin-offs from port functions is provided by a study of the port of Baltimore (Table 4). Not only was

**Table 2.** Economic impact of the port of New York, 1966*

| | Annual average employment | Total annual payroll ($) |
|---|---|---|
| Marine transportation | 66,400 | 428,928,000 |
| Auxiliary marine transportation | 65,200 | 255,279,700 |
| Marine construction | 34,100 | 160,103,300 |
| Land transportation | 40,400 | 172,709,400 |
| Port trade and finance | 96,000 | 462,821,500 |
| Port industries | 127,600 | 657,698,000 |

The sectors of the economy benefiting from port income were given as follows:

Money expenditure for consumption

| | Distribution of port income ($) | Percentage |
|---|---|---|
| Food | 2,079,000,000 | 33.0 |
| Housing | 1,266,300,000 | 20.1 |
| House furnishing and equipment | 434,700,000 | 6.9 |
| Clothing | 768,600,000 | 12.2 |
| Auto transportation | 264,600,000 | 4.2 |
| Other transportation | 163,800,000 | 2.6 |
| Personal care | 132,300,000 | 2.1 |
| Medical care | 371,700,000 | 5.9 |
| Reading, recreation and education | 415,800,000 | 6.6 |
| Beverages | 308,700,000 | 4.9 |
| Miscellaneous | 94,500,000 | 1.5 |
| Total expenditure | 6,300,000,000 | 100 |

*Source: PORT OF NEW YORK AUTHORITY (1966).

**Table 3.** Direct revenue generated per ton of cargo of specific commodities, port of Portland, 1965*

| Cargo class | Revenue generated per ton ($) |
|---|---|
| General cargo | 25.0 |
| Petroleum | 8.0 |
| Logs | 16.0 |
| Ores | 11.0 |
| Grain | 13.0 |

*Source: UNIVERSITY OF OREGON (1987).

significant primary employment generated in manufacturing (42,370) and inland transportation (7530) but also state and local taxation yielded $17,432,000 (of which $14,736,000 were paid by manufacturers). More recently a comprehensive study of the economic impact of the Port of Houston (BOOZ-ALLEN AND HAMILTON INC., 1982) has concluded that 159,130 Texas residents were in some way related to port activity in 1981: this represented nearly 10% of the total employment in Harris County. As only 31,699 of the jobs were directly related to the port functions, the scale of the spillover effects is clearly great. The $3 billion generated by port activity in 1981 included $742 million in personal income received by those individuals employed as a direct result of port activity. An additional $890.4 million in income was generated as a result of respending. Although general cargo accounted for less than 15% of the tonnage handled via the Port of Houston, it generated about 60% of the 31,699 jobs.

*Input–output models*

Input–output models have long been used to provide more scientific measurements of the indirect (or secondary) impacts generated by port activities. For example a 1971 study of Seattle was employed to back the port's request for supporting funds from the Economic Development Administration. The study showed that maritime commerce generated 39,087 jobs, $322,080,000 in payrolls, and $1,036,000,000 in business activity. Moreover, the jobholders paid $61,700,000 in Federal, state and local taxes, spent $53,700,000 on food and tobacco, $28,600,000 on clothing and personal care, $67,700,000 on housing and household operation, $17,600,000 for medical expenses, and $34,400,000 for auto purchases and operating expenses. The Federal Government derived $105,339,000 in customs and income tax revenues from Seattle maritime commerce and, in turn, spent $13,118,000 in payrolls for its Seattle employees engaged in facilitating the commerce. The King County residents in 1969 supported the Port of Seattle with $8,186,000 in tax levies but port-related workers and the maritime commerce-oriented private enterprises paid in excess of $39,000,000 in state and local taxes alone. Thus the study concluded that, apart from generating substantial local employment, the harbor was a net source of fiscal revenue to the state, the county, and the city.

One major defect with the plethora of impact studies conducted since the 1950s was the lack of a standard methodology: no comparability between studies existed and the suspicion was that many manipulated data to favour expenditure on and finance to the ports. In an attempt to rectify this problem, in 1979 the U.S. Maritime Administration published a Port Economic Impact manual designed to provide a standardized methodology and thus to enhance the credibility, clarity and comparability of port economic impact studies (ARTHUR D. LITTLE INC., 1979). (This manual was subsequently updated in 1986.) It was clearly recognized that any full account of the

**Table 4.** Economic impact—port of Baltimore, 1969*

| | Primary impact (U.S. $000) |
|---|---|
| Vessel disbursements | 64,286 |
| Crew expenditure | 2412 |
| Inland transportation | 58,195 |
| International insurance and banking | 2210 |
| Port services | 53,383 |
| Shipbuilding | 77,421 |
| Port-dependent primary metals manufacturing | 277,739 |
| Other port-dependent processing | 67,104 |
| Government expenditure | 24,221 |

*Source: *The Economic Impact of the Port of Baltimore*, 1969.

economic benefits generated by port functions must not only measure the direct impact of the port industry (and port activities) but also include the indirect and induced effects, in other words the role of the economic multipliers had to be taken into account. The size of the multiplier depends on the structure, size and diversity of the port district's (or regional) economy. The linkages vary in magnitude, depending on the ability of the local economy to meet the demand for goods and services. Secondary impacts can be estimated by economic-base multipliers, interregional trade multipliers, and input–output models. The first has the disadvantage of simplicity, the latter that of complexity.

Perhaps the most impressive of all port economic impact studies was published in the U.S.A. in 1978 (PORT OF NEW YORK AUTHORITY, 1978). In this study, the port industry is defined as "any economic activity that is directly needed in the movement of waterborne cargo". Thus, the research also reflects the economic influence of port expenditures by Federal, state and local governments. The study was the first ever undertaken to determine the port industry's present dollar impact on a national economy. It provides business and government policymakers with a new, versatile tool for assessing impacts in given situations or time frames. The scope of the report compares with analyses of other major industries in the transportation, mining, agriculture and manufacturing sectors.

Using the input–output model, the analysis showed that port industry operations in the base year of the study were responsible directly or indirectly for gross sales (revenues) within the economy of $28 billion: they made a $15 billion contribution to gross national product, created 1,046,800 jobs, and generated personal income of $9.6 billion. It was also shown that nationally the chain reactions initiated by the multiple purchases for port operations produced a multiplier effect of 1.6: this means that each dollar of sales by the port industry produces $1.60 in sales throughout the economy. The handling of the nation's waterborne exports and imports was directly and indirectly responsible for $16.2 billion in port revenues. Thus each ton of waterborne cargo in U.S. foreign trade generated port industry revenues of $34, which means that, after applying the multiplier, the direct and indirect revenues together amount to $55. The movement of every 600 long tons of waterborne foreign trade also created one job in the national economy, while a $1 million increase in the nation's imports brought about an average income of $160,000 in port services.

*Economic impact of Belgian ports*

The impact studies mentioned to date have all been conducted in the U.S.A., but many countries of the world, including Belgium, have also tried to analyze the importance of ports in the national economy.

As far back as 1964, the Study Center for the Expansion of Antwerp published an input–output table for the city. Its conclusions were that although the 'arrondissement' of Antwerp accounted for no more than 9% of the Belgian population, it contributed almost 12% to the gross national product. The report further stressed that the non-commodity-producing sectors played a very important part in the generation of Antwerp's income, contributing more than half of the total income. Thus, the port plays an important role, not only as a port itself, but also as a generator of activity for other transport modes, such as road, rail, and inland navigation. Morever, the dominant industries in Antwerp's local economy were all linked in some way to the port, and importantly, were all in growth sectors, such as oil refining, electrical engineering, chemicals, automobiles, and the electrotechnical industries. As the study was a rather complicated exercise and statistical data at a local level are in any case difficult to obtain, the report was never repeated.

An in-depth analysis of the Antwerp economy, however, was published in 1981 (GEWESTELIJKE ONTWIKKELINGSMAATSCHAPPIJ GOM ANTWERPEN, 1981). It showed that Antwerp was a growth pole in the national economy. While comprising only 3.3% of the land area of Belgium, it supports 9.4% of the country's population and produces 13.9% of the gross national product. Some 20% of this gross regional product is contributed by the cargo handling, storage and distribution sectors of the port. It was also calculated that, in 1977, the average value added in the port of Antwerp reached 960 B.fr. per ton of cargo turnover, increasing to 1304 B.fr. by 1980. General cargo generated a much higher than average value added (2400 B.fr. in 1980).

In comparison dry bulk cargo had a value added of 800 B.Fr. on average, whereas liquid bulk accounted for only 100 B.fr. per ton.

A 1986 'white paper', published by the City of

*(Continued on Page 27)*

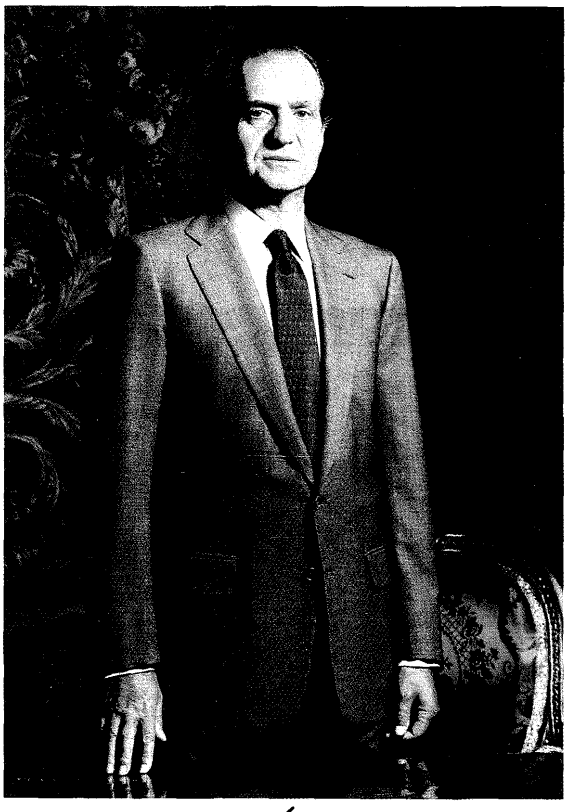
# THE 17TH WORLD PORTS CONFERENCE OF IAPH

Theme: Challenges for Ports—Present and Future

## May 4—11, 1991 in Spain

Venues: Pre-Conference Meetings (May 4—May 5): ●Hotel Princesa Sofia in Barcelona
Official Opening Ceremony (May 5): ●Palau de la Musica (concert hall) in Barcelona
Major Conference Activities (Working/Plenary Sessions) (May 5—May 10): ●on board "EUGENIO COSTA"
Technical Exhibition (May 7—May 8): ●Maritime Station in the Port of Palma de Mallorca

**H.R.M. King Juan Carlos**
**Honorary President of**
**the 17th IAPH Conference**



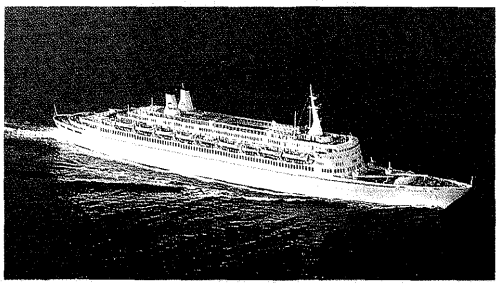
**Barcelona**

**Mahon**

**Mallorca**

**Ibiza**

**Valencia**



# Welcome Messages

**Fernando Palao Taboada**
**General Director for Ports and Coasts**
**Ministry of Public Works and**
**Urban Development, Conference Chairman**

One again, I would like to take advantage of this opportunity to reiterate our invitation to participate in the 17th Conference of the International Association of Ports and Harbors, which will take place in Spain during the upcoming May.

The range of Spanish port systems which we will have the occasion to visit will permit those in attendance to carry home a most representative idea of the current status of Spanish ports and harbours within the framework of the Western Mediterranean area.

The five cities on our itinerary—Barcelona, Mahón, Palma de Mallorca, Ibiza and Valencia—most definitely will impress those who visit them by their history and beauty.

Taking into consideration the authority and expertise of the various Chairmen participating in the Conference, the technical quality of the sessions is assured.

These ingredients, together with your attendance, guarantee that the Conference will be a success.

We look forward to seeing you in Spain.

**FERNANDO PALAO TABOADA**

**Josep Munné Costa**
**Chairman**
**Port of Barcelona**

I would like to express my sincere satisfaction, and that of all those working in the Port of Barcelona, on welcoming this most highly-qualified group of people representing the world of docklands and ports.

As Barcelona has long been a crossroads of cultures and races, it is my hope that the 17th IAPH Conference will introduce you to this city's traditional vocation of hospitality.

After months of world upheaval, any international meeting such as the one we are going to hold takes on a new dimension. We feel confident that the work carried out at this Conference, through the free exchange of ideas, will contribute to greater comprehension and understanding among all people.

**JOSEP MUNNÉ COSTA**

**Javier Tarancon Torres**
**Chairman of the Balearics Ports**

On behalf of the Balearics Ports—Palma de Mallorca, Alcudia, Mahón, Ibiza and La Sabina—and our Port Council, I extend a warm invitation to you to participate in the Conference.

It is indeed an honour for our Ports to be chosen to host the 17th IAPH World Ports Conference May 5—11, 1991 in Spain.

I hope you will be satisfied with your stay in our islands. We are sure you will appreciate their beauty and we look forward to seeing you very soon.

