

PORTS *and* HARBORS

October, 1978 Vol. 23, No. 10



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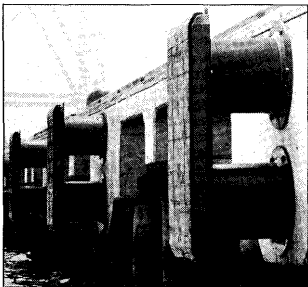
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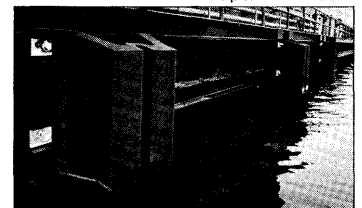
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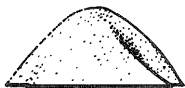
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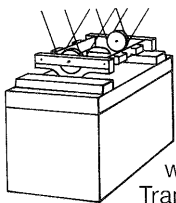
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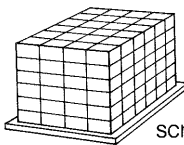
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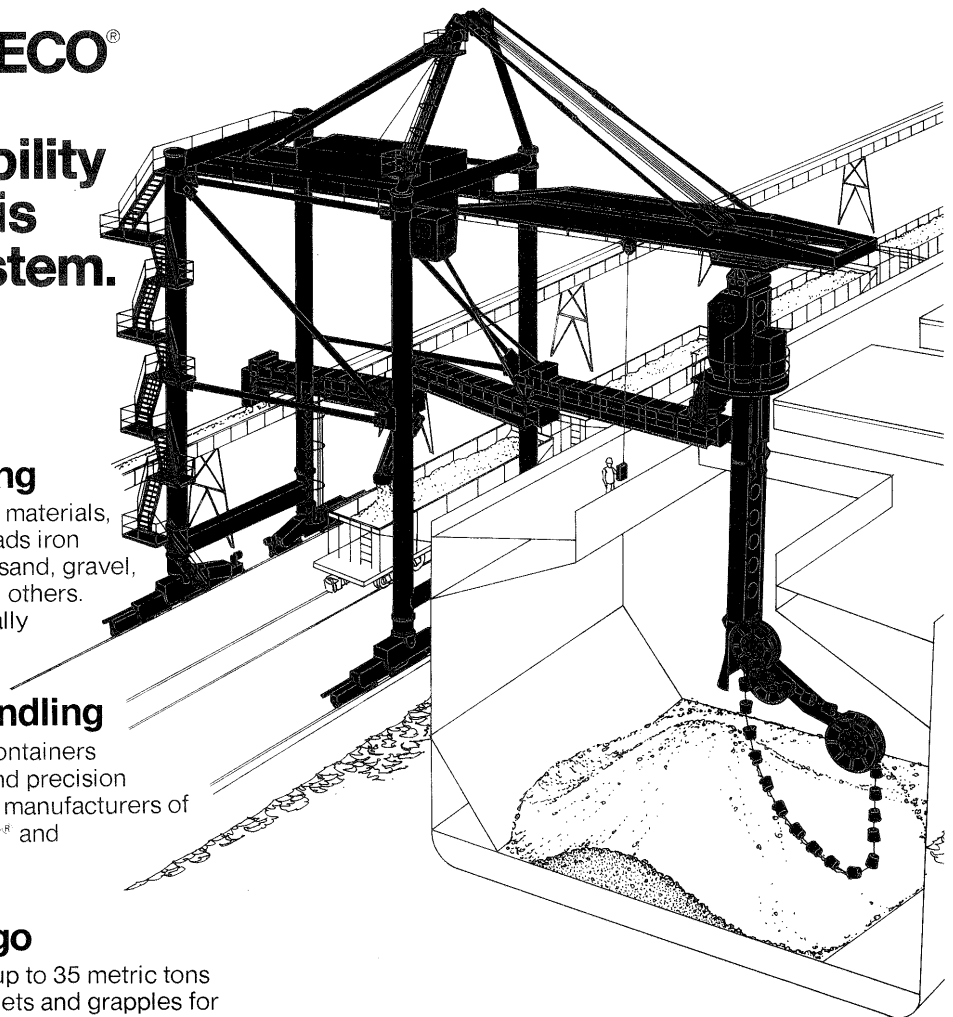
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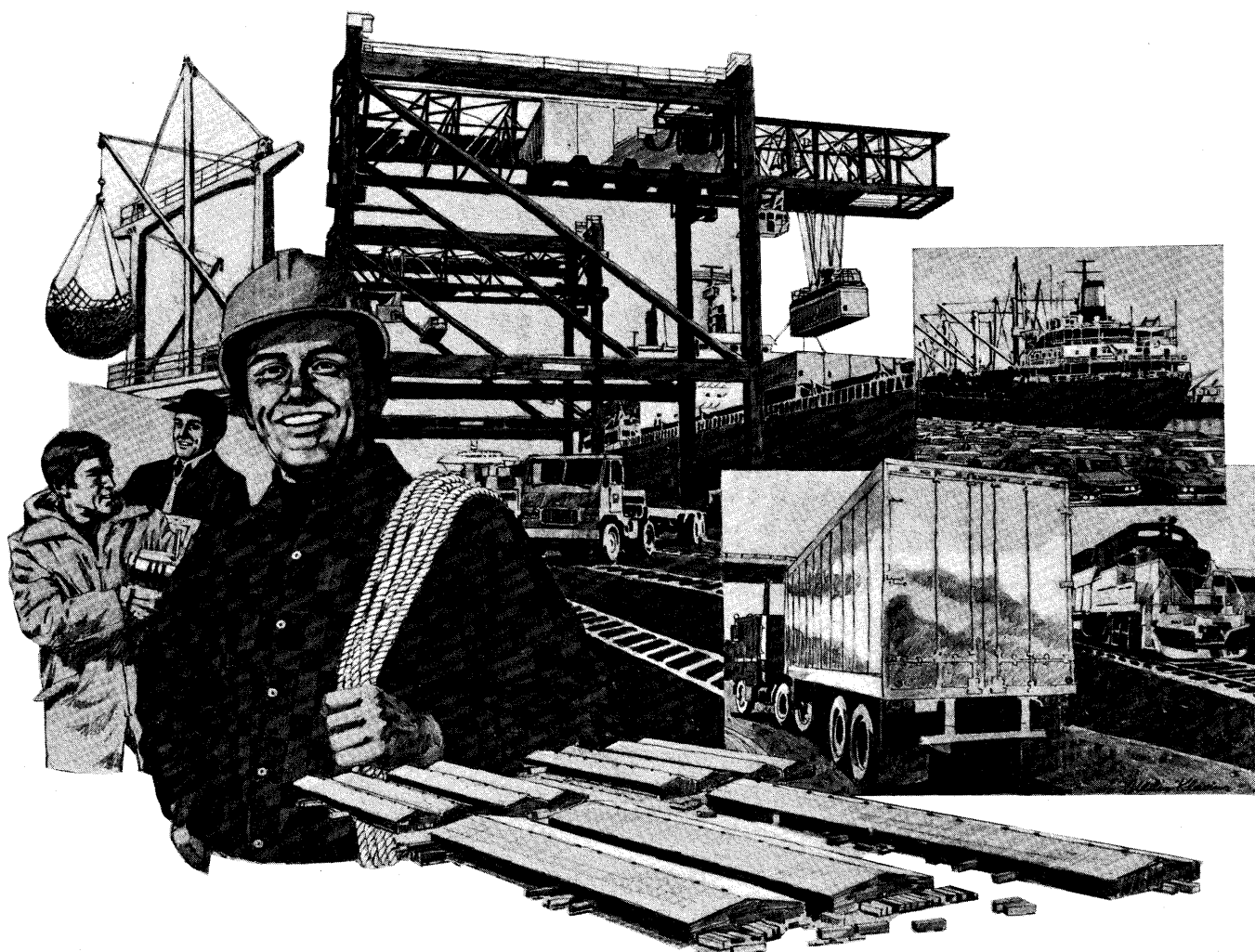
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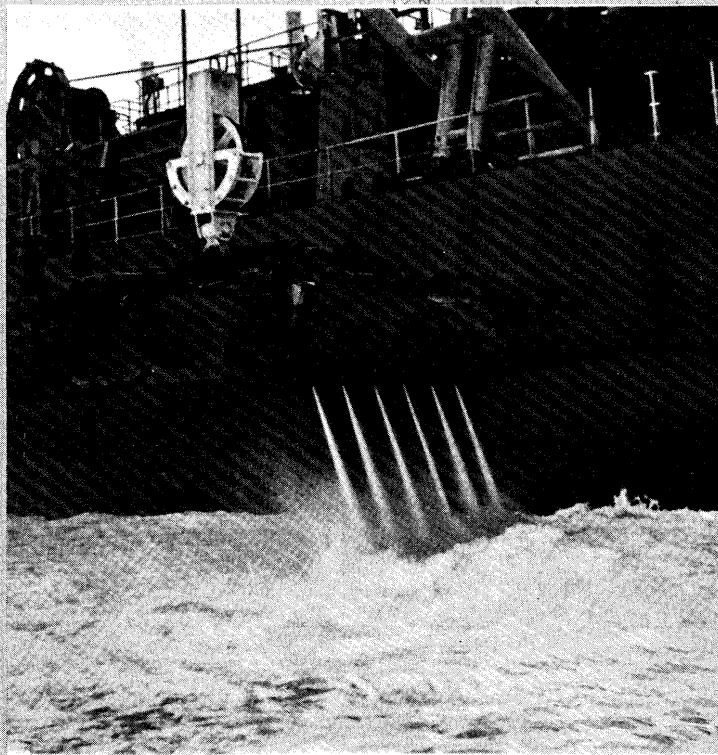
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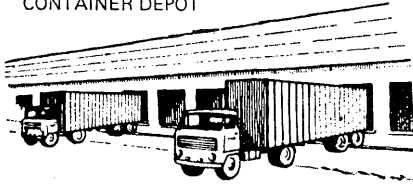
October, 1978 Vol. 23, No. 10

CONTENTS

	Page
IAPH Head Office Announcements:	7~11
Membership Campaign Making Good—5 More Nations Joined IAPH—"Ports of Tomorrow" to be thoroughly examined at Deauville—Trade Facilitation Committee will meet in October at Antwerp—IAPH Cooperation with WMO—IAPH Cooperation with CCC—ASAPHA asks for IAPH Cooperation on Port Health—IAPH Delegates at IAASP's London Conference—IAASP Publication—Membership Notes	
IAPH Trade Facilitation Committee (by Mr. J. Raven)	10
Industrial Ports and Economic Transformation—6 (by Paul Hanappe and Michel Savy)	15
Topics:	
U.S. Port Development—A View of the Past, Present and Future (by John M. Pisani, U.S. Department of Commerce)	12
ILO Expert tells Port Personnel Training in the Philippines (by Mr. Kenneth Milburn)	19
International Conference on Training and Certification of Seafarers (IMCO Secretariat)	20
Opening Speeches at UNCTAD/SIDA Follow-up Seminar	21
Wide differences between support régimes for European sea ports—also from country to country (Rotterdam Europoort Delta)	25
Ports:	
The Port of Vancouver, Canada	29
Foreign Trade 1977: The Port of New York and New Jersey	35
Helicopter Service at Port of Le Havre	37
Annual Report: Townsville Harbour Board	45
Kelang Port Authority: Progress Report '76	46
Orbiter Probe (International News):	27~48
UNCTAD's technical co-operation in the field of shipping and ports	27
UNCTAD: Trade and Development Board	28
The Cover: Vancouver, British Columbia, Canada: Lion's Gate Bridge—connecting downtown Vancouver through Stanley Park to North Vancouver. See also article on page 29.	

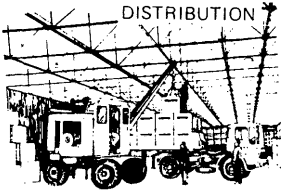
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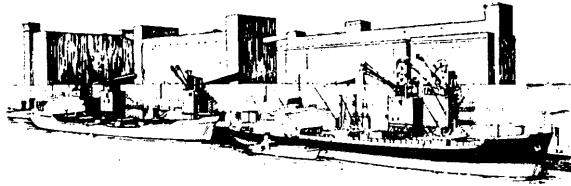


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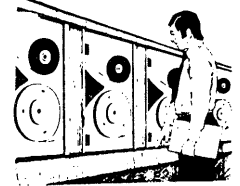
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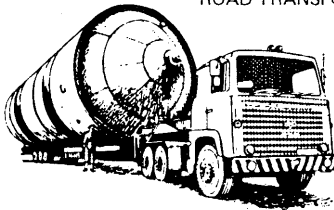
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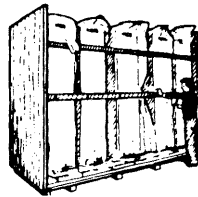
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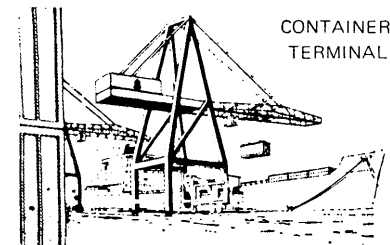
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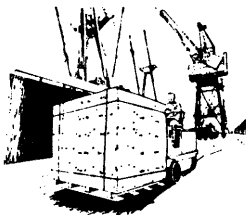
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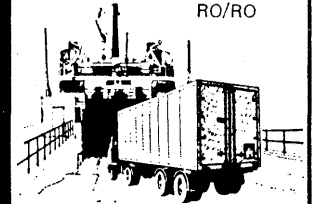
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IAPH Head Office Announcements : Pages 7 ~ 11

Membership Campaign Making Good 5 More Nations Joined IAPH

"A ten per cent increase in membership before 11th Conference in 1979" was the campaign target declared by the Membership Committee at the 10th Houston Conference of IAPH. But already they attained as much as 7.3 percent expansion last April within the first half of their promised period, 12 more months still remaining to complete their declared total.