**JAVIER TARANCON TORRES**

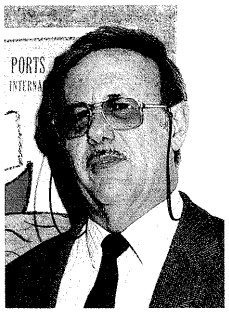
**Fernando Huet**
**Chairman**
**Port of Valencia**

The Atuonomous Port of Valencia has the honour and responsibility of hosting the official closing of the 17th Conference of the International Association of Ports and Harbors. From here, I wish to assure all delegates that we will put all our efforts into making the afore-said closing ceremony worthy of the work of the Conference as well as acquainting participants with some of the many features and customs impregnating the culture of this old Mediterranean land, although only briefly in view of the short time we will have.

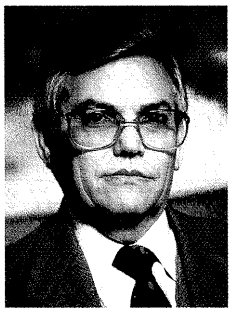
I am sending these few lines to sincerely welcome you all in advance on behalf of our Autonomous Port.

**FERNANDO HUET**

# Other Members of Organizing Committee



**José L. Juan-Aracil, Executive Secretary, Organizing Committee**



**Luis Montero, (Port of Barcelona)**

**Rafael Soler, (Ports of Baleares)**

**Rafael Aznar, (Port of Valencia)**

**Milagros Couchud (Ministry of Public Works)**

**José Trigueros (Ministry of Public Works)**

# PROGRAMS

## FRIDAY, MAY 3, 1991

(Hotel Princesa Sofia in Barcelona)

**12:00/20:00** Registration
Hotel accommodation
**16:00/18:00** Organizing Committee Meeting

## SATURDAY, MAY 4, 1991

(Hotel Princesa Sofia in Barcelona)

**09:00/20:00** Registration
**09:00/11:00** Budget/Finance Committee
**09:00/12:00** Marine Safety Sub-Committee, COPSSEC
Dredging Task Force, COPSSEC
Port Safety and Marine Environment Sub-Committee, COPSSEC
Port Planning Sub-Committee, COPSSEC
Ship Sub-Committee, COPSSEC
**11:00/12:00** Membership Committee
**12:00/14:00** Free Time for Lunch
**14:00/16:00** Constitution & By-Laws Committee
**14:00/17:00** Cargo Handling Operations Committee
**14:00/17:00** Trade Facilitation Committee
**14:00/17:00** Legal Protection of Port Interests Committee (CLPPI)
**14:00/17:00** International Port Development Committee (CIPD)
**14:00/17:00** Public Affairs Committee (PACOM)
**14:00/17:00** Port & Ship Safety, Environment and Construction Committee (COPSSEC)
**16:00/17:00** Nominating Committee
**17:00/18:00** Ad Hoc Committee on the Future
**21:00/23:00** Informal Dinner hosted by the Port of Barcelona

## SUNDAY, MAY 5, 1991

(Hotel Princesa Sofia in Barcelona)

**09:00/12:00** Registration
Luggage Reception for Delegates arriving Barcelona at the Maritime Station
**09:00/09:45** Resolutions and Bills Committee (1st)
Credentials Committee
**09:00/10:00** Environmental Matters Committee (Coordination Group)
Meetings of Technical Committees (reserve)
**10:00/12:00** **Pre-Conference Joint Meeting of the Board and EXCO**
**12:00** Organizing Committee and Staff move on board.
Conference material and early-arriving delegates' luggage moved on board

### ON BOARD EUGENIO COSTA

**12:00/23:00** Reception and embarkation of delegates arriving directly on board EUGENIO C.
**12:30/14:30** "Self service" buffet for all delegates already on board.
**17:30** **OFFICIAL OPENING CEREMONY** at "Palau de la Musica" in Barcelona
**20:30** Inaugural Dinner at "Atarazanas"
**23:45** Last Registration
**24:00** EUGENIO C.sails to Mahon.
Midnight Buffet

## MONDAY, MAY 6, 1991

(Morning, Port of Mahon)

**07:30** Breakfast
**08:30/09:00** Resolutions and Bills Committee (2nd)
**09:00** Arrival in Mohon
**09:00/11:00** **FIRST PLENARY SESSION**
**11:15/13:15** Visit of Mahon City

## MONDAY, MAY 6, 1991

(Afternoon cruising Mahon—Palma de Mallorca)

**13:30/15:30** Lunch
**13:30** EUGENIO C. sails to Palma de Mallorca
**15:45/17:45** **Working Session No.2 TECHNICAL COMMITTEE FORUM**
Chairman: Mr. McJunkin, IAPH President, Long Beach

| | | |
|---|---|---|
| 1) Introduction | Mr. McJunkin | 5″ |
| 2) Presentation of Technical Committees COPSSEC, CHO, TF, CLPPI, CIPD and PACOM | Respective Chairmen | 90″ |
| 3) Questions & Discussions | All Members | 25″ |

**17:45/18:00** Coffee Break
**18:00/20:00** **Working Sessions No.3 ELECTRONIC DATA INTERCHANGE (EDI)**
Chairman: Dr. Palao Fusaroli, Trieste

| | | |
|---|---|---|
| 1) Introduction | Mr. Fusaroli | 5″ |
| 2) Interchange of Information between ports and their users | Mr. Eric Lui, Singapore | 30″ |
| 3) Interchange of Information between Ports | Mr. Peter M. Brown, Australian Ports & Marine Association | 30″ |
| 4) Electronic Data Interchange | Mr. Chaudron & Mr. Dekkers, Rotterdam | 30″ |
| 5) Questions & Discussions | All Members | 20″ |

**20:00** Welcome Cocktail offered by COSTA CROCIERE
**20:30** Welcome on board Gala Dinner
**21:30** Arrival at Palma de Mallorca

## TUESDAY, MAY 7, 1991

(Port of Palma de Mallorca)

**07:30** Breakfast
**08:30/09:00** Honorary Membership Committee
**09:00/10:30** **Working Session No. 4 EUROPEAN INTEGRATION**

Chairman: Mr. John Mather, IAPH First Vice-President, Clyde Port

| | | |
|---|---|---|
| 1) Introduction | Mr. Mather | 10″ |
| 2) Implication of the process of change in Eastern countries | Mr. Dieter Noll, Rostock | 30″ |
| 3) Consequences of the European Integration on Ports | Mr. Combeau, Bordeaux | 30″ |
| 4) Questions and Discussions | All Members | 20″ |

**10:30/11:00** Coffee Break—**Opening of Exhibition**

**11:00/12:45 Working Session No.5 TRENDS OF PASSENGER SHIP AND MARINE INDUSTRY**

Chairman: Mr. C. Lunetta, IAPH 3rd Vice President, Miami

| | | |
|---|---|---|
| 1) Introduction | Mr. Lunetta | 10″ |
| 2) Marine-oriented Tourism in Mediterranean Sea | Mr. L. Sardi, Costa Crociere Italian Lines | 30″ |
| 3) Ports and Trade Restrictions | Mr.P.J. Falvey, New York/ New Jersey | 30″ |
| 4) Questions and Discussions | All Members | 20″ |

**12:45/14:45** Lunch

**14:45/18:00** Visit to Manacor

**18:45** Spanish Wine and Folk Dances in Bellver Castle offered by Ayuntamiento de Palma de Mallorca

**20:00** Dinner on board

## WEDNESDAY, MAY 8, 1991

(Port of Palma de Mallorca)

**07:30** Breakfast

**08:30/10:00 Working Session No.6 ENVIRONMENT**
**Part One: Ports and Their Environments**

Chairman: Mr. J. Smagghe, Le Havre

| | | |
|---|---|---|
| 1) General Presentation | Mr. Smagghe | 5″ |
| 2) Water Pollution | Mr. Van der Kluit, Rotterdam & Mr. Gerard Velter, Le Havre | 25″ |
| 3) Dredging Problems | Mr. H. Haar, New Orleans Dr. Willis E. Pequegnat | 25″ |
| 4) Questions & Discussions | All Members | 10″ |

**10:00/10:15** Coffee Break

**10:15/12:15 Working Session No.6 ENVIRONMENT**
**Part Two: Environmental Problems in Ports in Developing Countries**

Chairman: Mr. J.M. Moulod, Abidjan

| | | |
|---|---|---|
| 1) African Ports Facing Environmental Problems | Mr. Moulod | 25″ |
| 2) North-South Cooperation on Environmental Problems | Mr. C.B. Kruk, Chairman, IAPH CIPD, Rotterdam | 25″ |
| 3) Consequences of IMO MARPOL Convention for African Ports | Mr. J.R. Lethbrdige, World Bank | 25″ |
| 4) Questions & Discussions | All Members | 15″ |

**12:30/14:30** Lunch

**15:00/16:30 Working Session No.6—ENVIRONMENT**
**Part Three: Port-City Relations**

Chairman: Mr. Michael Sze, Hong Kong

| | | |
|---|---|---|
| 1) Introduction | Mr. Michael Sze | 5″ |
| 2) Port-City Development, an example: Osaka | Mr. T. Ashimi, Osaka | 25″ |
| 3) An Example of Canadian Port-City Relationship | Mr. J.M. Tessier, Canada Port Corporation | 25″ |
| 4) Port-City Relations in Korea | Dr. Jun Il-Soo, Korea Maritime Institutes | 25″ |
| 5) Questions and Discussions | All Members | 15″ |

**16:30/16:45** Coffee Break

**16:45/18:45 Working Session No. 7 PORT MANAGEMENT**
**Part One: International Characteristics of Ports**

Chairman: Mr. H. Molenaar, Port of Rotterdam

| | | |
|---|---|---|
| 1) General Presentation | Mr. H. Molenaar | 5″ |
| 2) Municipal Ports in N.W. Europe | Mr. F.L.H. Suykens, Antwerp | 25″ |
| 3) Ports as Private Concern | Mr. John Mather, Clyde Port | 25″ |
| 4) Public and Semi-public Ports | Mr. M. Pechere, Marseille | 25″ |
| 5) Privatization of Ports | Mr. N. Gould, Wellington | 25″ |
| 6) Questions and Discussion | All Members | 15″ |

**18:45** Exhibition closing

**20:00** EUGENIO C. Captain's Gala Dinner

## THURSDAY, MAY 9, 1991

(Port of Ibiza)

**02:00** Everybody on board

**02:30** EUGENIO C sails to Ibiza

**07:30** Breakfast

**08:00** Arrival at Ibiza

**09:00/10:30 Working Session No.7 PORT MANAGEMENT**
**Part Two: Organization Models for Port Management**

Chairman: Mr. Ng Kiat Chong, Singapore

| | | |
|---|---|---|
| 1) General Presentation | Mr. Ng Kiat Chong | 5″ |
| 2) Spaces for Logistics Activities in Port Management | Mr. J. Craells, Barcelona | 25″ |
| 3) Privatization and Changes in New Zealand Ports | Mr. R. Cooper, Auckland | 25″ |
| 4) Ports of the Future— Interdisciplinary Aspects | Mrs. L. Liburdi, New York/ New Jersey | 25″ |
| 5) Questions & Discussions | All members | |

**10:30/10:45** Coffee Break

**10:45/11:45 Working Session No.7 PORT MANAGEMENT**
**Part Three: The Role of Port Authority**

Chairman: Mr. Wong Hung Khim, Former IAPH President, Singapore

| | | |
|---|---|---|
| 1) Introduction | Mr. Wong | 5″ |
| 2) Evolution of Port Authority in Portugal | Mr.A.L.C. Rodorigues, Lisbon | 25″ |
| 3) National Politics in Ports Administration | Mr. Felix O. Ovbude, Nigeria | 25″ |
| 4) Questions & Discussions | All Members | 5″ |

**12:00/14:00** Lunch

**15:00/18:00** Visit to Ibiza

**19:30/21:00** Dinner on board

## FRIDAY, MAY 10, 1991

(Port of Valencia)

**00:00** EUGENIO C. sails to Valencia

**07:30** Breakfast

**08:30/09:00** Resolutions and Bills Committee (3rd)

**09:30/11:15 Working Session No. 8 HUMAN RESOURCES**

Chairman: Mr. D. Taddeo, Montreal

| | | |
|---|---|---|
| 1) Introduction | Mr. D. Taddeo | 15″ |
| 2) Human Resources on Ports, Ports Stevedores | Mr. G. Bencomo, GM Consultant | 25″ |
| 3) Reform of Labour Regime for Ports | Mr. J. Sharples, British Ports Fed. | 25″ |
| 4) Questions & Discussions | All Members | 15″ |

**11:30/13:00 SECOND PLENARY SESSION**

**16:00/18:00 Post-Conference Joint Meeting of the Board and EXCO**
**Post-Conference EXCO**

**18:30** Port of Valencia Optional visit

**18:30/20:00 CLOSING CEREMONY** at "Palau de la Musica" in Valencia

**21:00/23:00** Farewell Dinner on board

**24:00** Farewell Gala on board
Typical Valencia Fireworks from wharf

**24:00** EUGENIO C. sails to Barcelona

## SATURDAY, MAY 11, 1991

(Barcelona)