In terms of new countries joining IAPH, this 7.3 per cent increase means our further infiltration into 5 more nations.

The above figures were reported by the Secretary General at the Mombasa meeting of the Executive Committee last April with the details that there was an increase of 13 Regular Members and 16 membership units from 14 countries including 5 new nations—Honduras, Haiti, Oman, U.A.E., Sri Lanka.

To accelerate the campaign, the Membership Committee recommended to the Executive Committee, when they met in Mombasa last April, that a campaign letter should be sent out to all non-member ports throughout the world for membership in IAPH and attendance at the forthcoming 11th Conference in Deauville.

Mr. J.P. Davidson, IAPH Executive Member from Clyde Port, U.K., who took part in the Mombasa meeting as Acting Chairman, drafted the letter and passed it on to President Altvater in Houston for his approval and signature.

The letter after signed by Mr. Altvater was mailed out to 187 ports in the world from Tokyo Head Office on August 21, 1978 with a brochure outlining the IAPH and a pamphlet on the 11th Conference.

The Presidential letter follows. (TKD)

Dear Sirs,

As President of the International Association of Ports and Harbors, it is a pleasure for me to approach you with a brief description of our Association and an invitation to learn more about our work.

IAPH, a worldwide association of port authorities established in 1955, now has 191 regular members and 145 associate members from 70 nations throughout the world.

A copy of the Objects and Purposes of the Association, contained in our Constitution, is attached to this letter. In the fast changing environment of today, IAPH has become an increasingly important medium through which the ports and harbors of the world assist each other by exchanging information and pooling and disseminating their expertise. In keeping with the spirit of our objects and purposes, a genuine friendship and understanding has grown over the years between port people from the 70 member nations.

A short brochure on IAPH accompanies this letter. However, the full value of our Association only can be fully

appreciated by meeting together with members from around the world. Every two years, at our Biennial Conference, port experts meet to share problems and discuss solutions.

Our Eleventh Biennial Conference will be held in May, 1979, at Le Harve and I extend to you a sincere invitation to join us there, participate with us, and see our Association at work.

I hope that the benefits which IAPH membership can bring to your port will encourage you to join our ranks. One of the Association's directors from your area will contact you in the near future to answer any questions you may have about us and our work on behalf of world ports.

We look forward to welcoming you at Le Harve.

Sincerely yours,
G.W. Altvater

"Ports of Tomorrow" to be thoroughly examined at Deauville

— 3 full mornings and 2 afternoons allotted for working sessions —

A new format is to be applied to the Working Sessions at the 11th Conference, whose given theme is "World Ports of the Future", inviting as many delegates as possible to participate in substantial deliberations.

All the delegates of the working sessions, according to the new procedure, will be divided into groups by languages and the subjects are thoroughly studied in each group before assembled at a plenary for open discussion.

The Executive Committee selected four Special Committees—International Port Development (Chairman: Sven Ullman), Large Ships (Chairman: F.L. Dixon, Jr.), Containerization, Barge Carriers and Ro-Ro Vessels (Chairman: R.T. Lorimer) and Community Relations (Chairman: J. Bax) to work heavily allotting for their sessions 2 full mornings and 2 afternoons and one more morning for a group discussion with an eminent economist as its central figure.

Secretary General Dr. Sato, under the authorization of President Altvater, on August 15, 1978 wrote to each of the four committee chairmen requesting to prepare themselves for the new format of the working sessions to develop active discussion respectively digging deep into the given conference theme.

Full details of the new format, you will find in the following proposal suggested by Mr. A.S. Mayne, First Vice-President of IAPH, and approved by the Executive Committee at Mombasa. (TKD)

Procedures of the Working Sessions at the 11th Conference of IAPH

1. The Chairman of each particular Committee will prepare a report on the activities of his Committee to 31st December, 1978 and within that report he will highlight the specific issues for additional discussion in working groups (say 50-100 delegates). These items, perhaps two or three, will generally form the basis for the Working Sessions or preferably the Chairman of the Committee to write a short paper on a worthwhile subject to be discussed by the Working Groups. Any papers of this nature will be predistributed to all delegates within one month of the Conference by the Host Port.
2. The Chairman of each Committee will select four or more members of his Committee to act as "Group Leaders" of each 50-100 delegates.
3. Each delegate will be designated to their conference group upon registration. As practicable as possible, each delegate will be assigned to belong one of the following groups by the language that the member would like to use during the conference.
 - 1 French Group
 - 2 or 3 English Groups
 - 1 Japanese Group
 - 1 Spanish Group (if more than 30 delegates are expected)
4. Discussions in working groups will be 1½ hours each followed by a 30-minutes break for morning or afternoon coffee or tea before assembling together in general assembly for a further 1 hour when the group leaders, having prepared the group's comments during the break, will each present a 5 minutes summarized report of their group discussion to the assembly from the dais. The Chairman of the particular committee will also be on stage and will summarize the working session after opening up the discussions to general assembly for further comments.
5. The same group will discuss the same issue highlighted by each different Committee Chairman's report. Therefore, a delegate remains in his respective group for each working session of the Conference.
6. Although group members will not change, the "Group Leaders" will alter for each committee as selected by the respective committee chairman and nominated before the Conference, separately to each group.
7. When there is more than one delegate from the same organization, it may be preferable for them to be allotted to a different working group.
8. The members of the IAPH Executive Committee will not be nominated to working groups as they will alternate between all groups to monitor progress of discussion.

In addition to the four Working Sessions dealing with the Chairman's Report of the Special Committees (Containerization, Large Ships, International Port Development and Community Relations), there shall be another Working Session scheduled on the morning of May 15th.

This working session is different from the other four and will be held as follows.

1. The Host Port will designate a lecturer who will be possibly a well-known economist.
2. The designated lecturer will speak to delegates in general assembly on the theme "World Ports of the Future" for one hour.
3. Same as the four other sessions dealing with the Special Committee Reports, discussions in working groups will

be held and to be followed by a 30-minutes break. After the break, all delegates assemble again for the Group Leaders report to the assembly from the dais and open discussion. The lecturer will also be on stage during the open discussion.

Trade Facilitation Committee will meet in October at Antwerp

IAPH Special Committee on Trade Facilitation which is being chaired by Mr. Robert L.M. Vleugels, Director-General of Port of Antwerp, is scheduled to hold its meeting in Antwerp from 25 to 27 October this year.

Members of this Committee as well as those who are engaged in the works for the trade facilitation are encouraged to take part in the forthcoming meeting in Antwerp.

Further details will be obtainable by contacting Mr. Vleugels at the following address:—

Mr. Robert L.M. Vleugels
Director-General, Port of Antwerp
City Hall, Antwerp, Belgium
Tel: 31.16.90/31.16/92
Telex: 31807 HAVANT B

To facilitate much wider participation of our members to this Antwerp Meeting, Mr. J.A. Raven, Special Adviser to the Committee and Vice-President of SITPRO UK Board, a world known expert in this field, contributed to the journal a comprehensive paper describing an overall situation of the movement in the world, and pin-pointing the possible roles that can/should be played by port authorities. Members are encouraged to read the paper which is reproduced on page 10. (rin)

IAPH Cooperation with WMO

Mr. R. Schneider, Deputy Secretary-General of the World Meteorological Organization (WMO, Geneva), in his 3 August 1978 letter, asked IAPH for views and suggestions on the draft Manual on Marine Meteorological Services relative to the warnings of hazardous weather and sea conditions and forecasts as well as synopses of major features of environmental situation, in support of safety, efficient planning and implementation of shipping, fisheries, port and harbour activities as well as operations connected with maritime search and rescue, marine pollution prevention and clean-up measures and other human activities at sea.

Amongst others, the draft manual carries in its chapters of C.1-3 and C.1-4 items of "Marine Meteorological Services for Coastal and Off-Shore Areas" and "Marine Meteorological Services for Main Ports and Harbour Areas" respectively. And, in view of the fact that the ports have been beneficiaries of the activities of the meteorological agencies as well as in view of the significance relative to ports' welfare, Secretary-General, Dr. Sato, referred the matter to the attention of President and Vice-Presidents, members of the Executive Committee, Chairmen of Committees on Legal Protection of Navigable Waterways, Large Ships and IAPH Liaison Officer with IMCO, and Ports Association of Australia, Republic of China, Denmark, Japan, Korea and Britain, as well as Port Management Association of West & Central Africa and American Association of Port Authorities. (rin)

IAPH Cooperation with CCC

Mr. E. Dorsch, Director of Customs Technique Direc-

torate of Customs Co-Operation Council (CCC), in his 28 July 1978 letter, asked IAPH for views and comments concerning the need and utility of the proposed new Convention with the basic aim of facilitating the transfer of goods from one Customs transit system to another by providing a link between such systems so that it should be possible to reduce the applicable Customs formalities, in particular the sealing and documentary requirements.

Secretary-General, Dr. Sato, in view of the significance and possible effect to the ports of the world, referred the matter to the attention of Mr. Robert L.M. Vleugels, Chairman and members of IAPH Special Committee on Trade Facilitation, members of the Executive Committee, and Ports Association of Australia, Republic of China, Denmark, Japan, Korea and Britain, as well as Port Management Association of West & Central Africa and American Association of Port Authorities. (rin)

ASAPHA asks for IAPH Cooperation on Port Health

The Association of Sea and Air Port Health Authorities (ASAPHA) is a London based organization dealing with the health problems in sea and air ports. Though it is well understood that responsibility for Port's health matters is not always related with, or held under the responsibility of any port authority, while it can be said that the subject of "Health" must be seen and considered as a matter of international commitment.

According to recent communication from Mr. A.J. Smith, Secretary of British Ports Association, Dr. Dilwyn T. Jones, Honorary Secretary of ASAPHA, at recent discussions with British Ports Association which collaborates with ASAPHA on all pertinent matters in a UK context, expressed that it would be both generally and specifically helpful to evolve a system of international cooperation amongst the persons and/or organizations directly responsible for the following matters in the first instance:—

- 1) Imported infections disease
- 2) Imported meat
- 3) Other imported food
- 4) Environmental health aboard ships and aircraft
- 5) The environment in ports
- 6) Shelfish layings

This Office finds it logical and beneficial for both parties to seek for members cooperation on the matter either by means of responding to the enquiry directly if one is so positioned or by raising the matter to a proper authority within his jurisdiction. In this context, members are encouraged to do so by writing to the following address:—

Dr. Dilwyn T. Jones, Honorary Secretary, ASAPHA
Health Department, P.O. Box 270, Guildhall,
London EC2P 2EJ (rin)

IAPH Delegates at IAASP's London Conference

As reported in April 1978 issue, the 9th Annual Conference of International Association of Seaport & Airport Police was held at London from 22 to 26 April, 1978. Mr. Andre Pages, Chairman of IAPH Standing Committee on Legal Protection of Navigable Waterways and Mr. A.J. Smith, Vice Chairman of the Committee and IAPH Liaison Officer with IMCO, have attended the Conference as IAPH delegates.

Representing IAPH, Mr. Pages delivered a speech which was as follows (rin).

"On behalf of the International Association of Ports and Harbors, it is my pleasure, and my honour, to express my thanks, and my appreciation to President Ellen and to the members of the IAASP.

First of all, I will express my thanks to President Ellen for having extended a friendly invitation to join the Conference, coincidentally with a meeting of the Standing Committee on Legal Protection of Navigable Waterways of the IAPH.

But, furthermore, I must thank the Association for the splendid work that it is performing, and for the devotion of the security officers of all our ports, to their difficult mission.

It is a sad fact that our Ports are in urgent need of your expertise, and of your continuous vigilance. But it is comforting to state that we can rely upon you all with full confidence."

IAASP Publication

International Association of Airport & Seaport Police (IAASP) published a 155 page book entitled "Standards for Cargo Security 1978 (Part 2)", covering items of:—

- Work Personnel-Procedural Security
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The Secretary
IAASP
8, Gallions Entrance, Royal Albert Dock,
London E16 2QD
Tel: 01-476-0395
Tlx: 897016

(rin)

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IAPH Trade Facilitation Committee

**by Mr. J. Raven, Vice-President
SITPRO UK Board
Special Adviser, IAPH Special
Committee on Trade Facilitation**

The 1977 IAPH Conference in Houston decided to set up a Facilitation Committee to bring the special interests of the world port industry to bear on the rapidly developing work of facilitating world trade.

International trade facilitation, an important example of the systems approach technique, aims at breaking down all the irrational costs and complications which beset cross-frontier trading in contrast to the relative simplicity and economy of internal domestic markets.

Ports are at once a key participant and a special problem in this new management technique. Given that international trade facilitation is concerned with the information handling system all along the line of the movement of the goods from origin to destination it follows that ports are bound to occupy a particularly important position because they often mark frontiers between maritime nations, always denote changes of mode of transport and in international trade usually imply transfers of risk and responsibility according to whether goods are sold CIF, FOB or under some other traditional formula.

If to this traditional complexity of function one adds new facilitation problems of giving effect to through transport techniques which aim to suppress modal differences by repositioning traditional points of transfer of risk and responsibility and wherever possible postponing or anticipating frontier customs clearance then it is clear that ports—and port operations—are in the forefront of the battle for better managed and more economic procedures.

No set of managers have more to gain from such improvements than port operators because in the vast majority of ports the so called port authorities have practically no authority at all over the way in which goods, procedures and documents are managed. Generally speaking ports are obliged to cope with the eccentricities and deficiencies of other peoples' information handling systems.