**09:30** Arrival in Barcelona & Disembarkation in Port of Barcelona

END OF 17TH IAPH CONFERENCE

PROVISIONAL AGENDA

# PRE-CONFERENCE JOINT MEETING OF THE BOARD AND EXCO

**10:00—12:00, Sunday, May 5, 1991**
**(Hotel Princesa Sofia, Barcelona, Spain)**

**1.** Board Chairman's opening address
**2.** Credentials Committee Chairman's report
**3.** Secretary General's report
**4.** Ad Hoc Committee on the Future
Chairman's report and recommendation on a strategic plan
**5.** Finance Committee
Chairman's report and recommendation on the dues structure
**6.** Internal and Conference Committee Chairmen's report and recommendation
**6.1** Membership Committee
Chairman's report and recommendation
**6.2** Budget/Finance Committee
**1)** Chairman's report and recommendation on the Settlement of Accounts for 1989/1990
**2)** Chairman's report and recommendation on the Budget for 1991/1992
**6.3** Constitution and By-Laws Committee
Chairman's report and recommendation
**6.4** Resolutions and Bills Committee
Chairman's report and recommendation, if any
**6.5** Nominating Committee
Nominations of the President and 1st, 2nd and 3rd Vice-Presidents for the next term
**6.6** Honorary Membership Committee
**1)** Board's proposal, if any
**7.** Reports by Technical Committee Chairmen
**7.1** CIPD (including UNCTAD liaison activities)
**7.2** COPSSEC
**7.3** Cargo Handling Operations
**7.4** Trade Facilitation (including CCC liaison activities)
**7.5** Public Affairs (PACOM)
**7.6** CLPPI
**8.** Report and recommendation by the Liaison Officers
**8.1** IAPH European Representative
**8.2** Other Liaison Officers, if any
**9.** Report and recommendation by the Chairman of the Resolutions and Bills Committee concerning the issue submitted by the Technical Committees, if any
**10.** Introduction of the dates and site of the 18th Conference of IAPH
**10.1** Presentation of the proposed dates and venue for the Conference
**10.2** Appointment of the Conference Vice-President for the next term
**1)** Recommendation by the Board Chairman
**2)** Report and recommendation by the Resolutions & Bills Committee Chairman
**11.** Board Chairman's closing address

PROVISIONAL AGENDA

# FIRST PLENARY SESSION

**09:00—11:00, Monday, May 6, 1991**
**(on board "EUGENIO COSTA" at the Port of Mahon)**

**1. Opening Address by the President**
**2.** Report by the Chairman of Credentials Committee
**3.** Secretary General's Report
**4.** Ad Hoc Committee on the Future
Chairman's report and recommendation on strategic plan
**5.** Finance Committee
Chairman's report and recommendation on dues structure
**6.** Report and recommendation by the Chairmen of Internal and Conference Committees
**6.1** Membership Committee
Chairman's report and recommendation
**6.2** Budget/Finance Committee
**1)** The Settlement of Accounts for 1989/1990
**2)** Budget for 1991/1992
**6.3** Constitution and By-Laws Committee
Chairman's report and recommendation
**7.** Report by Technical Committee Chairmen
(to be made at Working Session No.2—Technical Committee Forum)
**8.** Report and Recommendation by the Liaison Officers
**8.1** IAPH European Representative
**8.2** Other Liaison Officers, if any
**9.** Report and recommendation by the Resolutions and Bills Committee Chairman, if any
**10.** Closing remarks by the President

PROVISIONAL AGENDA

# SECOND PLENARY (CLOSING) SESSION

**11:30—13:00, Friday, May 10, 1991**
**(on board "EUGENIO COSTA" in the Port of Valencia)**

**1.** Opening address by the President
**2.** Report and Recommendation by the Chairman of the Resolutions and Bills Committee
**2.1** Resolution of Condolence
**3.** Report and Recommendation by the Honorary Membership Committee Chairman
**3.1** Election of Honorary Members
**3.2** Presentation of the Honorary Membership Certificate by the President
4. Report and Recommendation by the Resolutions and Bills Committee Chairman
Resolution of Thanks to the Host
**5.** Announcement of the dates and venue of the 18th IAPH Conference in 1993 by the President
**6.** Invitation Address by the Host of the 18th IAPH Conference
**7.** Report and Recommendation by the President for the adoption of the Resolutions pertaining to the appointment of the Conference Vice-President
**8.** Report and Recommendation by the Nominating Committee Chairman
**8.1** Nomination of the President, 1st, 2nd and 3rd Vice-Presidents for the next term
**8.2** Election
**9.** Address by the Outgoing President
**10.** Inauguration address by the New President
**11.** Announcement of the Appointive Members of the Executive Committee for the next term by the New President
**12.** Announcement of the Chairmen of the Technical Committees for the next term by the New President
**13.** Closing Address by the Conference Chairman

PROVISIONAL AGENDA

# POST-CONFERENCE MEETING OF THE BOARD AND EXCO

**16:00—18:00, Friday, May 10, 1991**
**(on board "EUGENIO COSTA" at the Port of Valencia)**

**1.** Board Chairman's opening address
**2.** Election of the "Elective Members" of EXCO for the new term
**3.** Appointment of Legal Counselors, if any
**4.** Consideration on the "Terms of Reference" of the Technical Committees for the new term
**5.** Consideration on the candidate(s) to host the 19th Conference of IAPH in the American Region in 1995
**5.1.** Presentations by the Candidate(s)
**5.2.** Voting, if necessary
**6.** Others
**7.** Board Chairman's closing address

# Social Events Programs


## FRIDAY, MAY 3—Barcelona

**1) Historical, Olympic and Modernist Barcelona**
Departure from the Princesa Sofia Hotel at 15:00
This guided bus tour will take you to:
**The 14th century Gothic Cathedral**, old **Gothic Quarter** (where the original Roman and medieval city was located) and the beautiful **Santa Maria del Mar Gothic Church,** the **Montjuich Mountain,** site for the 1992 Olympic Games. You may see the stadium, the **Sant Jordi Sports Hall** and an impressive view of Barcelona.

After that you will go to the **Paseo de Gracia** to view the modernist houses, with prominent examples built by Gaudi and Puig i Cadafalch. To end the tour you will proceed to the **Holy Family Church**, the still unfinished masterpiece of striking originality begun in 1884 by Antonio Gaudi.

Duration: 3 hours 30 minutes.

## SATURDAY, MAY 4—Barcelona

**2) Historical, Olympic and Modernist Barcelona**
(The same tour as on Friday, May 3)
A.—Departure from the Princesa Sofia Hotel at 10:00
B.—Departure from the princesa Sofia Hotel at 15:00
Duration: 3 hours 30 minutes.

**3) Welcome informal dinner at the Masia Egara, Tarrasa**
The welcome dinner will take place at 21:00 at the Masia Egara, a typical Catalan manorial house from the 16th century located in Tarrasa. Buses will leave the Princesa Sofia Hotel at 20:00.

## SUNDAY, MAY 5—Barcelona

**4) Sightseeing Tour of Barcelona**
A short sightseeing tour by bus of the City of Barcelona
A.—Departure at 10:00
B.—Departure at 11:00
C.—Departure at 12:00
D.—Departure at 13:00
Estimated duration: 1 hour and 30 minutes

**5) Visit to the Port of Barcelona by boat**
A short tour by "golondrina" (a motorboat for passengers) along the Port of Barcelona
A.—Departure at 10:30
B.—Departure at 11:30
C.—Departure at 12:30
D.—Departure at 13:30
Estimated duration: 1 hour

**6) Inaugural Gala Dinner**
It will take place at 20:30 hours at the **Royal Atarazanas** of Barcelona next to the Port of Brcelona located at less than 300 m. from where the EUGENIO COSTA will dock.

## MONDAY, MAY 6—Port of Mahon

**7) Visit to Ciudadela**
Departure by coach at 09:15, arrival at **Ciudadela** for a visit to different Megalithic monuments. This will deal "primitive" constructions from the Bronze Age one thousand years before Christ.
Distance: 90km. Duration: 3 hours 45 minutes. Return to EUGENIO COSTA at 13:00.

**8) Visit to Lanzarote of Mahon**
Departure at 09:30 by speedboat to the Island of **Lanzarote** (inside the Port) to visit the ancient Maritime Health Buildings.
Distance: 4 miles Duration: 3 hours 30 minutes.
Return to EUGENIO COSTA at 13:00

**9) Visit to Mahon**
Depart from EUGENIO COSTA on foot at 11:15 for optional visit, until 13:15.

## TUESDAY, MAY 7—Port of Palma

**10) Visit to Palma de Mallorca**
Departure at 09:15 by coach for a guided tour of the historic part of Palma city. Visit to the **Baroque patios**, **Lonja**, **Gothic Cathedral** and the **Alumundaina Palace** (ancient fortress, built between the 12th and 17th centuries.)
Distance: 2 km on foot. Duration: 3 hours
Return to EUGENIO COSTA at 12:15

**11) Visit to the Drach Caves and the Bellver Castle**
Departure at 14:45 by coach to the **Drach Caves** in **Porto-Cristo**. You will visit the natural caves with numerous stalagmites and stalactites,

where a musical concert will be held by the underground lake.
Distance: 120 km Duration: 4 hours.
Arrival at Bellver Castle at 19:15 hours.
At 19:15 Spanish wine will be served at **Bellver Castle**, offered by the Municipal Council of Palma de Mallorca. A traditional dance will be performed by Govern Balear.
Return to EUGENIO COSTA at 20:15.

## WEDNESDAY, MAY 8—Port of Palma

Morning free
For those who wish, coaches will depart at 09:00, returning at 12:00 for shopping in the city centre.

### 12) Visit to Cartuja of Valldemosa

Coaches will depart at 15:00 hours for a view of Valldemosa and its surroundings, with a visit to the monastery of the town.
Return to EUGENIO COSTA at 19:00
Distance: 30 km. Duration: 4 hours.

### 13) Visit to Abacanto Palace

Delegates and accompanying persons
Coaches will depart at 22:30 to visit **"Abacanto"** (ancient estate or small palace providing a Viscontiniano atmosphere with classical music).
Distance: 15km
Return to EUGENIO COSTA at 00:30 and 01:30.

## THURSDAY, MAY 9—Port of Ibiza

Morning free.
From 09:00 onwards, motorboats will be provided to travel from EUGENIO COSTA, anchored in the outer harbour, to the docks.
Morning free, with information available concerning all the sights worth visiting in the city and on the island.

### 14) Visit to the City and Island of Ibiza

Departure from the docks at 15:00 by coach for a guided tour of the island and the historic city. You will see the countryside of **San Antanio Abad**, **San José**, **Ses Salines**, and you may tour by foot part of the ground walls of **"Dalt Vila"** dating back to the 16th century.
Distance: 45 km by coach and 2 km on foot.
Duration: 3 hours 45 minutes. Return to docks at 18:45.

## FRIDAY, MAY 10—Port of Valencia

### 15) Visit to Valencia's Fish Market *(Lonja)* and porcelain factory *(Lladro)*

Departure by bus at 09:00 from the docks in Valencia to visit first the **"Lonja"**, a Gothic monument built in the 13th century and one of the first monuments in the European Gothic style.
You will visit afterwards the factory where the famous **Lladro** porcelain is made. This porcelain is created by contemporary designers, who have inherited from their Valencian ancestors—appreciated all over the world since the 15th century—a scrupulous respect for the smallest details.

### 16) Lunch at Platform No. 2 in the Port of Valencia

A typical meal from Valencia, the famous "paella" cooked in front of all the participants at the **"Tinglado"** (Platform) No. 2, at 13:30, The location is a building from the 19th century, recently restored and surrounded by gardens and places of important cultural interest for the City of Valencia.

### 17) Closing Ceremony in the "Palau de la Musica" (concert hall) of Valencia

# EXHIBITION

## GENERAL INFORMATION

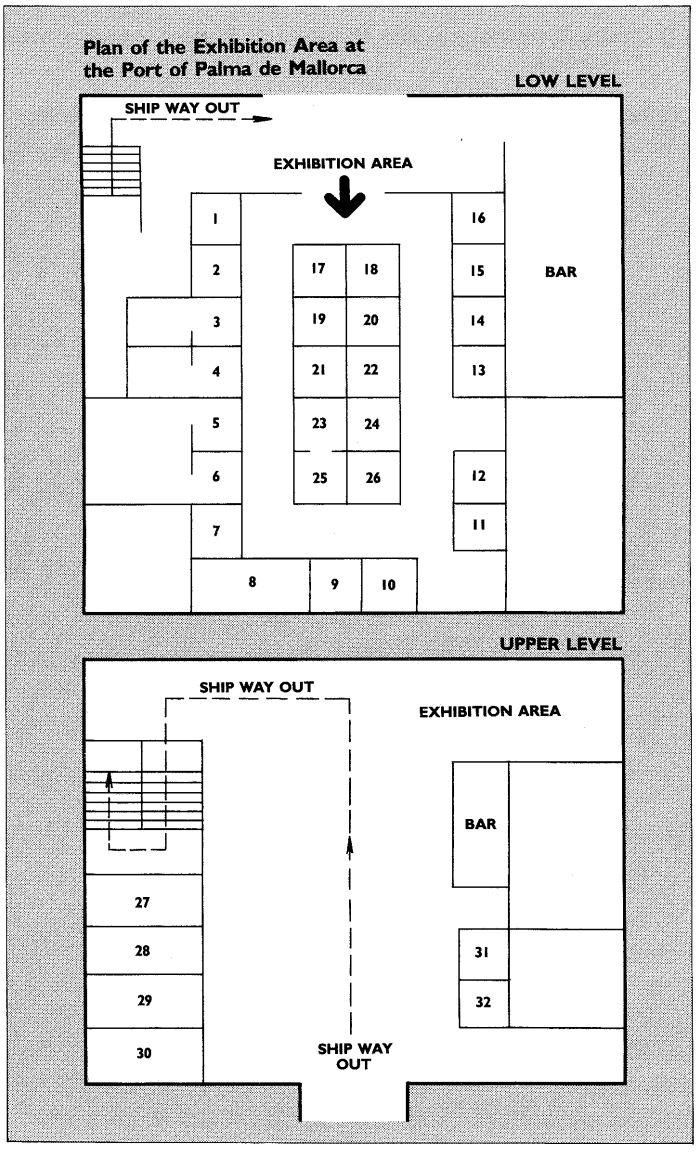
A Technical Exhibition will be held on Tuesday 7 May and Wednesday, 8 May 1991, in the Port of Palma de Mallorca.
This Exhibition will be an opportunity to display to the delegates recent developments in the management of ports.
Conditions for space applications are as follows.