Customs, exporters, importers, road hauliers, railways, shipowners, wharfingers, stevedores and banks all extend their systems into the general area of port operations and inter-react, within established procedures, in order to secure the forward movement of goods or money with very little concern indeed for the convenience of port operators.

Ports are extremely individualistic communities and for historical and competitive reasons the way in which they manage—or are obliged to comply with—procedures and documentation in international trade is infinitely varied. There are however few ports in the world even in developed economies where procedures and documents for handling general cargo are accurately defined and fully documented.

This situation was quite acceptable and presented no real difficulties—until quite recently. Today however the development of largescale systems of through transport with largely identical procedural and documentary requirements and the increasing use of computers which need clearly defined procedures and rigidly stipulated documents produce an entirely different situation.

At one end of the port operational spectrum we have the recent and at some points continuing problem of acute port congestion brought about by shifts of purchasing power to countries where port documentation and procedures—particularly customs clearance, banking and import transactions, have been unable to meet enormous unexpected stresses. These call for urgent, practical but relatively simple measures of simplification and standardisation. At the other end of the same spectrum we have sophisticated port operations where customs container operators, forwarders and many large shippers are already using computers and where very shortly a mass of quite small businesses in all aspects of trade, transport and communications will be swinging over to cheap mini computers, micro processors and computerised office devices. This will produce a concerted cumulative demand for a shift from documents to computers as the basis for operating much of the information exchange network associated with international trade procedures. That shift will be impossible without expert facilitation advice and help on interfacing standards adjusted procedures and standardised programmes.

The IAPH decision to set up a Facilitation Committee is therefore particularly timely and the appointment of Mr. Vleugels, Director of the Port of Antwerp as its Chairman, is a happy guarantee of the energy and quality of direction which can be foreseen for this new IAPH activity.

Mr. Vleugels has already undertaken an intensive series of consultations with experts and relevant organisations within and in association with the port industry. In a fully democratic way he has decided that the first task falling to his committee is to ascertain the requirements of IAPH members in future facilitation work.

With this in mind he has circulated a questionnaire designed to:

- (a) Identify main interests of IAPH members in facilitation so as to guide the Committee and headquarters in securing appropriate information on a regular basis from specialist sources.
- (b) Give the Committee and headquarters an initial view of facilitation activities of ports at the present time.
- (c) Identify main computer uses in ports and assess likely support for practical work by the Committee on a standard optional code of practice for ships operations/procedures in port management.

An exact text of the questionnaire was reproduced on pages 30 and 31 of the July/August issue of "Ports and Harbours". So far the response has not reflected the interest which anyone in international trade knows to be actually held among those responsible for port management in developing and developed economies alike.

The relative lack of control by many port authorities over the procedures and documents used within their ports for handling general cargo may be a problem but it cannot disassociate the managers of those ports from a keen interest in improving the current situation. In the first place, as we are seeing today in a number of countries, bad documentation and procedures resulting in inefficient utilisation of existing port resources can force expansion of quays, cranes and warehouse capacity well beyond the real requirements for general cargo if effectively handled. This

can stimulate extravagance in capital expenditure and gross sub-optimisation of physical resources when the capital investment has been made. Even in developed economies the difference of a few hours in dwell time of containers may make all the difference between very expensive land reclamation programmes and the ability to get by with existing limited land resources by much better use factors.

Secondly, ports have an interest in the competitive of the overall activity carried on within their ambit. Even though they are not in control of documentation and procedures they are invariably a respected central impartial influence. If they move to set up and support port consultative committees composed of shippers, forwarders, bankers, customs and carriers charged with the improvement of documents and procedures for general cargo handling then they have more chance of success than many of the other necessarily sectional and often keenly competitive elements concerned. Such committees are the key to real progress because they are able to relate special local conditions to the broadening range of improvements in documents and procedure which are now available nationally and internationally as the result of the work of a host of organisations ranging from United Nations regional commissions to the International Chamber of Commerce, International Chamber of Shipping, IATA, FIATA, IMCO and ICAO to such national facilitation bodies as SIPROCOM in Belgium, JASTPRO in Japan, COSTPRO in Canada, SITPRO in the UK, INDPRO in India and NITPRO in Nigeria.

Thirdly, in many developing countries the ports have an overwhelming national duty to smooth the path for customs and to make the movement of necessary imports as efficient and as cheap as possible in the interests of the domestic consumer. In some rapidly developing economies an acute build-up of imports can result in port congestion which effectively blocks all nascent exports from early diversification of domestic industry.

In developing and developed countries alike most major seaports are fully conscious of the national role and responsibilities. Efficiency in the movement of general cargo through such ports is something in which they must take an interest and from which they cannot disassociate themselves merely because they are not in a position entirely to control and reform the associated documents and procedures.

More and more ports are turning to computers first for payroll and other general administrative purposes and then to control physical movements of goods and vessels in and out of their port areas. Simultaneously many customs authorities, banks and a growing number of shippers and forwarders are also developing computer based systems.

It would make the best of good business sense to extend such computer resources into handling general cargo information systems traditionally carried out by the painfully complicated, costly and error-prone exchange of pieces of paper.

The complete transfer of international trade procedures and documents from manual to computerised systems is many years ahead but ports as special concentration points of information flow are bound to find themselves either unwilling and passive victims or else interested and participating beneficiaries in the progressive extension of computers into the old documentary domains.

One of the first pieces of information that the port

operator needs in order to manage general cargo movement effectively is the position of the vessels carrying these goods in and out of his port. If he can begin to plot all the necessary port operations two or three weeks ahead of the arrival or departure of the vessel, keep his information about ships movements up to date at all times, and get the earliest possible agreed advice of the movement of the cargo destined to be discharged from or loaded into these vessels then he is in the optimal position to manage his own business and the interests of his customers in the most competitive way in relation to other ports. It is this concept of basic efficiency in port management, based upon progressive improvement of essential information handling which lies behind Mr. Vleugels' questionnaire and his decision to undertake the chairmanship of the IAPH Facilitation Committee.

His primary thesis is that as a practising port manager he wants this information and if he could get it should be better able to manage his own port operations. He believes that because every port is linked with other ports in the transport pattern the all-important shipper and shipowner customers need good standards of port performance generally. This means that the IAPH in its facilitation work will need to co-operate with shippers, forwarders, shipowners, road hauliers, railways, banks and customs authorities through their appropriate international representative bodies but that meanwhile, also, facilitation, like charity, should begin at home and ports have their own housekeeping jobs to do.

Also it would be quite alien to the nature and objectives of IAPH if improvements in key techniques already known to and tested by some member ports were not to be freely available for use by other less experienced or advanced members.

Also port operation cannot be viewed as an isolated activity. It intermeshes with and is dependent on a great many other trade and transport activities.

Mr. Vleugels' questionnaire is designed to give him and his Committee clear guidelines for their main priorities in a practical facilitation work programme and it is hoped that those readers of the "Ports and Harbors" who may not already have replied directly to Mr. Vleugels questionnaire will now take this second opportunity of getting in touch with him either by answering the questionnaire itself or by commenting to him on possible other methods of approaching his facilitation responsibilities.

Mr. Vleugels has also proposed a meeting of the Special Committee on Trade Facilitation at Antwerp on October 25th, 26th and 27th this year. It is hoped that as many members of this Committee as possible will attend and that other IAPH members interested in facilitation not yet members of the Special Committee who would like to attend will get in touch with Mr. Vleugels as soon as possible.

U.S. Port Development—A View of the Past, Present and Future

by John M. Pisani
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This article will deal with four aspects of the U.S. port system—its national importance, the role of the Federal Government, current problems and future perspectives.

Since the days of early settlement, our Nation has been dependent on water transportation of its trade. Populations tended to locate around harbors, which rapidly became the economic centers of the New World. In just over 200 years, this dependency on shipping and trade has led to the development of some 170 commercial seaports in this country, occupying only 1,650 miles or a mere 2 percent of our national shoreline.

In addition to these coastal gateways, numerous inland ports emerged along navigable waterways as our Nation expanded westward. The end result has been the creation of a network of ocean and inland ports which comprise many of the country's important centers of commerce, industry, distribution, finance, education and culture.

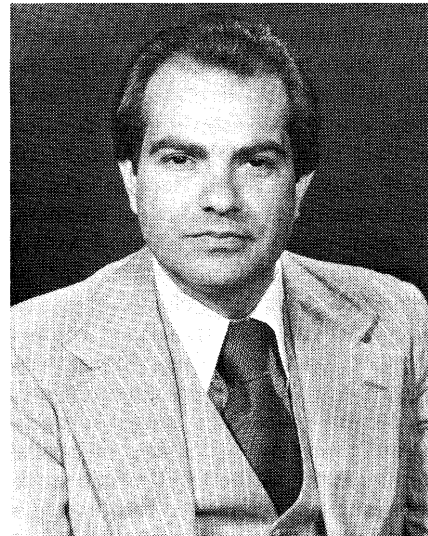
Functionally, ports perform the vital interface role of transshipping cargo between land and water carriers. But their essential reason for being is to further the economic development of their surrounding communities through the provision of jobs, income and tax revenues. Thus, U.S. ports uniquely mirror the economies of the regions they serve. They are sensitive to population and industrial growth, to raw material patterns and to Government policy. They serve, but do not in themselves create trade.

Every person in this country depends in some way on its ports. Although most people have been generally aware that our ports mean much in the Nation's economic life, no one could say how much in definitive terms. The extent of available information concerning the annual amount of economic activity generated by our port system has been limited to the knowledge that the industry:

- Handles over 1.7 billion tons of waterborne commerce valued in excess of \$200 billion;
- Contributes over \$5 billion to the U.S. Treasury in Customs collections and \$1 billion to the Balance of Payments; and
- Invests some \$300 million in marine terminal development.

The recent completion of the first nationwide economic evaluation of the U.S. port industry for the Maritime Administration under a two year R & D contract let to the Port Authority of New York and New Jersey has filled this information vacuum. The analysis was accomplished through the creation of an input (purchases)—output (sales) model with data supplied by the Commerce Department's Bureau of Economic Analysis.

The Maritime Administration study demonstrates in quantifiable terms the extent to which the Nation's economy relies on the U.S. port industry. It shows that the total direct and indirect impact of the industry in terms of its sales of services to its users—domestic and foreign shippers and passengers, and private and government



Mr. John M. Pisani

customers—was approximately \$56 billion in 1977. This means that the total impact of U.S. ports on the economy averaged about \$153 million per day during last year.

These figures are quite distinct from the "value added" to gross national product. Using the value added concept, which omits cumulative resale values, the port industry's total contribution to GNP in 1977 was approximately \$30 billion or \$82 million per day.

The Port Authority research team also found that the industry was directly and indirectly responsible for:

- 1,046,800 jobs or one job in the national economy for each 600 tons of foreign waterborne commerce handled through ports;
- Personal income of \$19.2 billion;
- Business income totalling \$7.4 billion;
- Federal taxes of \$10.4 billion; and
- State and local taxes amounting to \$4 billion.

International traders are by far the best customers of the U.S. port industry. In 1977, some \$32 billion of port revenues was generated from the industry handling of waterborne exports and imports. This meant that each ton of our foreign trade cargo moved last year produced port revenues of \$44. Application of the 1.6 multiplier^{1/} generated for the port industry by the input-output model meant that each ton contributed direct and indirect port revenues of \$70 to the U.S. economy in 1977.

The findings reported in the Maritime Administration study dramatically show that the port industry in the United States is a vital part of the national economy not only because of its strategic function in assuring the flow of cargoes, but also because of the chain of economic activity that it generates. Its services to the economy in terms of sales, purchases, jobs, income and taxes are on a par with those of other major industries. The dollars that con-

^{1/} The model gave a multiplier of 1.6 for the chain reactions initiated by all purchases for port industry operations throughout the Nation. This meant that each dollar of sales to the port industry produced \$1.60 in sales within the economy. This consisted of \$1 direct sales plus 60 cents of indirect sales.

tinuously flow into and out of the port industry affect in some way each and every industry in the economy.

Who has been responsible for the development of U.S. ports as valuable assets to the national economy?

Shoreside port development in the U.S. traditionally has been carried out by both public and private interests. Public port authorities, functioning under cities, counties, and states, are the primary developers of transfer facilities for handling general cargo. At some ports, such as in Charleston, South Carolina, port authority staff operate marine terminals while at others, such as in New York, the port authority acts strictly as a landlord and leases all facilities to private terminal operators.

On the other hand, bulk facilities, particularly for petroleum, are pre-dominantly owned and operated by private corporations as an integral part of their total production to consumption physical distribution system.

Municipal and country authorities still are the dominant form of local public port administration. They are centered mostly on the Pacific, Gulf and Great Lakes Coasts. State port agencies, on the other hand, are concentrated mostly on the East Coast, particularly in the South Atlantic.

Although creatures of government, public ports engage competitively in commercial enterprise. This public utility/private business role has allowed public ports to respond more quickly to shipper service needs while at the same time attracting economic development to local communities.

Except for some Federal grant programs with non-port related objectives, public ports must depend on reinvestment revenues and/or bond issues for financing expansion programs. This public sector of the port industry owns nearly 50 percent of some 2,000 deep draft marine terminals with a total investment since 1946 of approximately \$4 billion.

The existing concept of the public port authority, therefore, with all its diversity of structure and mission, has proven its value consistently in the past. The necessary new terminals and services have been developed to accommodate expanding trade and modern ship types.

These landside port development activities of local public agencies are basically matched by the Federal Government on the water side. The U.S. Army Corps of Engineers constructs and maintains all main shipping channels while the U.S. Coast Guard provides navigational aids and oversees port safety.

The Maritime Administration is the third major Federal organization that contributes to the development of our Nation's port capabilities. It is the Federal port promoter, planner and technical adviser in peacetime and the Federal port controller in time of national emergency.

Beyond these three agencies, there are some 50 other Federal bodies that carry out responsibilities impacting on ports. All of these agencies basically have non-port related goals and objectives, but influence the course of port development. For example, there are: regulatory agencies such as the Environmental Protection Agency, the Federal Maritime Commission and the Occupational Safety and Health Administration; inspectional agencies such as U.S. Customs, Agriculture, Public Health, and Immigration; and promotional agencies such as the Commerce Department's Industry and Trade Administration, Economic Development Administration and National Oceanic and Atmospheric Agency.

This fragmentation of Federal port-related activities

mirrors the uncoordinated policy towards ports in this country. This does not appear to be in concert with the traditional non-discriminatory position of the Federal Government towards ports embodied in Article I, Section 9 of the Constitution, which states in part . . . "No preference shall be given by any regulation of commerce or revenue to ports of one State over those of another . . ."

This initial statement of Federal port policy has been continually reinforced by subsequent Executive and Congressional actions supporting non-Federal involvement in the development of shoreside port facilities. Thus, unlike many foreign trading nations, such as the United Kingdom, Canada, Japan, France and the Netherlands, for example, who centrally plan, develop and finance their ports, the U.S. port industry has attained its current stage of development without Federal master planning and financial aid. This autonomous capability to respond rapidly and take risks on new technology at the local level in a competitive market has been the U.S. port system's cornerstone.

Dramatic technological improvements have been made in ocean transportation of general and bulk cargoes in the last 15 years. The advent of intermodal containerships, roll/on-roll/off carriers, barge-carrier vessels, supersized crude tankers, combination bulk ships, liquid natural gas carriers and slurry vessels are but a few examples. Each of these developments has had a significant impact on transforming a highly labor intensive port industry, characterized by low productivity and high operating costs, into a highly capital intensive, increasingly automated, and more productive segment of the total ocean transportation system.

U.S. port management recognized clearly in the sixties that the efficiency of terminal facilities and cargo transfer methods must keep pace with vessel productivity increases, if the full benefits of new high technology shipping in the form of reduced total system cost were to be realized.

Resolution of the broad range of major issues and problems, however, currently facing U.S. ports will result in additional changes in technology, trade and government policy that will require continued industry adaptation in the future.

Let me cite a few of the industry's expressed concerns.

1. **Federal Control.** The industry is opposed to any Federal assumption of its marine terminal development role.
2. **Excessive Regulation.** There is a definite need for better balance between environmental protection and economic development; better integration of port development requirements into state coastal zone management planning; and better and more timely processing of construction and dredging permits by government at all levels.
3. **Facilities Cost and Funding Crunch.** U.S. ports are caught in a financial cross current of increases in facility costs, due to capital intensive technology, inflation, impact of mandated government regulations, local sharing of Federal waterway projects, etc., and a growing scarcity of local funds to meet these increased costs.
4. **Labor Stoppages.** Ports are most frequently affected by waterfront strikes although rarely directly involved in disputes. This is one of the few times when ports gain the public's attention.
5. **Waterway Development.** There is a need for a consistent Federal policy toward waterway development, standardization of evaluation criteria, availability of adequate dredging equipment and opposition to user charges.

6. **Deepwater Ports.** A clear Federal policy is needed on the development of deepwater ports to handle very large crude carriers and its relationship to a Federal energy policy.
7. **Free Trade.** Ports support the maintenance of a free trade policy and oppose protectionist measures.
8. **Regulatory Jurisdictions.** There is a need to resolve the FMC and ICC overlapping jurisdiction dispute relative to ocean and inland rates because it has discouraged development of international, intermodal transportation.
9. **Panama Canal.** Ports seek assurance of a stable rate structure and continued access by international shipping.

What of the future? What can the port industry expect to happen in the remaining years of the twentieth century? I would like to offer some of my own perspectives on certain port development issues.

Improvements in vessel productivity will continue to be made and these will further stimulate the need for new or improved port terminal design and operation.

Much of the stimulus for this continuing development will come from the steadily growing volume and changing nature of U.S. foreign trade itself, which currently amounts to over 800 million tons annually. Maritime Administration forecasts indicate that this volume will increase to over 1.4 billion tons annually by the year 2000.

Therefore, increased demand will be exerted on vessel operators and public ports to achieve further productivity increases to hold down the costs of shipping the projected growth in general cargo and bulk commodities. This translates into a steady pressure for new technology to increase the speed and efficiency with these cargoes can be moved.

Thus there will be a clear need for further port development in the United States to handle the future volume of waterborne commerce. Because of the large scale increases in cargo throughput, however, brought about by advanced port technology, additions to marine terminal capacity are likely to be more incremental than quantum.

Facility costs, however, will rise due to continued high cost technology, inflation and mandated governmental requirements and be accompanied by narrow financial margins for port bodies to absorb these increased costs.

Increased port development funding from state and local governments to cover deficits that future facilities may incur will continue to be more difficult to obtain, because competition for limited local monies with other public priorities of the urban and state environment is likely to remain severe.

Therefore, public ports will be required to assume a more "pay as you go" position depending more and more on the reinvestment of port earnings for development purposes and the most efficient use of other financial resources. Depressed port usage charges over time will have to become more remunerative to cover facility costs and increase revenues.

Federal aid for shoreside port development is another possibility. Up until recently, U.S. ports have staunchly resisted any concept of Federal assistance fearing that it would lead to Federal control and restrict the competitive structure of the industry. But this attitude is changing and probably will continue to change in the future as more and more individual public ports apply for and receive funds from a diverse number of non-port related Federal agencies. This type of Federal aid, while it may not per se diminish local control of port development, is and will continue to

impact on the competitive relationships of ports.

It is not my intention here to debate the relative merits or problems associated with Federal assistance to ports. Suffice it to say, however, that the port industry in the future must come to grips with and place in proper perspective this question of more or less Federal involvement in local marine terminal development.

Similarly, the Federal Government will continue to play a major role in several highly sensitive and extremely non-revenue producing areas of local ports. These include coastal zone management, waterfront renewal, marine fire protection, harbor traffic control, pollution control, cargo security, and waterfront labor productivity, stability and safety. Most of these areas constitute matters of significant public interest not easily absorbed into the business approach of local public port agencies, yet nonetheless needed and of a port nature.

The port industry, however, with one hand, has pressed the Federal Government into resolving these problem areas, but with the other hand, it has performed a delicate balancing act to keep the Government from intruding into the historical preserve of the public port agency, namely, marine terminal construction and commerce development.

These latter two limited areas were appropriate for the close of World War II when they constituted the dominant port needs at that time. It doesn't appear that this approach, however, can be sustained indefinitely in the future. Unless the public port industry changes its posture, it could ultimately cease to be the caretaker of the Nation's ports, which would in my opinion be an unfortunate situation.

The Federal Government role in waterway development is not likely to change dramatically in the foreseeable future. By the end of the century, some major seaports may have Federally constructed shipping channels of 50 feet or more. Private or state owned offshore deepwater port facilities should be operating on the Gulf and Atlantic Coasts by that time.

It is only a question of time and type before users of our inland waterway will have to start paying a fee. Great Lakes shippers have been paying user charges since the St. Lawrence Seaway opened in 1959. Attempts will continue to be made to extend user charges to deep draft ports and harbors on the other three coasts.

Before the end of this century, an effort will be made to establish a cohesive national port policy and to consolidate the major Federal port related agencies to enforce the policy and deal on a more unified basis with port matters.

And finally, I believe coordinated port planning on a regional basis is a necessity for today's strong public concern for the protection of the environment. The growing trend for public ports to amalgamate themselves into large groups for planning purposes will continue to gain momentum. I believe some elements of the port industry recognize that this is essential if they are going to compete effectively for local and state monies. It is clear that as resources become more scarce in the future, port planning becomes more important and must adopt as broad a viewpoint as is possible to be truly effective.

The American port industry is a national asset. It has a proven track record. I believe it will continue to grow to meet the expanding needs of the Nation's waterborne commerce as well as enhance the economy.

Industrial Ports and Economic Transformations

Series No.6

By Paul Hanappe and
Michel Savy

CHAPTER III

RECENT TRENDS IN PORT ECONOMICS (Part 2)

3.2. THE TREND TOWARDS SPECIALISATION IN TRANSPORT (Continued)

- 3.2.2. In the port—specialised installations
 - 3.2.2.1. Increases in the number of specialised port installations
 - 3.2.2.2. Specialised installations and port policy
- 3.2.3. Land transport
 - 3.2.3.1. Road and rail
 - 3.2.3.2. Motorways
 - 3.2.3.3. Pipelines
 - 3.2.3.4. Waterways
 - 3.2.3.5. Diversification and specialisation of land transport

3.2.2. In the port: specialised installations

In most cases, and as the specialisation of vessels occurs around a group of products (various bulk carriers) or a packaging technique (various vessels for general cargo), the result is the installation of specialised port facilities, matching the specialisation of the vessels. The review of port installations of this specialised type will therefore be fairly brief since the dates, the methods and the principal reasons for their installation have already been covered in the case of the vessels.

Viewing this mainly from the point of view of the ports one may consider more particularly the place occupied by specialised equipment in the commercial and industrial policies of the ports.

3.2.2.1. Increases in the number of specialised port installations

- a. specialisation in the port follows the same logic as the specialisation of vessels.

Simultaneously with the shift from multi-purpose cargo vessels to an increasing number of specialised vessels the equipment in ports has undergone comparable specialisation and diversification. To the traditional crane have been added terminals for various types of bulk cargo and terminals corresponding to the various types of general goods cargo. The crane, however, does not disappear: on the contrary even more powerful cranes are installed for handling heavy loads, such as equipment forming part of deliveries of turnkey factories.

In a general way these specialised installations make

it possible to reduce very considerably both cost and the time for loading and unloading the goods, whether in bulk or in modular packs such as containers, barges, pallets or trailers.

In this way the turn-round time for a large oil tanker has been reduced to about 2 days, that for a dry bulk carrier (ore or coal) to about 4 days, and 7 days for a cargo of cereals¹, whilst the gain in productivity linked with the new techniques of general cargo is considerable: during one shift, at Antwerp, 7 men can load 1,500 tonnes in containers whereas in the case of traditional cargo 16 men would be needed to load 200 tonnes in the same time².

¹ cf. DEZERT, B. Tertiary activities. Volume III—Transport and the organisation of space. Paris, SEDES, 1976, 162 p. (in French).

² cf. MINGRET, P., The industrial growth of the port of Antwerp, Belgian Royal Geographical Society, Brussels 1976 (in French).

- b. Terminals for traditional bulk.

To each type of bulk there corresponds, in practice, a specialised terminal comprising (in an import port such as those of Europe) handling equipment to unload the vessel, storage provisions (storage areas, silos, tanks, depots at normal or controlled temperature) and means of direct access to the point of use in the case of coastal industries or to the method of onward transport to the hinterland in other cases: oil, ore, coal and cereal terminals are typical of major modern industrial ports.

- c. Specialised installations for “new bulk carriers”.

However new terminals are being installed for exporting or importing certain products: vegetable products (sugar and molasses, wood in log or chip form, etc.), chemical products and certain industrial products such as paper. It should be noted that, amongst these specialised installations, certain do not necessarily correspond to specialised vessels but may be special machines for handling steel tubes, exported to the Soviet Union from Bremen.

- d. Specialisation of terminals for general cargo

The multiplication of types of vessels carrying general cargo results in the creation of an equivalent number of types of terminals: container gantries (with adjacent storage and management of the container park (cf. sect. 3.4.3 below, particularly for the increasing role of data-processing in this organisation), mobile ramps for RO-RO vessels (with depots for loading and unloading the sets of trailers remaining in the port from the previous voyage of the vessel, tractors for handling the trailers). Only the barge-carriers handle their cargo themselves, with the aid, it is true, of local trailers. However these often need a cereal terminal to unload the grain contained in their caissons (in the case of transport from the United States to ports on the Rhine).

3.2.2.2. Specialised installations and port policy

On the basis of the technical characteristics of the various types of terminals, more or less specialised or multi-purpose, it is possible to attempt a classification from

the point of view of their links with the industrial and commercial activities of the ports.

a. installations for industrial bulk products

In most cases the terminals for industrial bulk products are built simultaneously with the installation of the user industries, or at least on their decision to receive their supplies by sea. The ore and coal terminals of Fos have scarcely any reason for their existence beyond the Solmer factories. In the same way the terminals specialising in the export of minerals and crude petroleum are established as a function of the exploitation of one or other deposit. In certain cases, however, when several ports are in competition, as in the case of those on the north-west coast of Europe, one sees the establishment of an industrial terminal with deliberate commercial intentions on the part of the port authorities. In this way Rotterdam has developed its activity in the reception and transit of iron ore, whereas all iron and steel projects on the site seem to be abandoned. By installing a specialised chemical terminal for the reception and storage of phosphoric acid the port of Antwerp hopes to develop an original activity, capable of attracting the traffic of users other than the initiators of the project, etc.

b. Installations for general cargo, and inter-port competition.

By contrast the terminals for general cargo, and which are less directly linked to a fixed industrial forwarder or importer, are more likely to correspond to the commercial and competitive development of the ports. The installation of container gantries is an illustration of this competition which operates in respect of tariffs and turn-round times (being expensive vessels the containerships limit, to the strict minimum, the number and duration of their ports of call). The port which is best and most rapidly equipped for the handling of containers, the loading and unloading of car ferries, RO-RO vessels and car carriers, the loading and unloading of one or other type of special product, hopes to attract this traffic before its competitors and, aided by scale effects, to ensure a remunerative and stable level of activity.