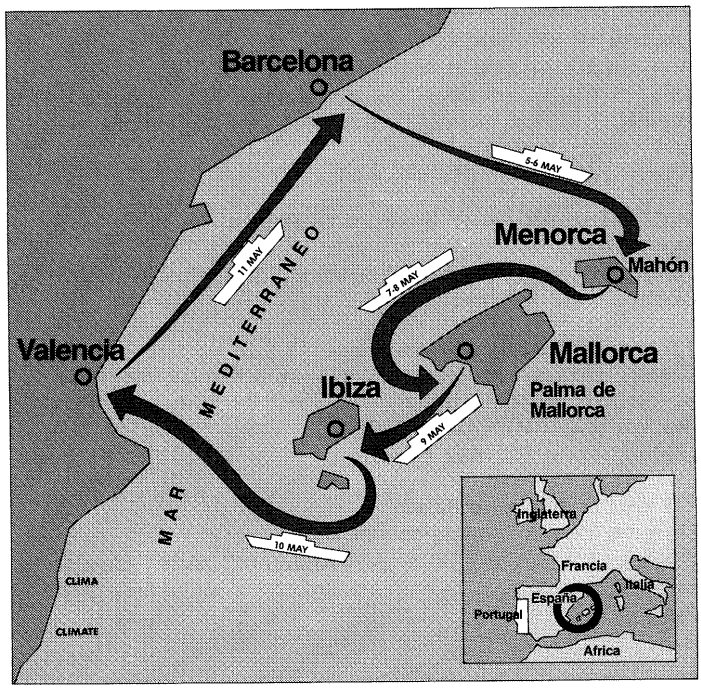
**Economic Conditions**
Type A Stands are Nos: 1, 2, 7, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 31, 32.
Type B Stands are Nos.: 3, 4, 5, 6, 8, 29, 30.

**Price**
Type A (approximately 6 square metres).....300,000 ptas.
Type B (approximately 12 square metres).....400,000 ptas.

**Composition of the Stands**
1. Carpeted floor
2. Placard with the name of the exhibitor
3. Electrical equipment
4. A desk
5. Two chairs
6. One plant

Any additional requirements will have to be stipulated as an extra service. For any further information about additional services, please contact IFEBAL, Institution Ferial de Baleares
Federico Garcia Lorca 16, 0714 Palma de Mallorca
Phone: 34 71 55 00 Fax: 34 71 45 12 21




## Schedule for "EUGENIO COSTA"

In response to the request of an Executive Committee member from California, the cruising schedule for the vessel "Eugenio Costa" has been announced as follows.

| | Spain Time | California Time |
|---|---|---|
| **SUNDAY, MAY 5** | | |
| Departure from Barcelona | 24:00 | 16:00 Sunday |
| Arrival in Mahon | 09:00 | 01:00 (Monday) |
| **MONDAY, MAY 6** | | |
| Departure from Mahon | 13:30 | 05:30 |
| Arrival in palma de Mallorca | 21:30 | 15:30 |
| **TUESDAY, MAY 7** | All day and night in Palma de Mallorca | |
| **WEDNESDAY, MAY 8** | All day and night in Palma de Mallorca | |
| **THURSDAY, MAY 9** | | |
| Departure from Palma de Mallorca | 03:00 | 19:00 (Wednesday) |
| Arrival in Ibiza | 07:00 | 23:00 (Wednesday) |
| **FRIDAY, MAY 10** | | |
| Departure from Ibiza | 02:00 | 18:00 (Thursday) |
| Arrival in Valencia | 07:00 | 23:00 (Thursday) |
| **SATURDAY, MAY 11** | | |
| Departure from Valencia | 00:00 | 16:00 (Friday) |
| Arrival in Barcelona | 09:30 | 01:30 (Friday) |

*(Continued from Page 18)*

**Table 5.** Employment in the port of Antwerp, 1985*

| | Cost of personnel (1000 B.fr.) | % | Employment | % |
|---|---|---|---|---|
| (1) Direct port-linked activities | | | | |
| (Shipping agents and forwarders, cargo handling firms, shipowners, import and export companies with facilities in the port, etc.) | | | | |
| Subtotal | 31,548,555 | 35.8 | 22,344 | 32.1 |
| (2) Industry in the port | | | | |
| Oil refining | 5,476,720 | 6.2 | 2616 | 3.8 |
| Chemicals and petrochemicals | 14,081,197 | 16.0 | 10,788 | 15.5 |
| Shipbuilding and repair | 6,820,686 | 7.8 | 6806 | 9.8 |
| Automobiles | 15,862,337 | 18.0 | 14,298 | 20.5 |
| Other | 4,685,494 | 5.3 | 4316 | 6.2 |
| Subtotal | 46,926,434 | 53.3 | 38,824 | 55.8 |
| (3) Public sector | | | | |
| State | 2,505,799 | 2.8 | 2307 | 3.3 |
| City | 3,485,157 | 4.0 | 3162 | 4.5 |
| Railroad company | 3,591,600 | 4.1 | 2993 | 4.3 |
| Subtotal | 9,582,556 | 10.9 | 8462 | 12.1 |
| Total | 88,057,545 | 100 | 69,630 | 100 |

*Source: Port of Antwerp.

Antwerp together with the Port of Antwerp Promotion Association and the Port of Antwerp Community, calculated that the port was responsible for 77% of the maritime exports of the BLEU; for direct employment of some 75,000 persons, 60% of whom live outside the municipal boundaries; an added value of some 205 billion B.fr. (1985) (including subcontractors); and payment of 75 billion B.fr. in taxes to the central government. The economic contribution of the port and the employment it generates are shown in Table 5.

## Conclusions

Port impact studies have drawn much response from researchers. They have been criticized for suffering from major theoretical defects. It is claimed that they attempt to measure the average magnitude of the hinterland income and employment per ton related to existing port facilities. There is no attempt to assess the marginal or incremental effect of changes in public investment in port facilities. They ignore the fact that the port is only one element in a large number of producing and distributing systems and attribute all the employment in the port to the existence of the port alone (WATERS, 1978).

On the other hand, opinions defending such studies have pointed out that they serve a purpose, although their application as a planning tool is severely limited. The primary objective of economic impact studies, according to such defenders, is to inform the general public of the importance of port services to the region's economy. This alone is not a small task for an economic good such as port services. The provision of socio-economic infrastructure generates external economies that are not readily visible to the general public and yet the expansion of port services requires public and political support (CHANG, 1978).

Port impact studies should not only be used to convince the national authorities of the role that ports play in the economy. They are also extremely valuable at the local level in order to create or maintain the spirit of a port community. People, because they do not normally pass the working piers, are cut off from the normal romance that exists between a city or region and its port. As a result, they are not aware of the numerous activities taking place along the waterfront: the arrival and departure of ships, the longshoremen discharging the cargo, the trucker picking it up, the freight forwarder handling it, the customs-house broker clearing it, the customs inspector looking at it, the banks financing the shipment, the insurance companies covering the transaction against damage—all of this activity takes place out of sight. A port, though, must be seen by its community as an

economic engine with a definable product and high economic value. Ports must demonstrate their economic importance to earn the support of their community, their states, counties and cities.

The importance of community attitude is well illustrated in a study on the port community of Antwerp (BAUDOIN and COLLIN, 1986) and a study on the evolution of the Antwerp economy (DE BORGER, 1986). In the Netherlands, it is known that the ports of Rotterdam and Amsterdam have lost traffic and industries because of a negative community attitude: consequently, it was therefore argued that an attempt had to be made to fit community influence into general concepts of economic development. It is now well established that the perception and the attitudes of individuals are vitally important in the decision-making process (SOFFER, 1982). Published data and impact studies can contribute to the formation of community attitudes but usually much more is needed. What is required, in effect, is the 'maritimization' of the urban mentality.

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*International Maritime Information*

# WORLD PORT NEWS

## New Publications

### Structural Changes in Ports and the Competitiveness of Latin American and Caribbean Foreign Trade

By the United Nations Economic Commission for Latin America and the Caribbean. Cuadernos de la Cepal No. 65. (Santiago, Chile: 1990). Available in English or Spanish. 126 pages. Bibliography. Order from: Distribution Unit, CEPAL — Casilla 179-D, Santiago, Chile, or United Nations Publications, Sales Section — DC-2-866, New York, NY 10017. Price: n/a.

This fine study analyzes port activity in terms of legislation, experience, the market and technology with the objective of improving the competitiveness of the foreign commerce of Latin America and the Caribbean. After an historical review of international trade since 1492, it continues by describing a "composite Latin American and Caribbean port" that serves as a model to illustrate common infrastructural, operational and institutional problems facing the region's governments, port administrations and the receivers of port services. The Latin American/Caribbean situation is considered in terms of international trends in shipping and trade—the globalization of international commerce, revolutionary change wrought by intermodalism and information technology, modern cargo handling methods, the privatization of public enterprise, and relevant experiences of ports throughout the world.

The situation at the composite port is described as "difficult and, at times, chaotic, with an excess of regulations controlling every activity" and a militant, monopolistic, "over-dimensioned," and strike-prone work force. In brief, "the majority of the institutional problems facing Latin American and Caribbean ports are a consequence of the conflicting economic goals, labor agreements and legislation under which they are required to operate."

Excessive port costs and poor productivity, the report warns, can seriously undermine the competitiveness of a country's exports, unnecessarily inflate the cost of imports, discourage investment, and increase national unemployment.

The region's ports "must be freed from the constraints of an overregulated, centralized and public sector dominated commercial environment." They must increase productivity, contain costs, and become "an integral and, therefore, larger part of the commercial customers they seek to serve." In fact there is little choice, for "in a fiercely competitive global economy there is no way that the fragile links between producers and consumers can tolerate ports which are costly, inefficient and unproductive." The Chilean port experience is cited as an example of the benefits of meaningful economic and institutional reform.

*(AAPA Advisory)*

### The Ratification of Maritime Conventions

Edited by the Institute of Maritime Law, University of Southampton, England.

Published by Lloyd's of London Press ISBN 1-85044-301-7. Looseleaf. Final extent 2,408 pp. Price £385.00 incl 1991 service issues.

The Ratification of Maritime Conventions is a major looseleaf work giving the full text of all international maritime Conventions and their ratifications, with expert commentary.

The work is published with the Institute of Maritime Law, University of Southampton — to whom Lloyd's of London Press has provided a substantial four-year research and development grant to help fund the post of information officer — and in consultation with the International Maritime Organisation.

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### The Costs of Waterfront Unreliability in 1988

BTCE Occasional Paper 101. Australian Government Publishing Service, Cat. no. 90.2399 2. RRP $16.95.

The Bureau of Transport and Communications Economics has released Occasional Paper 101, *The Costs of Waterfront Unreliability in 1988*. This paper provides details of the costs incurred by ship operators, exporters and importers due to unpredictable delays in moving goods through Australia's ports in 1988. The data for the study were obtained through a major survey of shipping companies, exporters and importers. The study demonstrates that the costs incurred as a result of unreliable waterfront performance are far greater than the costs of poor productivity per se.

The book is available from Commonwealth Government Bookshops in all State capital cities and in Canberra, or by mail order from the publisher:

AGPS Mail Order Sales
GPO Box 84
Canberra Act 2601

## The Americas

### 1990: Record Year for Port of Halifax

The Port of Halifax ended 1990 with record cargo tonnages for the fifth consecutive year. Port traffic totalled 17.3 million metric tonnes which represented a 3% increase over 1989. Total container tonnage also rose for the fifth straight year surpassing the 3.9 million tonne mark. Roll on/roll off and miscellaneous general cargo grew by 12% to over 550,000 tonnes in 1990 and total bulk traffic (crude and refined oil, grain and gypsum) was up 3% to 12.8 million tonnes.

The Port of Halifax welcomed 33 cruise ship calls and 24,423 passengers in 1990 (up from 24 calls and 17,152 passengers in 1989) reflecting the increasing attractiveness of the metro area and the Province as a cruise destination. With the Port anticipating 51

vessels calls and over 37,000 passengers, 1991 is expected to be an exceptional year for cruise business.

Container traffic at the Port of Halifax has doubled since 1985 and Halifax handles more Canadian originating and destined container traffic than any other port. With over 30 container lines, the Port of Halifax now has more sailings to more trade routes than any other port in Canada.

The Port of Halifax's success in recent years is largely attributable to its highly skilled and stable work force and its natural assets: deep water which can accommodate the increasing size of the world's fleet, minimal tides, and year-round, ice-free status. The Port's strategic location in close proximity to major shipping lanes, combined with its excellent intermodal connections, makes it an ideal gateway for Canadian overseas trade.

## Montreal: Containerized Cargo Traffic Record

A record 5.8 million tonnes of containerized cargo traffic, a marked improvement in grain movements, a net income from operations of $3.6 million, and a net income of $10.8 million are the highlights of the Port of Montreal's 1990 operating results.

Total traffic handled at the port increased by 1.3 million tonnes or 6.5 per cent to reach 21.7 million metric tonnes in 1990.

The general manager and chief executive office of the Port of Montreal, Mr. Dominic J. Taddeo, gave a positive summary of the operating results for 1990, a year that nevertheless was not easy "especially with a grain sector that was still sluggish, fierce competition that has turned the containerized cargo market into a real free-for-all, and the effects of the recession during the second half of the year."

"Despite these difficulties, the Port of Montreal did very well for itself, registering very satisfying results and even setting a record in the containerized general cargo category," Mr. Taddeo said.

The chairman of the board, Mr. Andre Gingras, congratulated everyone involved in port activity, and in particular the shipping lines engaged in the container trade "who brought containerized cargo traffic to a new record while increasing the Port of Montreal's share of the market in this sector."

The Port of Montreal is by far Canada's number one container port and a major player on the North Atlantic.

### 1990 Financial Results

- Revenue from operation: $55.6 million, an increase of $2.6 million or 4.9 per cent.
- Operating and administrative expenses: $52 million, a decrease of $2.8 million or 5.1 per cent.
- Net income from operations: $3.6 million, compared with a loss of $1.8 million in 1989, the only loss of the 1980s.
- Net investment income: $7.2 million, an increase of $200,000 or 2.8 per cent.
- Net income: $10.8 million, an increase of 5.6 million.
- Capital expenditures: $22.9 million.

## Port of Nanaimo Joins Drug Battle

The Nanaimo Harbour Commission has joined the the Pacific Coast Association of Port Authorities (PCAPA) in a drug awareness program.

Mr. Jack Fyfe, chariman of the Nanaimo Harbour Commission said the program is aimed at limiting the opportunities for illicit drug imports through Canadian ports.

To that end, an agreement has been signed between the Commission and the Nanaimo RCMP for a local drug awareness and alertness program aimed at tightening the net around any possible drug imports on vessels coming in to the Port of Nanaimo. Both Mr. Fyfe and RCMP Inspector Dennis Brown said there has been no evidence in the past of any drug problem at the local port. They said the new program will train Port staff in recognizing clues which might point to illicit drugs.

"Our staff will be trained on what to look for to identify any possible drug smuggling activity, but they will not become involved directly in policing or investigative actions," Mr. Fyfe said. "They'll report any suspicious situations to the RCMP Drug Squad," he added.

Inspector Brown said the Nanaimo RCMP Detachment will co-operate fully with Port authorities and is fully supportive of the Port Drug Awareness Program through a team effort.

*(Nanaimo Harbour News)*

## Another Record Year For Alaska Cruise

With the October 14th (1990) departure of *Rotterdam,* the Port of Vancouver concluded its eighth consecutive record Vancouver-Alaska cruise season, according to figures released by the Vancouver Port Corporation (VPC).

The number of sailings increased 18.2% to total 228, boosting the revenue passenger count to 388,323 — a 16% increase over previous year's total of 333,189.

Increased vessel capacity and intensified marketing efforts by cruise lines accounts for much of the increase, according to VPC Acting Port Manager Captain Norman Stark.

"The cruise lines see terrific potential in the Vancouver-Alaska cruise market, and they have been working hard to mine it," commented Captain Stark. "Their efforts, supported by the marketing efforts of the Port, the City, and the Province have really paid off," added Captain Stark, pointing to an increase over the '89 season of over 50,000 revenue passengers.

This year, VPC and Tourism Vancouver combined forces to successfully bring nearly one thousand cruise selling travel agents to Vancouver for Travel Trade's twice-yearly "Cruise-A-Thon" convention. Next year, VPC, Tourism Vancouver and Tourism B.C. will team up to present "Pacific Travel Mart '91" — a B.C./Alaska Cruise and Tour Conference intended as an annual September event.

Captain Stark concluded his comments by paying tribute to the excellent 'cruise team' in the Port of Vancouver.

"From the longshoremen who load the bags and supplies, to repair workers who service the ships, to the companies who supply the ships with flowers — everyone can share in the credit for a successful season, and for our growing reputation as a cruise port."

Another strong performance is projected for the '91 season, tentatively scheduled to open in early May.

## US to Investigate Japan Shipping Practice

The U.S. Federal Maritime Commission on October 18, 1990 issued an order pursuant to the Foreign Shipping Practices Act of 1988 ("FSPA") and the Shipping Act of 1984 ("1984 Act") requiring U.S.-flag and Japanese-flag carriers to provide information on an expedited basis concerning shipping conditions in the trade between the United States and Japan.

The particular focus of the Commission's inquiry is a fund established by the Japan Harbor Transportation Association ("JHTA") which is known as the Harbor Management Fund ("Fund"). According to press reports, the JHTA has since October 1989 levied a charge upon U.S. and other carriers serving Japanese ports which is paid into the Fund and which appears unrelated to any maritime service provided to U.S. carriers. Under the FSPA, the Commission is authorized to investigate and take corrective action against any foreign shipping practice that has an adverse effect upon the operations of U.S. carriers. Such corrective action could be imposed against Japanese-flag carriers and could include tariff or agreement suspension, denial of access to U.S. ports, or fees of up to $1,000,000 per voyage.

Carriers served with the Commission's order have until November 20, 1990 to supply the information required by the order. In addition, the Commission has sent letters to the U.S. Departments or State and Transportation requesting information and their assistance in resolving issues surrounding the Fund. The Commission will also publish a notice in the Federal Register inviting interested persons to comment by November 20, 1990 on the impact of the Fund on shipping services in the Trade.

The Commission intends to use the information obtained from carriers and other sources to determine whether further action under the FSPA is warranted.

*(News: Federal Maritime Commission)*

## 650 NY/NJ Dockers File for Pension

Approximately 650 longshoremen filed for retirement during a 60-day window period that expired on Jan. 31, 1990, according to the New York Shipping Association and the International Longshoremen's Association, AFL-CIO.

The tally accounts for more than 15% of the longshore labor force in the Port of New York and New Jersey.

Included are about 600 dockers who qualified for a special-incentives program in the new NYSA-ILA contract, 30 who filed for disability retirement and 20 who sought vested-interest pensions.

The special-incentives program was set up by the 1990-94 labor contract in a continuing attempt to reduce port costs by bringing the size of the work force into balance with the needs of the work place. The program provided increased benefits to men who retired during the window period or who declared their intention to retire when they became qualified later in the contract period.

"We're gratified at the numbers. This is a solid response to a good program," said NYSA President James A. Capo and ILA President John Bowers.

The two leaders said they planned a thorough review of program results before commenting further.

At the time the new contract took effect on Dec. 1, 1990, there were 4,095 active dock workers in the port. Four years earlier, the total was about 7,500.

## Corpus Christi Tonnage: New Record Set

For the third year in a row, Port of Corpus Christi Authority tonnage has surpassed record-breaking levels, as more than 71.4 million tons of cargo moved through the port in 1990. According to port officials, the figure represents an increase of 3 percent over last year, surpasses the previous all-time high of 69.4 million tons in 1989, and marks the eight consecutive year of increased growth at the port.

Petroleum continued as the top commodity, making up 79 percent of the total tonnage. More than 56.4 million tons of petroleum moved through the Inner Harbor and Ingleside divisions, an increase of over 1.7 million tons, or 3 percent over 1989. Dry bulk shipments rose 4 percent over the previous year, and accounted for 11 percent of total port tonnage. More than 8.1 million tons of dry bulk commodities moved through public and private facilities during the year. Chemicals ranked third, at over 5.7 million tons, and also registered a 4 percent increase over 1989. The largest increase, 33 percent, came in breakbulk shipments.

According to Port Executive Director Harry G. Plomarity, the record year can be attributed, in part, to increased marketing efforts, especially in the breakbulk category. Also, the port continues to go forward with diversification efforts which were put into place several years ago.

"Petroleum, traditionally our leading commodity, is continuing to increase at a healthy rate. And, our dry bulk shipments have continued to grow, providing a steady source of revenue for the port," says Mr. Plomarity. "Also, business with Mexico continues to expand. Our efforts are paying off in terms of an increased customer base and a wider commodity potential."

Highlights of 1990 included:

- Dedication of the port's new $3 million Cargo Dock One/Open Pavilion.
- Opening of the Laredo-Corpus Christi Infocenter in Monterrey, Mexico.
- Construction contract awarded for Dock 13, the port's $14.4 million multipurpose cargo facility. Completion is expected in early 1992.
- Port Commissioners authorized a master plan for expansion of the port's Bulk Terminal facility and commissioned two feasibility studies—one addressing the concept of an onshore deep draft oil terminal (SAFEHARBOR), and another relating to North Europe container service.
- Constructed a new seed treatment facility, which enables the port to more effectively compete for bagged cargo.

A total of 887 ships and 5,074 barges called the port's four divisions during 1990.

The Port of Corpus Christi is currently ranked by the U.S. Army Corps of Engineers figures as the sixth largest port in the United States. It ranks third in import tonnage.

## New Executive Director Of Port of Long Beach

The Long Beach Board of Harbor Commissioners on February 19 announced the appointment of Mr. Steven R. Dillenbeck as executive director of the Port of Long Beach.

The decision was reached following a rotation schedule which permitted each of the port's managing directors to serve temporarily as acting executive director.

*Mr. Dillenbeck*

Board members said it was necessary to name a permanent director due to the port's important role and increasing involvement in various projects which have a substantial impact on both the port and the City of Long Beach.

"The board also felt that the appointment of a permanent executive director was necessary for greater harmony and continuity," said Mr. C. Robert Langslet, president of the Board of Harbor Commissioners.

"The board has been very impressed with the qualities of each of the managing directors," said Mr. Langslet. "However, with more than one billion dollars in properties under lease and an extensive land acquisition program under way, it was felt that Dillenbeck's background and experience particularly qualified him for the position.

## Versatility Enhanced at North Locust Point

The versatility of the Port of Baltimore's North Locust Point Marine Terminal increased dramatically with the arrival of a 40-long-ton container crane from the Dundalk Marine Terminal.

The Maryland Port Administration moved the crane, one of ten container cranes at Dundalk, to improve North Locust Point's ability to handle containerized cargo and to enhance the facility's steel-handling capability.

"The arrival of this container crane creates many new opportunities for increased cargo activity at North Locust Point," said Mr. Brendan W. O'Malley, executive director of the Maryland Port Administration. "It will allow for the more efficient loading and unloading of containers, but more importantly, North Locust Point now has everything in place to serve as an excellent steel-handling facility."

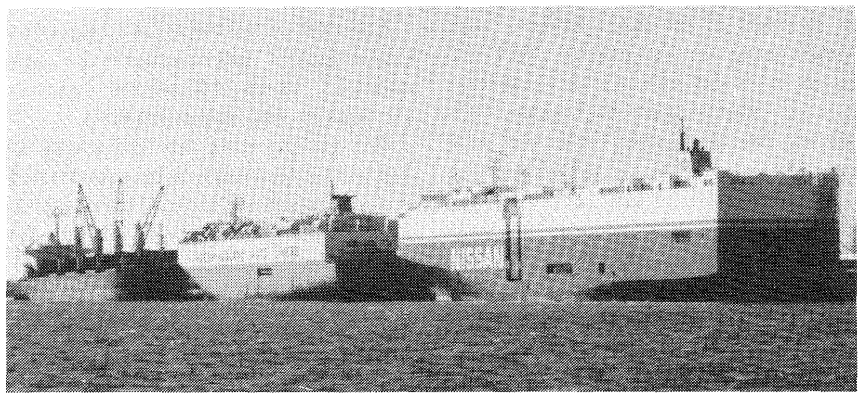
## New Orleans Shows Strong Container Growth

The Port of New Orleans has the highest growth rate in container traffic among the major container ports on the U.S. Gulf, according to an analysis by the Port Import/Export Reporting Service of New York, a division of the Journal of Commerce.

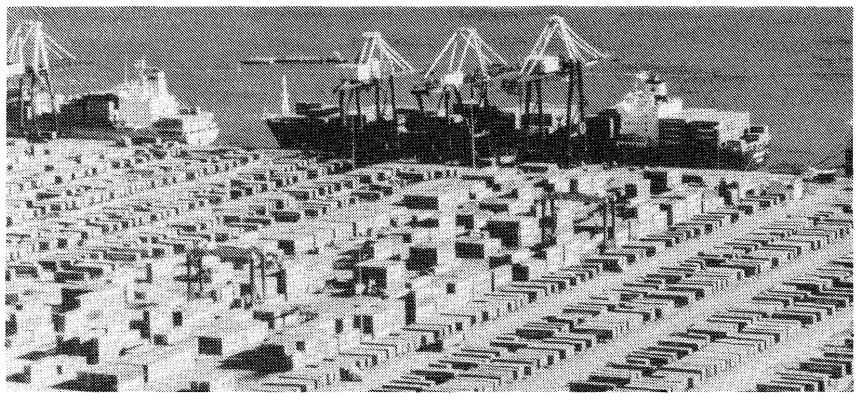
The figures, year-to-date through November 1990, reveal that container traffic at the Port has grown 12 percent when compared with the same period a year earlier.

Nationally, the Port has the fourth-highest growth rate in container traffic among the top 15 container ports in the nation. The Service calculates that the average national rate of growth for container traffic is 3 percent.