Initially, in effect, the installation of special equipment, and services by certain ports places them in a quasi-exclusive position, and in this way at least temporarily fixes inter-port competition. This rigidity in the supply of port services becomes greater as the installations to be installed become larger and correspond to services adapted for the related land transport.

In a second stage, however, the number of competitive ports serving the same hinterland and equipped to offer the same service as a specialised terminal will increase. Possibilities of substitution will therefore appear.

c. Port concentration and installations.

This level of equipment, maintained up to the present time, corresponds to a phase of growth in trading by sea and at the same time to certain shifts from one technique to another (from conventional cargo vessels to containerships, for example). The stagnation is, in certain cases, the reduction in the traffic observed from 1974 onwards, placing the port authorities in a more difficult financial situation¹, whilst the multiplication of the number of specialised terminals increases the total

volume of port investments necessary to offer a complete and competitive range of services to the clientele. It may therefore be expected that, parallel with the increase in the cost of specialised vessels, an increase in port investments favours the concentration of traffic, the overall growth of which is insufficient to justify the complete equipping of large number of ports.

¹ particularly since traffic in hydrocarbons is often the most remunerative to the port authorities.

If we further consider port installations in the broadest sense, that is to say including the equipment attached to the port industrial zones, the aspects of concentration of traffic in a few ports, as a result of stabilisation of the allocation of trade flows between the different ports, gives them advantages from the aspect of pure commercial competition.

This is the case with the network of pipelines installed throughout the port industrial zones, true "chemical motorways", according to the expression used at Antwerp, 50 metres wide and offering any occupant of the zone the possibility of obtaining 60 different chemical products as simply as industrial water or compressed air. The availability of such a complex system, which arises in particular from inter-industrial links rather than simple comparisons of transport costs, contributes at the same time towards specialising the port industries, towards allowing their development and their self-supporting diversification, whilst ensuring for the ports the incoming and outgoing traffic induced by the industrial establishment.

3.2.3. Land transport

Land transport, its cost and the quality of the services which it provides for the port, has acquired reinforced importance during recent years, where the accent is placed on an accelerating rate of services and improvements in the level of services in the actual maritime activities. Inter-port competition (and the underlying State interventions) therefore operate also on the conditions of land services to the port itself. Specialisation of the port arises, therefore, from the specialisation of the land transport which serves it.

Amongst the means of land transport which are currently used certain are almost omnipresent, such as rail and road, others are only used selectively, whether they necessitate specific geographical conditions (natural waterways) or make exceptional financing demands (canals, motorways).

3.2.3.1. Road and rail

The presence of roads or railways, whilst normal in all the European ports (whereas in Japan many of the recently constructed container terminals have not yet been connected to the rail network), does not however exclude competition, whether it relates to tariffs or to speed of service. The ports in the north of Germany benefit, in the case of links with South Germany, from Bundesbahn tariffs which ensure equality with the ports on the Rhine Delta, whilst the installation of sorting stations within the port installations themselves makes it possible to reduce delays in trans-shipment and onward despatch to the minimum.

3.2.3.2. Motorways

Motorways now play a major role in the life of a modern port, particularly for traffic in general cargo. It should be noted that the first three French motorways had the specific aim of linking Paris to the three main French ports

of Dunkirk, Le Havre and Marseilles. The example of Southampton, specialised in container traffic and yet still not linked to the British motorway network, appears rather as an exception to the general rule in Europe of compatibility, if not coordination, in motorway and port investments. In Belgium the motorway linking Lille and Liège to Antwerp was built with radial routes converging on Brussels. The first motorway crossing a European frontier put the Ruhr and Rotterdam into direct contact. At the present time the port organisations of Hamburg and Bremen (the latter in the direction of the Bremerhaven port) are developing motorway infrastructures, ensuring the linking of their specialised installations for container traffic with the national network. It may nevertheless be considered that, as from now, all the major ports are assured of motorway service. This is no longer therefore an index of specialisation, since the recent period of extension and interconnection of the various European motorway networks.

Two other methods, by contrast, are both limited in their application and relatively specialised in their use: these are transport by pipeline and transport by water.

3.2.3.3. Pipelines

Transport by pipeline still relates today mostly to the transport of petroleum (excluding the networks for distributing natural gas): it allows the transfer of crude oil to refineries near the inland consumer markets, in preference to refining in coastal installations which necessitate the transport of refined products over long and expensive distances. The presence of an oil pipeline linking a port to a more or less extensive hinterland is therefore an important factor in the relative specialisation of a port in hydrocarbons traffic. The case of Marseilles, where petroleum traffic is in the region of a hundred million tonnes a year, and which is linked to Germany by the South European pipeline, is particularly notable. However, apart from pipelines for refined products, other specialised pipelines are being established, accentuating the specialisation of the ports and even the industrial activities which are established there: pipelines for chemical products. The Chemical Atlas¹ lists the ethylene, propylene and VCM pipelines in Europe, in addition to those for gas and oil. These provide interconnections between the most powerful chemical bases on the coast and inland, in respect of which European ports are not all in the same position.

¹ Chemical Atlas, published by Informations Chimie, Paris, 1975 266 pp.

In this connection we should note the following pipelines serving the principal ports of north-west continental Europe and Marseilles.

Ports Pipelines	Antwerp	Le Havre	Marseilles	Dunkirk	Bremen	Hamburg	Rotterdam
Gas	●	X	X	X	X	X	X
Crude petroleum	●	X	X				X
Ethylene	X		X				X

X existing

● proposed

These facts must not however be considered as reflecting a fixed situation. They do however show that ports such as Le Havre and Dunkirk, despite their relatively northern position in relation to the rest of France, do appear slightly isolated, and this does not contribute to the extension or the diversification of the chemical activities which are established there. The installation of a steam cracker at Dunkirk shows, however, that connection to a network of pipelines for chemical products is not (yet?) a necessary condition for the extension of port chemical activities. Antwerp, Marseilles and Rotterdam appear to be better supplied with this particular category of specialised land transport systems, with connections to the gas, oil, ethylene and, in accordance with the general trends of the search for agglomeration economies, with a possible connection to a propylene network which is now being established, and even to a VCM network which is still embryonic at a European level (although none of these connections has yet appeared as a publicly announced proposal).

Although in many respects the Japanese port industrial developments are parallel, or at least similar, to European developments the same does not apply to the transport of chemical products by pipeline, non-existent in fact as well as in project. This arises from one physical characteristic, the frequency of earthquakes in this country, the effects of which could be particularly dangerous for this mode of transport: Japanese sensitivity to environmental problems and the power of the ecological movements are effectively holding back those who would be tempted to ignore such risks because of the economic efficiency of this method of transport.

3.2.3.4. Waterways

Transport by waterway appears to be much more selective in relation to transport by pipeline because of geographical characteristics and/or the infrastructure which it requires. The small amount of waterway transport in France, in comparison with Germany and the Benelux countries, gives it an image of fairly specialised transport in which practically all the traffic relates to a few heavy products such as building materials, cereals, coal and oil. At a European level, however, waterways carry a not unimportant part of the traffic under each of the statistical headings of the NST/R nomenclature, as can be seen in the following table taken from the 1973 Year-book of European Community Transport¹.

¹ Transport 1971—Annual statistics. Luxembourg—Statistical Office of European Communities, 1973, 372 pp.

3.2.3.5. Diversification and specialisation of land transport

In comparison with roads and rail the two last decades have seen the establishment of new terrestrial methods of transport: motorways, which ensure rapid transport of goods of a high specific value (the single international motorway has increased its share of the total goods transported within the Community between 1965 and 1970 from 11 to 20%); pipelines, for oil, gas and certain chemical products; and waterways, now being progressively brought up to higher standards to allow the passage of convoys of pushed barges, which could enlarge the range of products transported from heavy goods to more sophisticated products.

The specialisation of a port is therefore also shown (and increasingly, because of the selective character of pipelines

Table 3.1. Breakdown of goods transport by method

Method of transport	Agricultural products and live animals	Food products and feeding stuffs	Solid mineral fuels	Petroleum products	Minerals and waste for metallurgy	Metallurgical products	Crude ore, manufactured minerals and building materials	Fertilizers	Chemical products	Machines, cars, manufactured products & special transactions	All goods
1	2	3	4	5	6	7	8	9	10	11	12
Total traffic (1,000 t) 1965	72,786	40,528	193,038	107,916	129,616	84,455	267,713	42,690	41,748	66,491	1,046,980
of which inland waterways (1,000 t)	20,541	12,197	43,520	65,999	34,258	15,290	175,788	9,769	11,903	4,992	394,256
Inland waterways (%)	28%	30%	23%	61%	26%	18%	66%	23%	29%	7%	38%
International road traffic (%)	11%	13%	—	3%	—	5%	6%	1%	9%	11%	5%
Railway (%)	61%	57%	77%	36%	74%	77%	28%	76%	62%	82%	57%
Total traffic (1,000 t) 1970	80,235	51,051	177,794	140,304	161,657	125,364	333,433	46,276	59,767	80,228	1,256,036
of which inland waterways (1,000 t)	22,706	17,023	35,886	81,223	42,792	19,839	222,584	10,651	17,487	4,200	474,365
Inland waterways (%)	28%	33%	20%	58%	26%	16%	67%	23%	29%	5%	38%
International road traffic (%)	15%	18%	—	4%	—	6%	9%	2%	18%	20%	8%
Railway (%)	57%	49%	80%	38%	74%	78%	25%	75%	53%	75%	54%

National and international transport of goods in the countries of the Community (excluding national road transport): traffic with Member countries or countries outside the Community.

and canals) in those modes of land transport which serve it. In the same way that isolated motorways have progressively formed a network these pipelines and waterways could progressively develop their interconnections.

- containership
- new specialised bulk carrier
- barge-carrier
- RO-RO

“Industrial Ports and Economic Transformations”

The “Summary diagram” (3.2.1.3.) is to be understood as a supplementary to the item of “Maritime transport—specialised vessels (3.2.1.) of the Series No. 5 of the above paper. Carriage of the diagram was delayed due to the late arrival of the material. (DSG)

3.2.1.3. Summary diagram

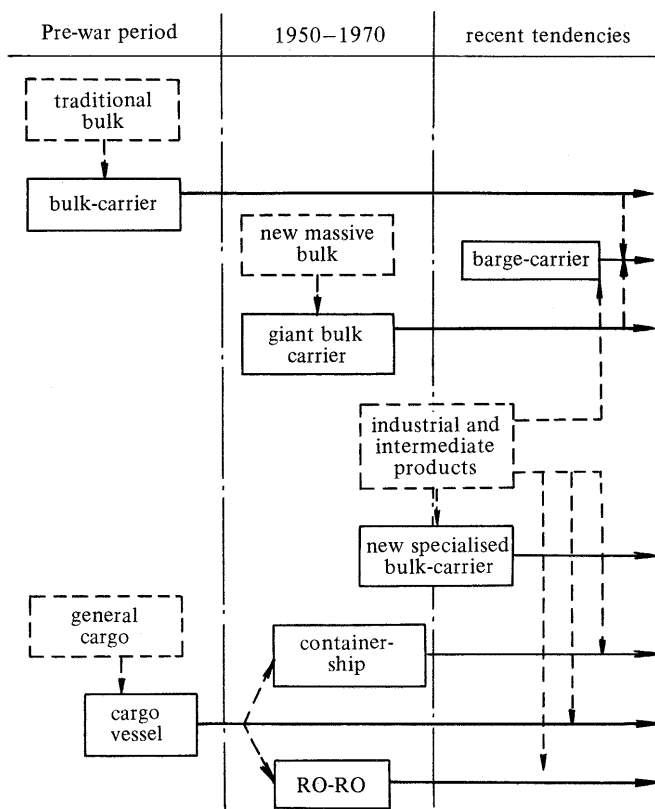
The main factors in the evolution of vessel specialisation, as compared with the pre-war situation when there were only traditional cargo vessels and bulk carriers of a comparable size, are shown in Figure 3.1. The appearance (and the continued use) of one type of vessel is indicated by a continuous line (—). The appearance of a new category of product (and its allocation to various types of vessels) is indicated as a dotted line (-----). It can be seen that at the end of the period there are four main types of goods: general cargo, traditional non-massive bulk, massive bulk, and new bulk products, and seven types of vessels: cargo vessels, traditional bulk carriers, giant bulk carriers, containerships, new specialised bulk carriers, barge-carriers and RO-ROs.

Key to the following diagram:

- goods:
- general cargo
 - traditional bulk
 - new massive bulk
 - industrial and intermediate products
- vessels:
- cargo vessel
 - bulk carrier
 - giant bulk carrier

Figure 3.1.

EVOLUTION OF THE TYPES OF TRANSPORTED GOODS AND OF CORRESPONDING VESSELS



ILO Expert tells Port Personnel Training in the Philippines

"Training of Port Personnel Mr. Kenneth Milburn ILO—Chief Technical Adviser to the Project"

There has recently concluded an interesting and successful project of technical co-operation in the Philippines which reflects the benefits that can derive to ports through the United Nations and its specialised agencies. In this case the subject matter was the training of port personnel, the main objective being to develop a port training programme to cover the whole of the Philippines and to embrace all levels of employees.

Until comparatively recently the responsibility for administering the ports of the Philippines rested with the Bureau of Customs, while port planning and development was the responsibility of the Department of Public Works. It had long been recognised by the Philippine Government that the Bureau of Customs administration was a handicap as far as efficiency of cargo handling was concerned because the experience and activity of their officials were geared more towards the perception of customs duties which have an immediate beneficial effect on the country's financial position than towards an improvement in cargo handling which might have comparable but less obvious financial advantages.