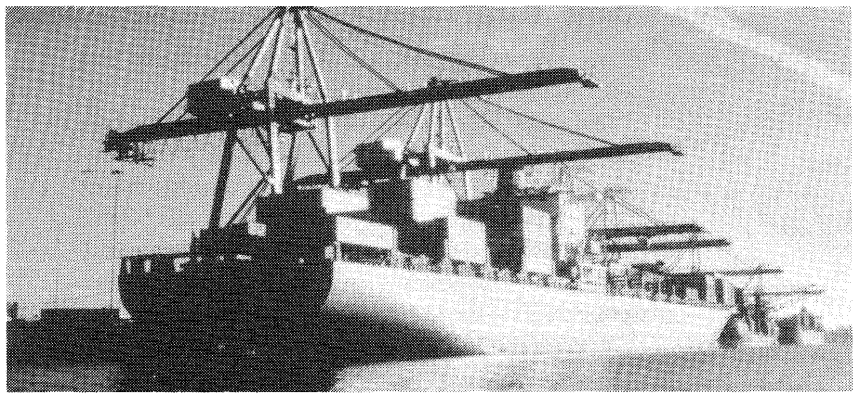
## PORT OF CHARLESTON



**Union Pier Terminal:** The Port of Charleston's Union Pier Terminal is the primary location for roll-on/roll-off (ro/ro) cargo, wood pulp, and forest products. Less than 30 minutes from the harbor entrance, Union Pier provides rapid turnaround for pure car carriers and breakbulk vessels alike. Dual access transit sheds are served by both rail and truck, with the added attractive feature of drive-off/drive-on rail service for ro/ro shipping.



**North Charleston Terminal:** North Charleston Terminal is a fully modernized facility for container operations. Recently redesigned, features at North Charleston include six container cranes (three of which are of post-Panamax specifications), over 180 acres of container back-up space, and intermodal interchange facilities on-terminal.



**Second Only to NY/NJ:** The Port of Charleston is the second largest container port on the East Coast of North America, second only to the combined ports of New York-New Jersey. Over 60 steamship lines — including four of the largest in the world — call Charleston providing service to over 120 countries.

## N. Carolina Executive Predicts Progress in '91

If 1990 was the year of the turnaround for the North Carolina State Ports Authority, then 1991 could well be the year of progress, according to Ports Authority Executive Director James J. Scott, Jr.

With major expansions completed at both the Morehead City Terminal and the Wilmington Terminal, in 1991 the N.C. Ports stand ready to receive new business. "We have been negotiating with several steamship lines for additional service," Mr. Scott said, "but we have nothing firm to announce at present."

New steamship service announced in 1990 includes the space chartering agreement between Yangming Lines and Hianjin Shipping Company. The first call to Wilmington will be made in March 1991. The combined carrier service brings increased frequency and additional capacity to N.C. Ports customers. Service between east coast South America and Wilmington is now being provided by the Copenhagen-based shipping company, Lauritzen Reefers A/S. And, Safbank Line, Ltd. is now advertising its call to Wilmington for service to South and East Africa.

1991 also will present capital project requests to the North Carolina General Assembly for funding. Major items in the Ports Authority plan include an extra transit shed with chiller capabilities for forest products and fruit for Wilmington, plus development of a marine terminal at Radio Island in Morehead City. The N.C. legislature will also be asked to consider a possible tax credit for exports through the N.C. Ports.

In line with the long range planning at the N.C. Ports, environmental issues pertinent to land development for expansion will figure prominently at both ports in 1991.

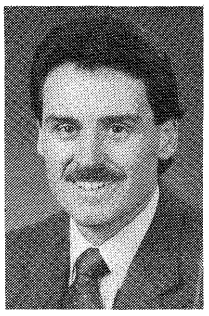
Finally, Mr. Scott expects the stability achieved at the Ports Authority during 1990 to continue during 1991. "Our structural organization now is such that we have direct lines of communications between the Board of Directors, the executive staff and the employees," Mr. Scott said. "We have laid a good foundation to enable us to meet the objectives set forth in our

strategic plan."

*(North Carolina Ports)*

## Mr. McCarthy Elected Tacoma Comm. Pres.

Port of Tacoma commissioners have elected Mr. John McCarthy to a one-year term as president of the Port of Tacoma Commission succeeding Ms. Pat O'Malley. The election was held at the Commission's first meeting of 1991.



*Mr. McCarthy*

Mr. McCarthy served previously as vice president of the five-member commission. First elected in 1983, Mr. McCarthy is an attorney in private practice in Tacoma.

For five years, he was an active participant in settling land claims with the Puyallup Indian Tribe, the most comprehensive settlement of its kind in U.S. history.

In 1990, the Puyallup Indian Tribal Settlement was implemented, which includes money for the replacement or removal of the Blair Bridge. "The major focus for the Port in 1991 will be to work on terminal development for the Upper Blair Waterway," explained Mr. McCarthy. "We will seek new shipping business to expand the number of good paying jobs in Pierce County and to enhance our international reputation."

Another priority for Mr. McCarthy will be to get the Port, as well major companies doing business with the Port, working together on Pierce County's future. "I want to expand the Port's role throughout Pierce County by becoming a better neighbor to smaller communities and local governments. We will also be working to encourage maritime companies that do business at the Port to take a more active role in the development of other Pierce County activities."

Other Port Commission officers elected were Ned Shera, vice president; Jack Fabulich, secretary; and Robert Earley and Pat O'Malley, assistant secretary.

## Port of Seattle Plans To Expand Terminal 18

The Port of Seattle is planning some major facility improvements at Terminal 18, which will expand capacity for existing and new customers.

The project calls for two tracks of over 4,000 feet each to be constructed at the terminal on Harbor Island, which would double the ability to handle double-stack intermodal railroad cars. A modified and expanded entry gate at the north end of the terminal will be added, as well as a modified main gate to insure that all truck traffic is off city streets. Additionally, a tank farm complex and other structures will be relocated to expand the terminal by approximately four acres.

These changes will enable the Port to increase its intermodal distribution capability by allowing more intermodal double stack trains on-dock, with the ability to handle more containers, thereby enhancing the Port's position as the number one Pacific Northwest container gateway.

The project will take less than 15 months to finish, with completion slated

for the spring of 1992. Port studies show that there will be an increase in container trade in the coming years, and Port officials are enthusiastic about the current developments.

"The Port had a record year in 1990, and we feel these planned improvements will bring new international trade to the region," said Mr. Frank Clark, director of the Port's Marine Division. "We feel optimistic that the quality of our facilities, and our working relationship with labor and the local transportation community will continue to serve the region well in the future."

## Africa/Europe

## EC Examining Japan Harbor Tax

The EC Commission has just opened an examination procedure against Japan on illicit trade practices, concerning the imposition of a harbour tax aimed at funding the Japan Harbour Management Fund, created in November 1989. The Commission's procedure is launched under the scope of the New Trade Policy Instrument (NTPI), created in 1984, and which strengthens the collection of trade defense instruments available to the Community (anti-dumping, anti-subsidy, surveillance, safeguard mechanisms). It aims at facing any illicit trade practice by third countries and which causes injury to Community industry, both in the community and in export markets.

The complaint has been filed by the European Community Shipowners' Association (ECSA), that groups around 90% of EC shipping companies serving Japan.

The ECSA submission claims that the revenue derived from these taxes will be used for the creation of a 'Harbour Management Fund' for the stated purpose of ensuring a stable supply of dock labour and for updating and modernising the Japanese inland distribution system. It is also claimed that the creation of this Fund has been authorised and guided by the Japanese Government, even if funds are collected by the Japan Harbour Transport Association.

ECSA claims in particular that the imposition of this harbour tax constitutes an illicit trade practice for the following reasons:

- Shipping lines are forced to contribute towards a Fund which purpose is to ensure a stable supply of dock labour and to construct inland distribution centres which will bring no commercial benefit to EC shipping companies;
- The harbour tax imposed by the Japanese is discriminatory in that the tariff operates in tow levels—the first for all shipping companies who carry international export/import cargo to and from Japan; and the second, 75% lower, for Japanese domestic carriers who operate in coastal cabotage.

Regarding injury, the complaint underlines in the first place that if the EC shipping companies accepted in principle to pay this harbour tax imposed by the Japanese, it was only because failure to do so would have created considerable problems and uncertainty regarding the ability of ships to load and unload in Japanese ports. This would have seriously disrupted and restricted a shipping company's normal commercial operations.

On the other hand, the claimants asserted that the payment of this tax will result in increasing the costs of shipping companies serving Japan. The amount paid by EC shippers represents around 10% of the total of duties received by the Japan Harbour Transport Association in the period October 1989-March 1990, or US$4.5 million per year. It has not been possible to fully pass these costs on to their customers. It is finally underlined that the imposition of this tax risks having a negative effect on EC-Japan relations.

*(EC News)*

## Marseilles and Shanghai Agree to Cooperate

An agreement to cooperate on technical and experience exchanges has just been signed at Marseilles between the Port of Shanghai and the Port of Marseilles Authority. Engineering, training and technical assistance projects will strengthen the ties between the two ports.

For the PMA, the port agreement follows six years of privileged relations with the Chinese port and forms part of a series of protocols signed between the mayors of Shanghai and Marseilles in October 1987 and August 1990. Mr. M. Kleftstad-Sillonville, technical director of the PMA, took part in this summer's Marseilles delegation.

*(Marseilles/Fos Europort South)*

## Port of Rouen: Breadbasket of Europe

The Port of Rouen's 1989-1990 cereal export campaign figures confirm its stature as Europe's leading cereal export port and the world's leading wheat export port. One of the Port's assets is its location in France, the breadbasket of western Europe.

French grain harvests account for one-third of EEC cereal. French farmers cultivate cereals on 100,000 km², nearly 20% of the country's national territory. Wheat, at thirty million tons, is the biggest crop.

France is the second-largest grain (wheat, barley, corn, etc.) exporter in the world and the leading flour and malt exporter. The country exports 60% of its grain. This export trade yields a 30 billion franc surplus in the French balance of payments.

The grain sector, in France, employs 150,000. This figure includes those employed in the grain transport sector. Cereal exports are one of the most important activities at the Port of Rouen, whose volume of cereal export traffic has increased, in the past decade, from four to nearly nine million tonnes each year.

With one billion additional mouths to feed between the present and the year 2000, agricultural yields must increase proportionately. Grain harvests will necessarily yield bigger crops. Cereals are omnipresent in food and account for, by far, the highest volume of international trade. And this volume of trade should increase, even if the Soviet Union and Eastern European imports decline. Between the present and the turn of the century, Africa and Asia will become major French grain export markets.

Grain by-products are increasingly used in the paper, chemical, pharmaceutical and cosmetic industries. This factor will create new markets and higher demand for cereals.

The Port of Rouen, ideally situated

in Europe's breadbasket, is meeting the challenges of the present and is making investments to be in a position to handle even higher volumes of cereal traffic in the future. *(Rouen Port)*

## Limerick: Request for EC Structural Funds

In accordance with their ongoing policy of improving facilities in the port and harbour, the Commissioners have submitted a request for EC Structural Funds to carry out a major development programme over the next five years. This includes:

- The first phase deepening of the channel to accommodate vessels of 250,000 dwt in 1991.
- The second phase deepening of the channel for vessels of 400,000 dwt in 1994/1995.
- The provision of improved navigational aids.
- The provision, possibly in joint venture with private interests, of a multiuser bulk facility for 150,000 dwt vessels in the Estuary.
- Development jointly with the E.S.B. of transhipment facilities at Moneypoint to maximise the use of the terminal in the national interest.
- Improvement of facilities at Dernish Oil Terminal (Shannon Airport) to provide greater safety and operational efficiency.
- Improvements in Limerick City Docks including the provision of extra covered storage, remedial works to quays, the updating of cranage facilities, the development of dock properties, the replacement of floating plant as well as general refurbishing and renewal work.

The total cost of this Capital Development Programme is estimated at £26 million of which approximately half is being sought from EC Structural Funds.

In common with other ports throughout the country, Limerick is still waiting for an official response to its application for EC Structural Funds.

The delay in dealing with these applications is incomprehensible, suggest the Commissioners, having regard to the repeated warnings from ministerial sources that, if this country is to survive and prosper in the post 1992 era, efficient and low cost transport, including port facilities, are a vital necessity having regard to our peripheral situation and the lack of direct road or rail links with the Continent.

*(Shannon Shipping News)*

## Gothenburg Sets Cargo, Container Records

Last year, the Port of Gothenburg enjoyed the highest increase in cargo turnover since the late 70s. With an increase over 1989 of eight percent, the port's total turnover reached 26.1 million tons. Container traffic set a new record at 352,000 TEUs.

General cargo volumes, units as well as break-bulk, were eight percent up from 1989 to 9.1 million tons, evenly distributed between exports and imports. Deep-sea liner goods was up 6 percent, short-sea 10 percent.

With 351,633 containers (TEU) handled, 1990 was a record year for the Port of Gothenburg. The figure includes empty containers. The figure for containers with a load was 287,388 TEUs, representing a 7 percent increase over 1989.

Unit-loads as a whole (containers, flats, lorries, trailers, and semi-trailers) reached 753,376 units in 1990, which means that 87 percent of Gothenburg's general cargo imports and exports were unitized.

Oil traditionally has two-thirds of Gothenburg's cargo volumes, and last year was no exception: 16.5 million tons of crude and refined oil were handled. Imports and domestic cargoes were up, while exports were down. In all, oil increased by 6.4 percent.