Upon the recommendation of a World Bank mission and in full agreement with the Commissioner of Customs, the Philippine Ports Authority was created. By the end of 1977 the Ports Authority, under its General Manager Mr. E.S. Baclig, Jr., had succeeded in assuming management control of 94 national ports and supervision over 523 municipal and 200 private ports including the port of Manila.

As early as 1972 the Commissioner of Customs was considering seeking the aid of the International Labour Office in developing a long-term training programme. In April 1975 a project document was signed by representatives of the Philippine Government and the ILO. In July 1975 the first ILO experts arrived in the Philippines and made contact with their counterparts who were at that time staff members of the Bureau of Customs. The nucleus of the Philippine Ports Authority had already been established, and one year later they took over the responsibility for port training.

During the first year of the project some training had been introduced, but the period was mainly spent in preparation and planning relating to infrastructure, staff, equipment, training curricula and materials and so forth. By degrees the organisation took shape and by the end of 1976 the Port Training Centre in Manila was firmly established with the training programme extended into the outports.

The long-range objectives were to improve the efficiency of cargo handling in the port of Manila and other ports of the country, efficient cargo handling being a prerequisite for a reduction in transport costs of imported goods and for an improvement in the competitive position of the country in so far as exported goods are concerned. This is particularly true in an archipelago country such as the Philippines where practically all trade, international as well

as domestic, is carried by sea transport.

The project had also among its objectives a reduction in the number and gravity of accidents in ports by the provision of appropriate training in safety for port workers at all levels. Improved efficiency of port operations should result furthermore in improvements in dockworkers' employment conditions.

Short-range objectives were also established and adjusted from time to time. These were mainly concerned with assessing the training needs and the training facilities required, and also to evaluate the result of training on the participants.

As might be expected, there were numerous difficulties encountered in the early stages. In the first place staff had to be recruited to administer the Port Training Centre. The PPA works as a government bureau and is subject to all the civil service procedures and rules of accountability regarding staff, equipment and expenditure. In addition, the PPA was itself a new creation and therefore required time to develop a pattern of administration. By degrees a sense of purpose developed, and a steady improvement in administration and facilities became evident.

It was decided at an early stage that training should be organised under three broad headings: (a) Management and Supervisory; (b) Port Operations; and (c) Equipment Maintenance. The administration was therefore divided into three appropriate divisions. Later a fourth division title, "Curriculum and Research", was added. The main administrative support services came from the PPA headquarters which worked quite well.

The premises for training were developed from an old but sturdy warehouse. The ground floor became the training workshops, with the mezzanine and upper floors renovated and utilised as administrative offices and classrooms, and including an auditorium for ceremonial and special functions which occasionally doubled as a classroom.

It was roughly estimated, pending the results of a more thorough research, that training would have to be given to 50,000 workers throughout the country. In order that the effect of training might feed through the port system in a reasonable space of time, it was decided that training would have to be introduced on a massive scale. During 1977 more than 3,000 candidates received training of some kind, each course being of about 50 hours' duration. This figure should be increased by 20 per cent during 1978.

One encouraging feature was the enthusiasm of the port workers to attend courses. It seemed that among other things they welcomed the programme, as it enhanced their status in addition to improving their skills. Employers during the whole of the period have been most co-operative in sponsoring candidates for training, but of course the main burden of costs lies with the Philippine Ports Authority.

There are many ways of counting the cost of training which would give disparate figures because of the difficulty in assigning values to certain fixed assets, and also to such matters as depreciation and amortisation. The most significant

(Continued on next page bottom)

International Conference on Training and Certification of Seafarers—

Note by the IMCO Secretariat

Supporting a suggestion expressed by Mr. A.J. Smith, IAPH Liaison Officer with IMCO, and in view of the significance involved, this office reproduces hereunder an extraction of the IMCO publication "MSC XXXIX/4, Aug. 3, 1978) (rin):—

I. General

The International Conference on Training and Certification of Seafarers, 1978, was held from 14 June to 7 July in London.

The Conference dealt with its substantive work in four Committees dealing with (I) articles and general matters; (II) master and deck department; (III) engine department; and (IV) radio department.

At the conclusion of its deliberations, the Conference unanimously adopted the INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS, 1978. This treaty is summarized below. (The Annex to the Convention and the resolution of the conference are omitted on account of limit space).

(Continued from page 19)

cant figure for budget purposes is probably the amount of cash expended in a given year chargeable to training.

The beneficiaries of effective training are widespread; they include the shipowners, the cargo owners, working contractors, the labour and the nation. The only source of cash generated within the port system is the cargo, and whoever shoulders the training costs direct will seek appropriate benefits or relief from the cargo. It would seem therefore that the best system of funding is that presenting the least administrative problems.

During the last complete year for which records are available goods to the value of eight billion dollars passed through the ports of the Philippines. This figure in itself illustrates the importance of the port industry, and of training with a view to improving performance standards within the industry.

The General Manager of the Ports Authority has been liberal in his support of the training programme in respect of staff and equipment. At the same time he has been selective in appointing good men to run the ports which now come under his jurisdiction. The overall effect is a considerable improvement in performance which in itself is a sound justification for the total policy and expenditure.

As time goes by and the PPA introduce fully their own systems, they will be observing and recording data on such matters as working rates and costs of moving cargo, together with information on damage and personal injury incurred within the port system. They will thereby be able to monitor training, and feed back information to the Training Centre who will adjust their programme and systems accordingly.

Research into the learning process has shown con-

II. Articles of the Convention

Application

The Convention is applicable to seafarers serving on board sea-going ships other than warships, naval auxiliaries, government ships on non-commercial service, fishing vessels, pleasure yachts and primitive wooden ships.

Entry into force

The Convention will enter into force twelve months after acceptance, accession, approval or ratification by twenty-five States the combined fleets of which constitute not less than 50 per cent of the world gross tonnage of ships of 100 gross register tons or more.

Transitional Provisions

After the Convention enters into force for a Party, certificates previously issued by that Party remain valid and the Administration concerned may, during the subsequent five years, continue to issue certificates in accordance with its previous practice to those candidates who had commenced their sea service prior to the entry into force of the Convention for that Party. All other candidates must be trained and examined to the standards of the Convention.

(Continued on next page bottom)

clusively that the eyes are the most important channel through which information is assimilated, roughly about six times as important as the ears. Visual aids are used extensively in the classrooms. These are mainly in the forms of films and slides, and transparencies shown on a overhead projector. Outdoor workers are prone to drowsiness when required to sit in a classroom for fairly long periods, particularly in a hot climate. The best way to counter this is by capturing and retaining their attention, and a good visual presentation has this effect.

Posterity will be the best judge of the benefits of the bold approach to port training shown by the Philippine government. The programme is now well established, and the ILO team of advisers phased out having completed their tour of duty. They leave a familiar environment and many friends behind, and it is a sad parting. This land of sunshine and smiles is not easy to leave.

The agreement included the words that the project was being executed in a spirit of friendly co-operation, and indeed that spirit prevailed throughout between the ILO team and their counterparts who worked shoulder to shoulder over a period of three years, at all times motivated by the common objectives and blending determination with experience.

The ILO input was funded by the Government of Norway, and their generosity is already showing substantial returns.

Acknowledgement: Publication of this article was made possible by the good offices and cooperation of Mr. E. Argiroffo, Chief of the Maritime Branch, ILO

Opening Speeches at UNCTAD/SIDA Follow-up Seminar

UNCTAD/SIDA Follow-up Seminar was hosted in Gothenburg, from 14 to 30 June 1978, to evaluate the benefits of previously conducted Training Courses in Port Management. The seminar was opened in the presence of the Swedish Deputy Prime Minister and Head of the Ministry dealing with aid to developing countries, Mr. Ola Ullsten, and the Head of the Shipping Division of UNCTAD, Mr. Adib Al-Jadir from Geneva. The following are their speeches for the opening of the Seminar:

Statement by Mr. Ola Ullsten Swedish Deputy Prime Minister

It is a pleasure and an honour for me to open this seminar on Port Management, arranged jointly by UNCTAD, the port of Gothenburg and SIDA.

A few of you attended the first course on Port Management in Gothenburg in 1972. Most of you, I believe, have not visited Sweden before. Let me extend our heartiest welcome to Sweden to all of you.

Our country is a shipping country and Gothenburg is our biggest port. The city that is hosting this seminar represents one of the most important features in the Swedish economic development over the last 75 years. Being a small country, Sweden has traditionally been heavily dependant on foreign trade which to a large extent has passed through

this harbour.

Roughly 25 percent of our GNP is exported. We are strong believers in free trade. It is no exaggeration to say that one of the cornerstones of the economic prosperity that has developed in our country is free trade.

A considerable part of our own foreign trade and a good portion of other countries foreign trade has been transported on Swedish vessels. Sweden is not only a trading nation, it is also a shipping nation. Gothenburg bears witness thereof.

Trade and economic cooperation between states bring with them dependence and change. These are concepts that may be positive or negative.

Trade between countries that are relatively equal in economic strength and level of development is likely to lead to a prosperous economic growth for both parts. With such growth structural changes in the economic life are more easily absorbed. The mutual economic dependence resulting from trade is not regarded as a menace to freedom but rather as a sign of mutual confidence and even stability. This is what has characterized the economic development in the industrialized countries over the last decades.

Trade between countries of unequal economic strength may be quite another thing. The relationship between developing countries and developed has often been charac-

(Continued from page 20)

Additionally, an Administration may, during the two years following the entry into force of the Convention for that Party, issue certificates of service to seafarers who have satisfactorily served in the capacity concerned for an appropriate period.

Dispensations

In circumstances of exceptional necessity, an Administration may issue, for a period not exceeding six months, a dispensation to a seafarer permitting him to act in a specified ship, in a capacity for which he does not hold the appropriate certificate provided he can fill the post in a safe manner and is certificated to fill the post immediately below. Where the post immediately below is not required to be filled by a person holding a certificate, the person to whom the dispensation is issued must have been tested to ensure that he can safely fill the post concerned and have qualifications and experience equivalent to those required for the post concerned.

The issue of a dispensation for a post as radio officer or radio operator is subject to the provisions of the Radio Regulations of the International Telecommunication Convention in force.

A dispensation may only be granted to a master or chief engineer in cases of **force majeure** and then only for the shortest possible period.

In all cases, Administrations must ensure that any post for which a dispensation is issued is filled by the holder of an appropriate certificate as soon as possible.

Control

While a ship is in the port of a Party, a duly authorized

officer may verify that all seafarers on board who are required by the Convention to hold certificates are so certificated or hold an appropriate dispensation. A standard form of certificate endorsement was adopted to facilitate these control measures.

The master, Consul or, in his absence, the nearest diplomatic representative or the maritime authority of the State whose flag the ship is entitled to fly must be informed of any deficiency found by the control officer and the grounds on which it has been determined that these deficiencies pose a danger to persons, property or the environment.

In the event that such deficiencies are not corrected thereby posing a danger to persons, property or the environment, the Party exercising control is required to prevent the ship from sailing.

Ships are entitled to compensation if unduly detained and no more favourable treatment may be given to ships of a non-Party than is given to ships of a Party.

Promotion of Technical Co-operation

Parties to the Convention are required, in consultation with IMCO, to promote support for other Parties requesting technical assistance for administrative or technical training, the establishment or equipping of seafarer training institutions, the development of training programmes or the facilitation of other measures for the enhancement of seafarers' qualifications. This shall preferably be carried out on a national, sub-regional or regional basis taking account of the special needs of developing countries. IMCO is also bound to pursue these efforts, as appropriate, in consultation or association with the ILO and other international organizations.

terized by one-sided dependence. There has been losers and winners.

From its start fifteen years ago, UNCTAD has played the role of demonstrating the injustices of trade conditions between developed and developing countries. It has shown that free trade does not necessarily bring such favourable effects to developing countries as it evidently has done to developed countries. Within UNCTAD many of the views and demands of the developing world were formulated long before they became known under the topical concept "A new economic world order".

The ultimate aim of the new economic order is a situation where all countries are on equal footing and all countries are able to derive full advantage of cooperation with others. Development of better systems for transportation in the developing countries is an important component in their efforts to reach a more equitable economic status. Better port management in your countries is a part of the new economic world order, to put it briefly.

In financing training activities provided by UNCTAD we believe Sweden has made a good choice. UNCTAD's contribution to the efficient operation and development of ports in developing countries is clearly in line with the existing needs. By channelling its considerable experience towards developing countries UNCTAD assists in developing human resources.

Shipping and sea communication are traditional means for exchange not only of goods but also of ideas and people between countries. At a time when trains, cars and aeroplanes did not exist, waters between people united them rather than separated them. It is perhaps not as true today. We all know that the present economic crisis has hit shipping business particularly hard. However, there are several reasons why we should not exclude the prospect of a strong revival for maritime transports.

Increased trade and increased economic cooperation between countries should certainly be an important feature in a world changing towards a new economic order. To some extent, the new order is already on its way. There is no longer a clear-cut division between developing countries and developed countries. The present economic crisis is partly a crisis of change.

Production from developing countries has penetrated the markets of the traditional industrial states in a way that causes many governments considerable concern. There is no use to deny that. However difficult the process of structural change may be for some developed states, particularly in a period of a deep economic recession, we must always remember that new competitors also are new customers.

As a matter of fact, demand for consumption and capital goods from the developing world has prevented economic activity in the industrialized world from falling still deeper. Thus the present crisis has made the interdependence between all states more obvious. In that sense it may even have contributed to a better understanding of the need for a new economic world order.

Increasing industrial production and export penetration on the part of a number of developing countries is of course a positive factor for those countries and a challenge to the others. This novel feature must not make us forget that many developing states, perhaps the majority of them, have reason to look very seriously at the present situation and at the prospects for the near future.

In the poorest countries, the situation has deteriorated over the last few years. The prospects for growth are

meager. These countries will have need for increased external assistance for long periods ahead. This is part of the reason why Sweden has concentrated its bilateral aid to the poorest countries. Today, about 80 percent of our bilateral assistance goes to countries classified as least developed countries.

It is important that the new economic order is not molded so as to favour mainly those countries which are able competitive to produce and sell goods. I think it is essential that traditional assistance flows are allowed to take an substantial and increasing place in our relations to the developing world. I also think it is important that these flows run to the recipient countries with as few conditions tied to them as possible.

The relations between developing countries and developed must necessarily be multifaceted. Assistance constitutes one relationship. Trade, economic cooperation, cultural contacts, scientific exchange are others. Some of the matters discussed in these organizations have a bearing on the new international economic order. Let me take up two such matters that may be of interest to this seminar.

Sweden as a shipping nation has played an active role in discussions within UNCTAD as well as within the International Maritime Consultative Organization, IMCO.

In 1974, UN convened a conference to draft a code of conduct for liner conferences. The conference was a response to the desire of developing countries to gain a larger share of liner trades touching their foreign trade and to get a larger measure of control over the shipping rates. The conference succeeded in the sense that a draft code was put to a vote. Sweden, together with 6 developed countries, voted against the draft code. A number of other developed countries abstained.

This might look as the traditional attitude of developed countries towards the demands of the developing countries. Since I think that conclusion would be erroneous, I would like to explain the reasons for our negative vote.

We fully endorse the demands of the developing countries for a larger share in the world shipping industry, including the liner trades. If a developing country so desires, a share of its own foreign trade could be reserved for its own national line. It is in the interest of the country itself that this share should be so high as to increase its role in world shipping. It is likewise in the interest of the same country that the share should not be excessive. This would result in uneconomic transports. It is furthermore likely that excessive shares would lead to penetration by foreign interests in the national lines. The degree of control sought would then become illusory, at best.

Given this basically positive attitude of Sweden towards the aspirations of developing countries in the sphere of shipping, what were the reasons that prompted our negative vote?

First of all, the proposed rules regarding cargo sharing—according to which the exporting country and the importing would carry 40% each of their bilateral trade—do not relate solely to developing countries—but also to developed. This means that the Code in fact would basically alter the system of free choice of vessels also between the developed countries. It would imply a serious retrogression to protectionism in an area where Sweden has major economic interests as an exporter of services.

We have advocated a solution whereby free competition would be preserved between the developed countries while at the same time acknowledging the right of developing

countries to reserve a part of their own cargoes.

The UN Code of Conduct for Liner Conferences has hitherto not come into force. Almost five years since the Conference, support, even among developing countries, has not been forthcoming to a sufficient degree. It is an open question whether this will be the case by the fifth UNCTAD conference. If the Code then is not in force, it seems obvious that UNCTAD should call a review conference with the aim of drafting a new code, more better directed to meet the aspirations of the developing countries, without disrupting the competitive pattern between the developed countries.

I would also like to touch briefly on another matter which will command great interest at the next UNCTAD Conference, the problems posed by flags of convenience. Sweden considers that the fleets carrying flags of convenience constitute an unwelcome aspect in world shipping. Disruption of competition has followed in their wake together with a number of major ecological disasters. The disruption of competition has not only affected the traditional shipping nations but also, according to a resolution adopted by a working party in UNCTAD, the developing countries.

The problems posed by the rapid expansion of merchant marines under flags of convenience are not easy to solve, to be sure. However, it should be possible to arrive at concrete measures within UNCTAD to curb the expansion of the fleets. Sweden looks forward to these discussions and intends to make a positive contribution.

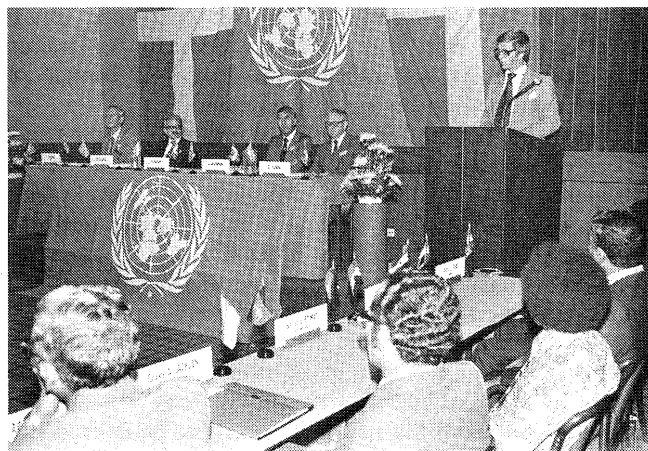
With these thoughts on general matters and specific matters I once again greet you heartily welcome to this seminar. When it is concluded, in 15 days I hope that you will leave Sweden with some new knowledge of ports, of each other and perhaps also of Sweden—to the benefit of a closer cooperation between all our countries.

Speech by Mr. Adib Al-Jadir Head of Shipping Division, UNCTAD

On behalf of the Secretary-General of UNCTAD, I have great pleasure in welcoming you, the participants, to Gothenburg to participate in the Follow-up Seminar to the First Four English-speaking courses in port management. I should also like to welcome the distinguished observers from the United Nations Economic Commissions, the United Nations Development Programme, and IMCO. I am sure that your attendance will enhance the contents of the discussions which will take place over the next few days and the subsequent benefits to emerge from this Seminar.

Gothenburg provides a most fitting location in which to conduct this Seminar and I am pleased that the venue has allowed many of our friends from SIDA, the Gothenburg Port Authority and from other bodies involved in maritime transport to be present today. However, we count it a most singular honour, that you, Sir, despite the pressures of your official duties, have spared the time to be present, personally, to inaugurate this Seminar and to briefly meet with some of the participants who have previously attended training courses financed by SIDA.

Sir, I would like to take this opportunity to thank the people and Government of Sweden for the generous support they have provided to UNCTAD in the field of maritime training. I would like to express my appreciation for the valuable advice and assistance provided by SIDA, in particular Mr. Gösta Westring and his staff of the Industry



Mr. Ola Ullsten, the Swedish Deputy Prime Minister and Head of the Ministry dealing with aid to developing countries, addressing the Follow-Up Seminar participants at the Opening Session at Hotel Scandinavia in Gothenburg on the 14th June, 1978.

In the panel from left to right:

Mr. Gösta Westring, Head of the Industrial Division of the Swedish International Development Authority.

Mr. Adib Al-Jadir, Head of Shipping Division, UNCTAD Geneva.

Mr. Eric Williamson, Chief Ports Section of Shipping Division, UNCTAD, Geneva.

Mr. Sven Ullman, General Manager of the Port of Gothenburg Authority.

Division, with whom we have come to work more closely in recent years. I also think it appropriate on this occasion to thank Mr. Ullman, the General Manager, and his staff at the Port of Gothenburg Authority. They have not only hosted the first two courses and this Follow-up Seminar, but have provided substantive support and encouragement throughout the development and conduct of this training project.

As you are aware, UNCTAD has, as one of its goals, the extension of developing countries' trade—the vast majority of which is carried by sea. In this respect it has long been established that ports may often constitute the weakest link in the transportation chain in international trade. Improvements in the efficiency of ports would, therefore, be an important factor in reducing transportation costs and may provide a stimulus to international trade.

UNCTAD's contribution to the improvement in efficiency of ports in developing countries was, until 1972, mainly concentrated on research and technical assistance projects. However, at that time UNCTAD first became involved in port management training courses.

The provision of management training schemes was seen by UNCTAD as a logical development and one which augmented the technical assistance and research functions. Improvement in management skills could provide a major contributory factor in achieving improved port performance, particularly with the advent of technological change. However, UNCTAD cannot claim the credit for initiating the concept of such training schemes. It was a former General Manager of the Gothenburg Harbour Board, Captain Stig Axelsson, who first suggested the establishment of an international training course for managers employed in the ports of developing countries in 1970. Captain Axelsson was conscious of the shortcomings of existing training schemes and the advantages to be obtained from

group training programmes. UNCTAD welcomed this initiative since, with the increasing demand for training opportunities, it was essential to develop a formal and systematic approach to such programmes.

From the concept there quickly materialized the framework of a course. It was at this stage that the concept was proposed to the Swedish International Development Authority (SIDA) and a request for financial assistance made. SIDA agreed to this request and, to date, have provided finance for a total of seven such courses—four in the English language, 2 in French and 1 in Spanish.

Whilst planning the course UNCTAD acknowledged the fact that training existed at all management levels. However, it was considered that the greatest impact from training courses of this nature was likely to be derived from increasing the knowledge and management skills at the more senior management levels. These were managers, who it was thought, would have the necessary authority to initiate and introduce changes in administrative and operational procedures in their ports. The first course, with a duration of 10 weeks, was therefore designed for 25 participants holding senior positions in government ministries, port authorities or other related organizations. Gothenburg was chosen as the location for the first course conducted in 1972 following the close co-operation which had developed between the many parties involved in the preliminary planning phase. Selection of participants to attend courses was made on a geographical region basis and at the first course participants were invited from countries in Africa and the Middle East.

The ultimate objective of the course content was to improve management skills, to broaden managers' knowledge of port administration and operations and to assist individuals to recognise the major organizational and operational constraints in their ports. To do this a comprehensive programme was provided which included an introduction to modern management techniques and their application in the ports industry of developing countries.

Following the successful conclusion of the first course in 1972 a further 5 courses have been organized and a seventh course is currently being organised for Latin American countries. These courses have quickly become institutionalized and the structure and content modified to meet the needs of developing countries, largely in response to participants suggestion during the evaluation.

In the period 1972–76, a total of 97 participants from 41 countries attended the four English-language courses conducted. These courses have been organized for managers from the Asian and Caribbean regions in addition to those from Africa and the Middle East. Whilst the second course was again conducted in Gothenburg, the later courses were held in the regions from which the majority of participants were selected. Hence, it was conducted in Tanzania and Kenya in 1975 and in Malaysia and Singapore in 1976.

We believe that the first series of courses has provided positive assistance to developing countries in the training and development of personnel employed in the ports. Analysis of the results of the evaluation conducted on the four English-language courses has provided substantive evidence to show that the courses have met their stated objectives and proved to be successful.

However, at the outset of this series of courses UNCTAD and SIDA were aware of the fact that the majority of the benefits to be derived from training courses of this type would be long term in nature. UNCTAD is currently

examining its role in the field of management training with the view to planning and designing management courses for the future. Hence, it was considered appropriate at this juncture to conduct this follow-up Seminar with the objective of evaluating the long-term benefits of previous courses. However, equally important is the need to identify the future priority training needs of port managers in developing countries. The evaluation component of this Seminar will provide a forum for discussion and an opportunity for the exchange of information and experiences between the participants invited to attend. The results of this evaluation will then be used to formulate a port management training strategy for the 1980's to help sustain the impetus stimulated by the previous series of courses.

I should not neglect the fact that the second component of the Seminar will consist of a management training symposium, the content of which is designed to build upon and extend that included in the previous courses. Under the title "The Management of Port Development" this should provide you with an opportunity of exchanging views on this most pressing of problems.

I would urge you to conduct a full and frank exchange of views on the benefits of the UNCTAD/SIDA training courses. Further, I trust that you will direct your attentions to the future need of port managers in developing countries and the ways in which training can best contribute to this. The eventual success of this project will depend upon the contribution that you, the participants, put into the deliberations. I wish you success. For the conclusions to be reached here will assist UNCTAD and other international agencies in the design of programmes which will ultimately be of benefit to you and your colleagues in developing countries' ports.

Wide differences —

(Turned back from page 26)

with the European treaties.

It would have been better, in Mr. Seefeld's view, if a common seaport policy had been aimed at from the beginning. All detail proposals should have been judged as to their consequences for the seaports. It is high time for this omission to be repaired. The EEC Commission should submit as soon as possible a complete proposal for a common seaport policy.

Mr. Seefeld's resolution was adopted by the European Parliament. The report of the first Seaports Working Group seems to be a big step forward on the road which he indicated.

Wide differences between support régimes for European sea ports—also from country to country

Remarkable report by EEC Commission working group

Rotterdam (Rotterdam "trends" in Rotterdam Europort Delta):—It has produced an impressive report with the outcome of research on the organisational structure of the seaports in the eight maritime countries of the EEC, the way they are administered and supported or not by their governments in respect of port expansions, the construction of locks, outer piers, communications within port regions, etc.

It collected data on their powers and restrictions of authority, put questions on financial matters and studied a number of port labour regulations.

Never had there been so comprehensive a survey in European seaport circles. Preparations alone took several years, during which the group inevitably encountered resistance in a number of EEC seaports. Nevertheless most of them agreed to cooperate.

No fewer than 77 of the 80 port managers who were approached, completed the questionnaires. Some of them are responsible for more than one port, so that the EEC Commission finally obtained data on 112 seaports, handling in the aggregate about 80 per cent of the commodities landed and loaded by ocean-going vessels in the ports of the EEC. Equally important was the fact that the respondents included all the major seaports.

Assisted by eight national coordinators, one in every member-state, the Directorate-General of Transport in Brussels created order in the immense amount of material supplied from all over the EEC. The stack of paper contained thousands of sheets.

The vital elements from all the responses have been summarised concisely in the just published working document, entitled 'Enquiry into the current situation in the major community seaports', and numbering over two hundred pages.