# Asia/Oceania

## Port of Gladstone: 1989/90 Highlights

*(Extract from 'Gladstone Port Authority Annual Report 1989-1990')*

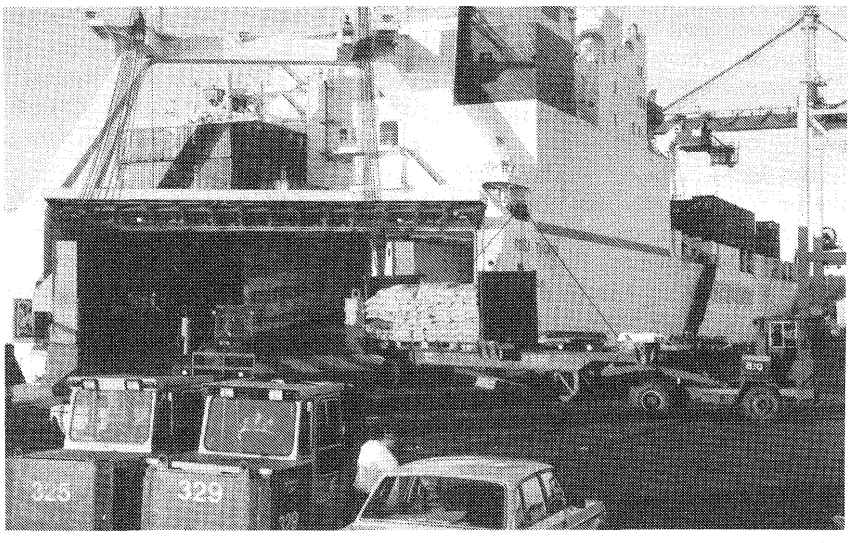
- Three-year Port Development Plan on line
- Record cargo of 29.57 million tonnes (the fifth consecutive record year)
- Clinton Coal Facility expansion
- First 100 million tonnes of coal shipped through Clinton Coal Facility (operations commence April 1980)
- Marina expansion and Fishermen's Facilities progessing
- Satisfying financial result
- Celebration of 75 years' Port operations 1914 to 1989
- Introduction of new cargoes to serve new and expanded port industries

### Functions of the Authority

The Gladstone Port Authority is a Corporation constituted under the Harbours Act 1955-89 (a statute of the Queensland Parliament). The prime function of the Authority is to control and manage Gladstone Harbour. In carrying out its functions, the Authority, inter alia:-

(a) consturcts, maintains and regulates Port facilites including small craft facilities;

(b) constructs and maintains shipping channels within the Harbour;



*Port of Gothenburg, Sweden*

(c) provides port land by way of acquisition of existing land and by reclamation of land below high water mark;

(d) regulates the use of Port lands;

(e) operates bulk coal loaders at Clinton and Auckland Point, and bulk grain shiploaders at Auckland Point;

(f) promotes the Port of Gladstone and encourages its use for export and import trades.

## Port of Geelong Strategic Overview

*Mission: To meet the needs of Stakeholders by ensuring the provision of a market led, commercially based Port service as part of the transport net work.*

**Introduction**

In mid-1990 the Port Authority embarked on a re-evaluation of its strategic directions. The resultant strategic plan follows a number of months of discussion and consultation involving management and Port Stakeholders. The plan states the Authority's mission, that is its global ongoing focus. It breaks down the mission statement into corporate objectives, developed following a detailed analysis of the Authority's strengths and weaknesses and the opportunities and the threats posed by the environment in which the Authority operates. Whilst not included in this overview, the corporate objectives have been broken down into detailed departmental objectives to ensure that all areas of the Authority are clearly aiming their endeavours at achieving the corporate objectives.

**Background**

The Inter-State Commission enquiry into the Waterfront remmended that Australian Port Authorities pursue operational changes to strengthen their commercial performance. The State Government has an objective for its trading enterprises to operate in a commercial and viable manner. This corporate plan has been developed with the clear assumption that the Authority is a commercial enterprise, expected to privide a profit and a satisfactory return on its assets.

**Stakeholders**

There are many organisations, groups and individuals who have vested interests in the activities and services provided by the Port of Geelong Authority. These groups are the Authority's Stakeholders. The Corporate Plan represents a balancing of the needs of the Authority Stakeholders.

**Overall Objective**

The PGA's aim is to operate a successful business ensuring —

- A standard of excellence in the provision of service to customers, shipping companies, exporters and importers.
- Strong financial performance — a minimum 4% return on the written down current cost of assets in service.
- A progressive, safe working environment for employees.

The PGA will play a leading and proactive role in implementing industry reforms, from a regional port perspective.

**Corporate Objectives**

The objectives of the Authority, developed through the strategic planning process, fall under the following headings.

- Target Market
- Service/Cost
- Consultation
- Employees
- Capital Investments
- Productivity
- Services
- Associated Ports

**Target Market:** Objective — To target the bulk and special cargo markets. The Port of Geelong's geographical position, abundance of land, specialist equipment and its ability to develop new facilities makes it an ideal port for the handling of bulk and special cargoes and for the development of port related industries in close proximity to the Port. The PGA will continue to look for profitable ways in which to develop these target markets through consultation with prospective users.

**Service/Cost:** Objective — To concentrate on the provision of quality service at low cost.

Australia is under increasing pressure to reduce costs in order to be competitive in overseas markets. Bulk cargoes, in particular, are highly sensitive to minor fluctuations in costs. The PGA will be concentrating on providing a quality service at the lowest possible cost.

**Consultation:** Objective — To regularly consult with Shippers and other Stakeholders and to continually work towards providing for their needs.

The PGA will continue to consult with Stakeholders through the, importer/exporter represented, Shippers group and the more widely represented Stakeholders group as well as through as many other channels as is necessary to ensure adequate consultaiton.

**Employees:** Objective — To provide a progressive safe rewarding working environment for employees.

The success of the PGA is synonymous with the achievements of its employees. The PGA is aiming to develop a flexible, multi-skilled work force with a classification framework providing opportunities for career advancement, increased training and a greater commitment to the provision of the safest possible working environment.

**Capital Investments:** Objective — To invest in assets that will improve service quality, productivity and profitability.

Capital investments must be able to satisfy customer needs at pricing that will provide a satisfactory, profitable return. Extensive consultation, prior to the commitment of funds, will take place to ensure that the above criteria will be satisfied.

**Productivity:** Objective — To implement work practices that improve productivity and service quality.

Management and employees will work together to provide a competitively priced service, balancing a permanent multi-skilled work force with external contractors and highly productive equipment.

**Service:** Objective — To provide a range of services within the transport network meeting the needs of customers on a profitable basis.

The PGA will, if opportune, move into related profitable transport activities that will facilitate the movement of trade through the Port.

**Associated Ports:** Objective — To provide a government funded Associated ports management service.

The PGA will continue to efficiently manage Associated Ports for the Government and will implement a user pays pricing policy.

**Performance Indicators**

The following performance indicators have been developed to measure the success of this strategic plan. As the PGA's new information system becomes fully functional, additional performance indicators will be developed.

| | 5 year Target | 1989/ |
|---|---|---|
| * Real return on written down current cost of assets | 4% | N/A |
| * Average berth occupancy — liquid | 30% | 24% |
| — bulk/general (excluding Pt. Wilson) | 33% | 24% |
| * Trade tonnes per employee (excluding Stevedoring employee) | 31300 | 27011 |
| * Operating expenditure per tonne of trade (excluding Stevedoring) in 1989/90 dollars | $1.51 | $1.76 |
| * Price Increases | Below CPI | |
| Overhead Expenses Increases | Below CPI | |
| * Average Ship delay due to unavailability of berth | 1 hour | N/A |

## Port of Melbourne: Mission and Objectives

*(Extract from 'Port of Melbourne Authority Annual Report 1989/'90)*

The Port of Melbourne Authority (PMA) is a statutory body first constituted under the Melbourne Harbour Trust Commissioners Act, 1876. It now operates under the Port of Melbourne Authority Act, 1958 and the Marine Act, 1988. The Authority is empowered to regulate, manage and improve the operations of the ports of Melbourne and Western Port along with certain portions of the Yarra and Maribyrnong Rivers.

In addition, under the Marine Act, the PMA is responsible for the administration of the Associated Pots, the maintenance and upgrading of navigational aids in all Victorian coastal waters, oil pollution control in all Victorian coastal waters, hydrographic surveying of Victorian ports and coastline, beach renourishment, and the construction and maintenance of recreational boating facilities provided by the State Government along the Victorian coast.

The PMA is responsible to the Minister for Transport.

### Mission and Objectives

MISSION STATEMENT

To ensure the provision of port and marine related services for the economic and social benefit of the Victorian Community.

OBJECTIVES

The PMA has four key corporate objectives:

SERVICE: Respond to stakeholders and ensure the delivery of safe, efficient and effective port, coastal and marine related services.

TRADE: Actively seek to develop trade which benefits the Victorian economy/community.

FINANCE: Operate a profitable and financially independent organisation.

HUMAN RESOURCES: Provide a safe and non-discriminatory work environment enabling the development of a productive, flexible and skilled workforce to meet organisational needs.

## Port of Townsville in profile

*(Extract from 'Townsville Port Authority Annual Report 1989/'90)*

### Constitution and Functions

LEGISLATION

The Port of Townsville is administered by Townsville Port Authority pursuant to the Harbours Act 1955-1989 (as amended).

STATUTORY OBJECTIVES

(i) The control and management of Townsville Harbour, all harbour works relating to Townsville Harbour or the Authority and belonging to or constructed by Townsville Port Authority.

(ii) The Board of Townsville Port Authority may do all such acts and things as may be necessary for or incidental to the discharge or exercise of any of the duties, powers, functions or authorities of Townsville Port Authority.

POWERS

Part III of the Harbours Act confers the following powers and duties upon the Board of Townsville Port Authority, briefly:-

- Entering into contracts.
- Management of harbours.
- Harbour lights, signals, buoys and beacons.
- Acquisition of lands, etc.
- Surrender to Crown.
- Sale of land.
- Rock, stone, shingle, gravel, sand and other materials.
- Protection of water frontages from erosion.
- Loading and discharging.
- Railways and roads.
- Stevedoring.
- Vessels.
- Private employment of Authority equipment.
- Wrecks, obstructions and damages.

FUNCTIONS

The Authority regulates Townsville Harbour to ensure the safe, efficient and cost effective movement of shipping cargo and passengers through the Port of Townsville for the benefit of all Port users and the community in general.

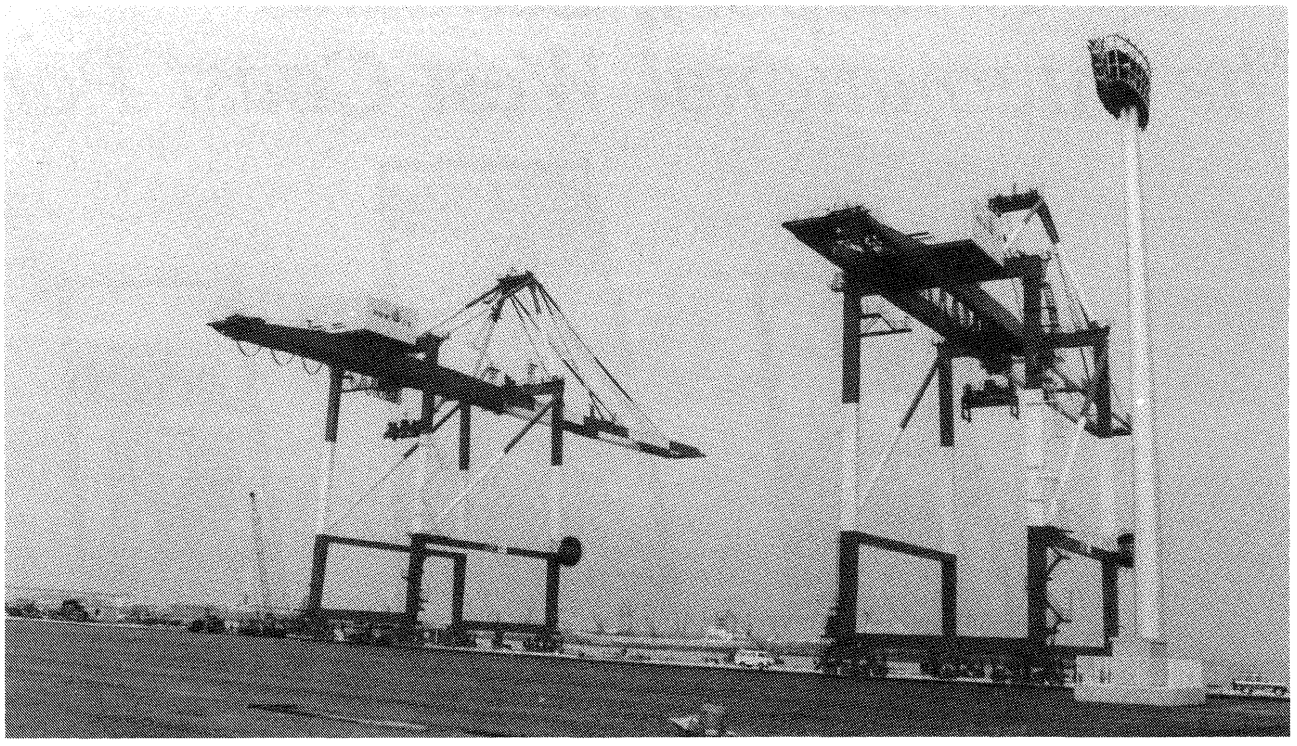
In addition to being a regulating body, Townsville Port Authority oversees the planning function and provides and manages Port infrastructure, including trade related facilities and services.

ECONOMIC AND SOCIAL GAINS

On 18th September 1990, the Hon. David Hamill, Minister for Transport and Minister Assisting the Premier on Economic and Trade Development announced a major study to gauge trade potential through the Port of Townsville to the year 2015. The Study will assist in formulating strategic plans for the Port and for the economic development of the Townsville region.

The Townsville Port Authority has always recognised that it has an important role to play in the continuing prosperity of the Townsville region and Queensland as a whole. To this end it has strived to promote the Port and the region directly and through membership of development bodies. In a social context, the Authority, through its employment and purchasing policies, contributes to local employment and commerce.

The Authority and the Department of Transport will be developing an



environmental policy for Port operations and future expansionary plans which is multi-disciplinary in nature and sensitive to local community aspirations.

The Townsville Maritime Museum continues to be generously supported by the Authority. An area of land in Palmer Street, South Townsville, is to be leased to the Townsville Seafarers Association for the new Maritime Museum to house exhibits from the regions's rich maritime history. Officers of the Seafarers Association, the Authority and Port users have formed a committee to raise the funds necessary to construct the museum complex.

## Seminar on Law of Sea Held at Noumea

The Seminar on the Law of the Sea and Marine Legislation was held at the Port of Noumea from 4th to 7th December 1990.

Participants from the Cook Islands, Kiribati, Solomon Islands, Papua New Guinea, Vanuatu, Noumea and Fiji attended the Seminar which was funded by the French Government.

The main objective of the Seminar was to familiarise the participants with the provisions of the new law of the sea and of the legislations relating to shipping and of the carriage of goods by sea.

The major areas covered were:

- The Need for Transport
- The Sales Contract
- Letters of Credit/Bill of Lading
- The Shipping Contract
- The Hague Rules
- Voyage Chartering
- Time Charter Parties
- International Conventions
- The Liabilities of Port Authorities
- The UN Conventions on the Law of the Sea
- The Exclusive Economic Zone and the Continental Shelf
- The Law of the Sea with regards to Navigation
- Marine Pollution

The two Lecturers to the Seminar were Mr. Sayed Hashmi from Pakistan and Miss Christine Alfsen from Thailand.

Wavu thanks the French Government for funding the seminar. *(Wavu)*

## *New Deep-draft Container Berth at Nagoya*

To cope with increase in container cargo (average annual increase rate is over 15 percent) and larger container ships entering the port, the Port of Nagoya has constructed a deep-draft container berth on the West-4 Section (No. 94 — pier length 350 m, water depth 14 m, with two post-panamax gantries), which will start operation April 1, 1991. Plans call for the construction of another deep-draft container berth at No. 93 just north of No. 94. This will complete the container terminal complex on West-4 which currently consists of the N.C.B. Terminal and No. 92 Public Terminal.

## 16th South Pacific Ports Association Conference

The 16th South Pacific Ports Association Conference was held in Noumea from 10th to 12th December 1990.

The Conference, hosted by the Port of Noumea, was attended by participants from Cook Islands, Kiribati, Solomon Islands, Papua New Guinea, Vanuatu, Noumea, Fiji, Australia and New Zealand.

The objective of the Conference is to promote regional cooperation, friendship and understanding between member ports and port users through mutual association, the exchange of knowledge and the dissemination of information useful to port administrators and also the promotion of measures to increase the efficiency and to facilitate the harmonious development of ports in the South Pacific Region.

*(Wavu)*

# *Clydeport, Scotland*
# *The International West Coast Port*

· *GLASGOW* · *GREENOCK* · *ARDROSSAN* · *HUNTERSTON* ·

*Capitalise on the superb location and unrivalled facilities on offer within the Clyde Port Authority jurisdiction.*

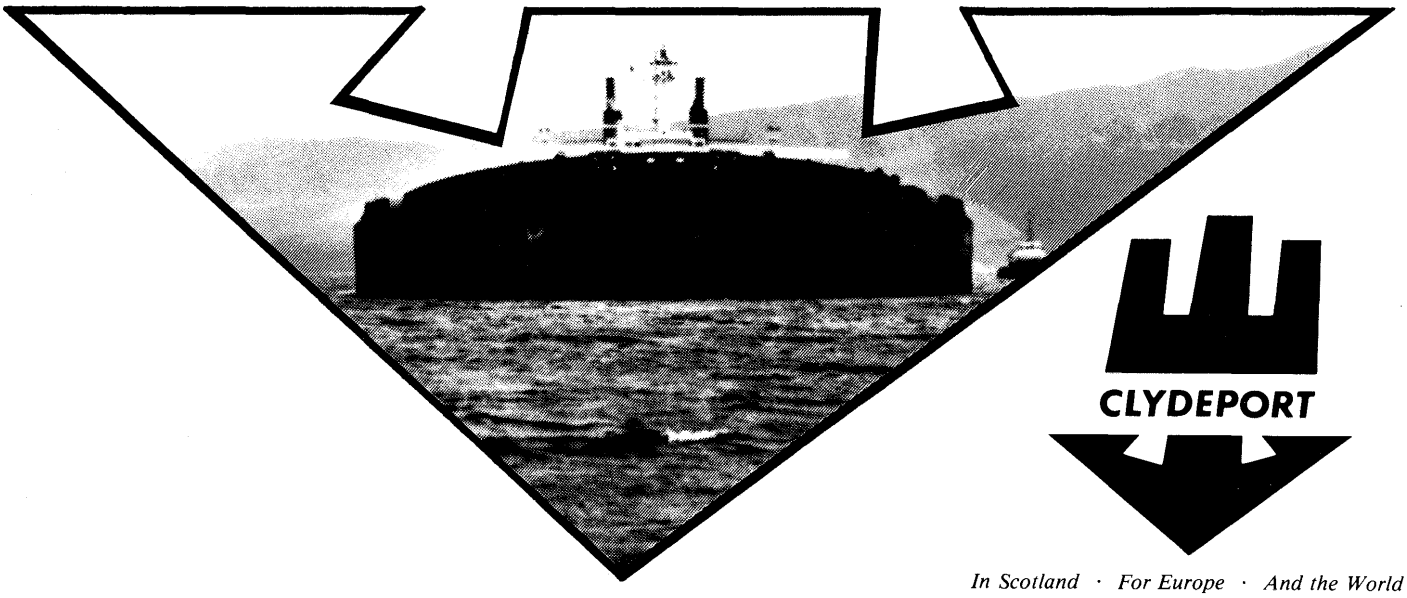
*Its uniquely navigable waters, both sheltered and deep, plus an abundance of well equipped docks and quays qualify it as one of Western Europe's premier ports.*

*We have a long standing seafaring heritage and the skills and experience to match.*

*And looking to the deregulation of economic trade barriers in 1992, Clydeport's significance as Europe's West Coast Port will be highlighted.*

*At each of our ports, you can take advantage of our attractive rates for cargo and bunkering services.*

*Clydeport — Commitment to quality and shipping services.*



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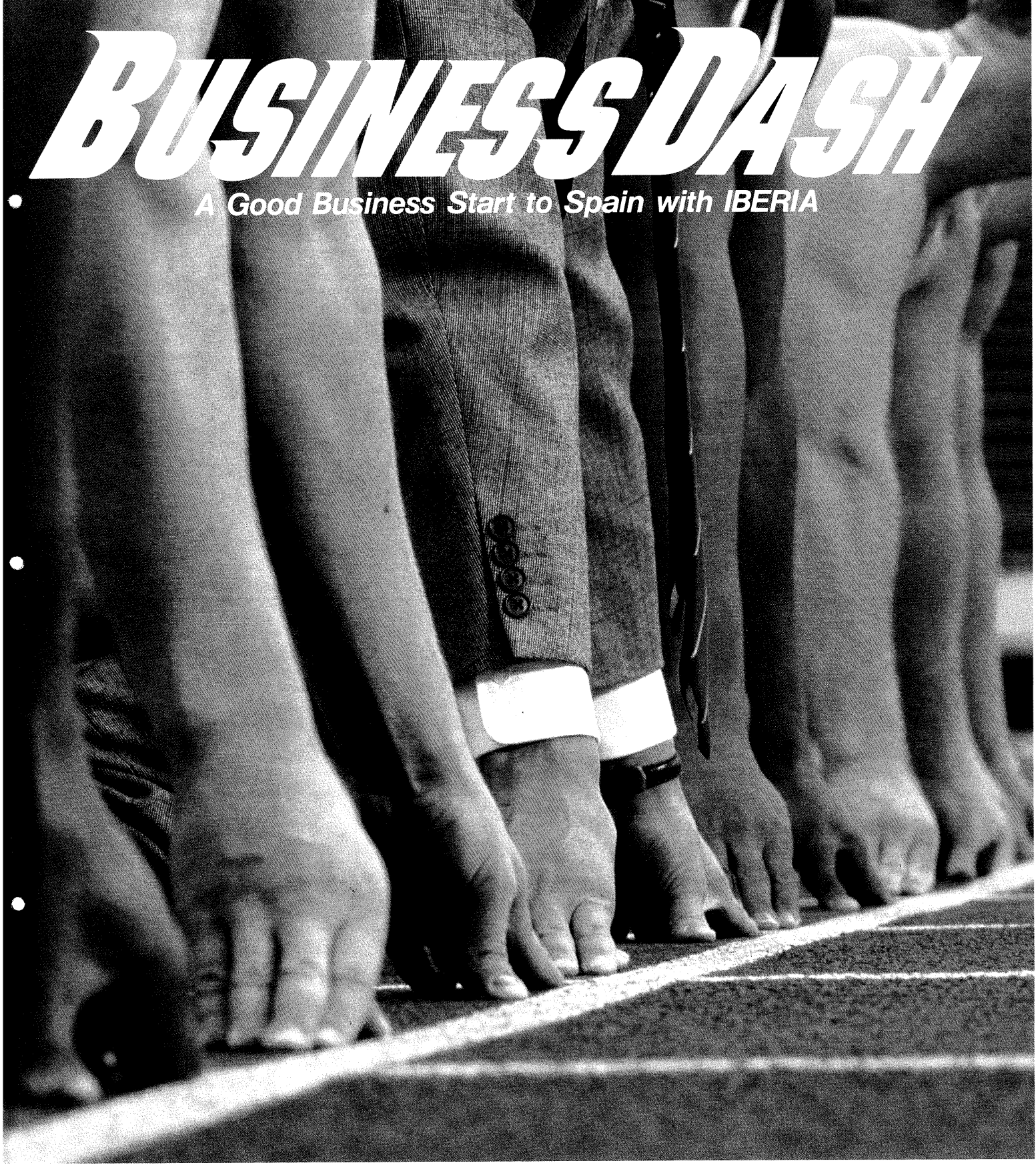


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# PORT OF STOCKTON

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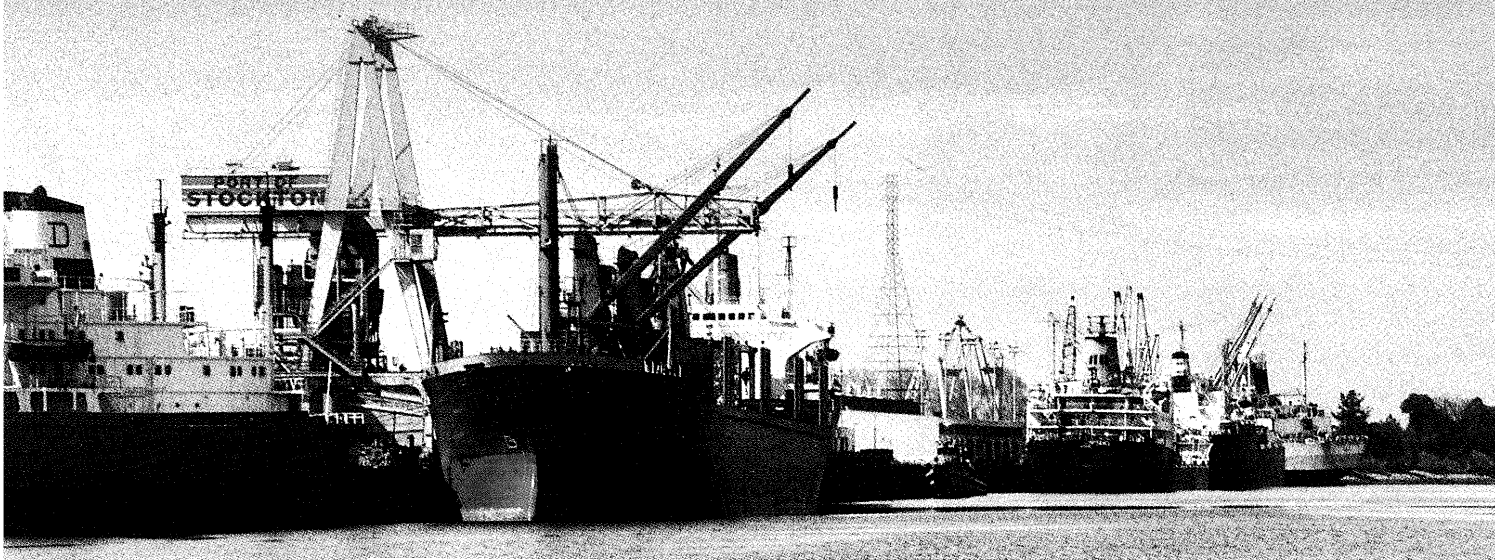
*Industrial Development Property*

*Deepwater Channel*

*Fast Intermodal Connections*

*We invite you to tour our facilities and compare our rates. See why we're second to none when it comes to handling your cargo efficiently and economically.*

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