It is unique material for everyone working in the European port and transport sectors. It shows that there are in fact wide differences in forms of management and organisational structure, and also that the measure in which national governments consider themselves responsible for their economically so important seaports, differs from country to country.

In this respect the outcome of the survey appears to be a cause of concern to the administrators of the big two Dutch seaports, Rotterdam and Amsterdam.

Dr. F.A.F. Scheurleer, managing director of the Rotterdam Municipal Port Management, the 800-strong organisation administering the port of Rotterdam, says: 'One may assume, as does the EEC Commission, that the competitive capacity of the seaports in all member-states is regarded as a vital factor for the national economy. And rightly so.'

Yet I must find in this EEC report that there are considerable differences in the starting points and in the conditions applying to the operations of the ports of Rotterdam and Amsterdam, and those applying to the ports in a number of other countries in the European Community.

Just look in the report at the passages on the support régimes obtaining in the various member-states for, say dredging maritime channels of access, the construction of locks and outer piers. In a number of countries government contributions go as high as 80 or 100 per cent.

The Netherlands government contributes in principle not more than two-thirds (67 per cent) to such investments in the cases of Rotterdam and Amsterdam. But not always. In certain cases the government has departed from this line by reducing its contribution to zero. Rotterdam has had to pay the most recent, costly improvements of the Euro-channel entirely out of its own pocket.'

'This as regards the maritime channels of access which in Rotterdam precisely have required so much work and such huge investments in the last few years,' Mr. Scheurleer noted.

'But if we look at the investment régimes of the various member-states with regard to all kinds of work in the ports themselves, the differences are even wider. Rotterdam and Amsterdam receive no support whatever for works that have to be carried out in the ports. In other countries we often find a quite different situation. In the Belgian ports, for instance, the construction of harbour basins and quays is paid for by the port administration and the central government jointly.

Other differences in competition conditions will appear when further research has taken place. And further data will become available since the EEC Commission plans to continue this work. We are in favour.'

New assignment

The EEC Commission is pushing on. Now that the EEC Seaports Working Group has submitted its report which the port administrators have approved in plenary meeting, the Commission has immediately set up another working group to advise it on the further research required to put a complete proposal on a common seaports policy before the European Parliament within a foreseeable time. The final report of the first Seaports Working Group was not yet sufficient for this purpose.

One of the assignment of the 'new' international working group—the word 'new' is put in quotes because the new committee differs hardly if at all from the first one—is to elaborate the findings of the first report as to differences in organisation, administration, operation, financial matters, statutory obligations, etc. and to trace their causes if possible. This will enable the Commission to determine to what extent such differences may result in a distortion of an open, fair competition.

The working group is even instructed to try and measure the cost effect of these differences upon the handling of both goods and ships in the EEC seaports 'insofar as it is in a position to do so'.

Furthermore the working group is required to draw up a list of 'initiatives' to be taken in the European seaports sector.

It is not hard to imagine how difficult is the assignment for the working group in the given circumstances.

More facts needed

Dr. R. Th. Sperling, adviser to the Rotterdam Port Management, and his assistant, Mr. J. Dikgraaf, were closely involved in the work done by the Netherlands delegates on the first working group. He too feels that the second working group still has some highly important research to do, but doubts whether it will succeed in every respect.

'Interesting though the present report is, to my mind it still has some major shortcomings. It pays no attention whatsoever, for instance, to the industrial function of the seaports and to the competition conditions applying to this field. Nor did the first working group concern itself with the competition conditions under which the private transportation and transport firms are operating in the seaports.

The Dutch delegation considers it absolutely necessary that data be collected on these points too, at any rate if the Commission wishes to take the cost of the private sector into account when measuring the cost effects of the handling of goods and vessels.

The point is that one should try to obtain a picture of, say, the financial facilities enjoyed by the firms in the various seaports on account of national or regional economic policies, of social conditions or special schemes applying to ports, etc.'

'It would also be necessary,' according to Mr. Sperling, 'to have more information on the policies of member-states in fields which also concern seaport policies, such as energy, transport, commerce, environment, taxation, monetary problems. Some of these aspects have not been covered at all during the initial research, and others only to a very limited extent.

In the talks preceding the establishment of the first working group (in February 1974) the Dutch port administrators immediately and repeatedly urged a wider coverage of the research in that sense. The EEC Commission agreed as appears clearly from the 'Draft of an enquiry into the current situation' which it submitted at the time. But the Commission withdrew its proposal because this approach ran into fierce opposition in some quarters. The Commission obviously felt it was hardly useful to push on with a plan that was clearly not assured of full cooperation by all concerned. I understood this position, though I did regret it.

Ultimately the EEC Commission is responsible for any common seaport policy proposals requested by the European Parliament. The members of the working group are merely responsible for their advice and are a sounding board for the EEC Commission. However, I repeat that I understand they did not want to force things at the time.'

Mr. Sperling wonders whether the new working group will succeed in establishing even approximately the cost effects of the various competition conditions--and if it does, whether it will be possible to draw any useful conclusions. He believes it is well-nigh impossible because tariffs are a result moreover of so many other factors which are equally hard to measure.

Determination

However this may be, every reader of the Brussels documents gets the impression that the EEC Commission is determined to get all the material it needs to submit a sound proposal for the common European seaport policy to the European Parliament presently.

This determination is based on the EEC Commission's

List of the cooperative EEC seaports

Belgium	France	Genoa
Antwerp	Bayonne	La Spezia
Ghent	Bordeaux	Leghorn
Ostend	Boulogne	Naples
Zeebrugge	Brest	Palermo
	Caen	Savona
	Calais	Trieste
	Cherbourg	Venice
Denmark	Dieppe	
Alborg	Dunkirk	Netherlands
Arhus	La Nouvelle	Amsterdam
Esbjerg	La Rochelle	Delfzijl
Fredericia	Le Havre	Rotterdam
Kalundborg	Lorient	Terneuzen
Copenhagen	Marseille	Flushing
Odense	Nantes/St. Nazaire	
	Rouen	Great Britain
	Sète	Bristol (3 ports)
Western-Germany		British Railways
Brake		Board (7 ports)
Bremen	Ireland	British Transport
Brunsbüttel	Arklow	Docks Board
Cuxhaven	Cork	(19 ports)
Emden	Drogheda	Clyde (3 ports)
Flensburg	Dublin	Dover
Hamburg	Galway	Felixstowe
Kiel	Limerick	Forth (6 ports)
Leer	New Ross	London
Lübeck	Waterford	Manchester
Nordenham		Mersey (2 ports)
Papenburg	Italy	Tees (2 ports)
Rendsburg	Cagliari	Tyne
Wilhelmshaven	Civitavecchia	

conviction that the introduction of a European seaport policy is an indispensable step towards an even more distant goal: the establishment of a coherent common transport policy.

In April 1972 Mr. H. Seefeld reported on behalf of the Transport Committee in a resolution to the European Parliament that it had so far proved impossible to get a European transport policy off the ground notwithstanding an agreement to this effect in Article 74 of the EEC treaty.

'Fifteen years after the coming into force of the Rome Treaties this failure should be regarded as a serious defeat for the Community,' he wrote.

In his view one of the chief causes of the difficulties was that virtually every section of a common policy on road transport, rail transport and inland shipping concerns more or less the competition problems existing between the European seaports.

Opposition

The national governments consider it to be vitally important for their seaports to be competitive, Mr. Seefeld finds. The EEC Ministerial Council has rejected several Commission proposals because national governments feared they would harm the competitive position of their seaports.

Current transport legislation in the member-states contains provisions which are harmful to some ports, and other provisions intended to offset such drawbacks. Any attempt within the framework of a step-by-step policy to upset this curious, artificial equilibrium by detail proposals, will inevitably run into opposition from those concerned.

The present equilibrium clashes in many a detail with the objectives and special provisions of the European treaties. It has perpetuated irregularities and inequities. It can be replaced only by a new equilibrium more in keeping

(Turn back to page 24)

Orbiter Probe

UNCTAD's technical co-operation in the field of shipping and ports

Extracts from Feature article No. 3

Technical assistance to developing countries in the field of shipping and ports and connected inland transport have become part of UNCTAD's activities since its establishment.

In 1975 the Committee on Shipping requested the United Nations Development Programme to examine ways and means of increasing the funds made available to the UNCTAD secretariat to enable it to continue and expand its technical assistance activities in shipping and ports. In particular, the Committee requested the secretariat to: a) undertake activities concerning the establishment, on a national, regional and sub-regional basis, of appropriate institutions which can play a role in the solution of problems related to maritime transport; b) organize training courses for managerial personnel for shipping and ports; and c) continue to provide the services of interregional advisers on shipping and ports.

The field in which UNCTAD provides technical assistance covers a wide range of subjects such as port operations and port planning, economics and management of shipping, establishment of shippers' councils or equivalent bodies and of the consultation machinery, adequacy of shipping services, development of national merchant marine, joint shipping and ports ventures, multimodal transport, economic and commercial aspects of shipping legislation.

On the average more than twenty experts are in the field. Their recruitment and substantive backstopping to the projects they work in are provided by UNCTAD. The total annual cost exceeds \$2 million. In addition, staff members of UNCTAD's Shipping Division carry out frequent advisory and training missions in the field.

Among major technical assistance projects, mention must be made of: a multi-sectoral regional project in Central America on the improvement of shipping and ports in the region; a multisectoral national project in the Ivory Coast also in shipping and ports; and a port development project in Jamaica. The characteristics of typical projects recently completed or active are given below. Some of the projects are carried out jointly with IMCO or with regional economic commissions.

Training activities in the field of shipping and ports have expanded considerably during the past few years. UNCTAD has organized six training courses in port management, three training courses in shipping economics and management, a number of seminars on selected port topics, and a seminar on ocean chartering. In total, more than 500 participants from developing countries were able to attend this type of training.

PORTS

Most of UNCTAD's technical assistance in the ports field is based on the results of UNCTAD's own research studies on port operations, port planning, port pricing, port statistics and port performance indicators. In addition, UNCTAD provides technical assistance in such fields as the setting up of national port authorities, port legislation and regulations, labour questions, planning, construction, operation and maintenance of specialized bulk terminals, equipment procurement. UNCTAD has, over the past eight years, provided technical assistance in all aspects of the planning, management and operation of ports.

Training

Recognizing that management training is a pre-requisite for the development of efficient ports UNCTAD has also organized, over the past six years, six training courses for port management/government officials.

Port Congestion

Finally, following the sharp increase in port congestion during the period 1975-1977, UNCTAD has organized and fielded port congestion task forces in Benin, Cyprus, Ivory Coast, Mauritius, Morocco and the Yemen Arab Republic on the request of the governments of these countries, in order to determine the causes of port congestion, to propose specific action to deal with the problem and to assist in the actual implementation of the actions recommended.

SHIPPING

Technical assistance in the field of shipping is based to a large extent on studies carried out in UNCTAD as well as recommendations adopted by the Committee on Shipping. Technical assistance and advice refer to two objectives: protection of foreign trade interests; and promotion of national merchant marine.

INFORMATION SERVICE

In pursuance of the decision of the Committee on Shipping, the Information Service for Technical Assistance in Shipping and Ports to Developing Countries (SHIPASSIST) is being set up on an experimental basis within the UNCTAD secretariat.

The objective of SHIPASSIST is to promote and facilitate the development of national merchant marines, ports, shipping services and maritime transport technologies in developing countries by providing them with regular information on the available sources of technical assistance in the above fields. The Information Service is also to serve

as a focal point for the needs of policy-makers in developing countries for *ad hoc* advice as to the source of specific types of technical assistance in shipping and ports.

The UNCTAD secretariat will be publishing, annually, a Directory of Services for Technical Assistance in Shipping and Ports to developing countries. The secretariat will also be providing developing countries, at their request, with advice on sources of specific types of technical assistance in shipping and ports desired by them.

SHIPASSIST will cover both bilateral and multilateral sources of technical assistance. In response to a recommendation made recently by a Group of Experts on Ship Finance, SHIPASSIST will at a later stage include sources of capital assistance in its coverage.

UNCTAD: Trade and Development Board

(18th session, 29 August–15 September, Geneva)

(UNCTAD Monthly Bulletin): The most significant item on the Board agenda for this session is perhaps the fifth session of the Conference on Trade and Development to be held at Manila from 7 May to 1 June 1979. The Secretary-General of UNCTAD will submit to the Board the draft provisional agenda for UNCTAD V, drawn up following his consultations with governments.

Interdependent problems of trade, development finance and the international monetary system have always been kept under continuous review by the Trade and Development Board. At this session, the Board will have a report on this subject, to which will be attached, as addenda, the secretariat reports on the world economic outlook and on aspects of international economic stabilization.

A sessional committee will be convened to consider matters relating to trade relations among countries having different economic and social systems. As usual, facilities will be provided for bilateral and multilateral consultations among delegations with a view to intensifying trade and economic relations between developing countries and socialist countries of Eastern Europe.

Matters requiring action by the Board arising from or related to reports and activities of its subsidiary and other bodies concern commodity trade, trade in manufactures and semi-manufactures, financing related to trade, shipping, international multimodal transport, and economic co-operation among developing countries.

Under the heading of trade in manufactures and semi-manufactures, the Board will consider a proposal to establish a joint UNCTAD/UNIDO expert group on trade and industrial co-operation between the developed and developing countries. In the field of restrictive business practices, the Board is expected to take appropriate action concerning the institutional arrangements for the negotiation of a set of multilaterally agreed equitable principles and rules.

A decision on the terms of reference of the Committee on Shipping is expected to be taken at this session of the Board.

The Board will take note of the reports of the Intergovernmental Preparatory Group on a Convention on International Multimodal Transport on its first four sessions.

Nanaimo developing efficient handling system

(Nanaimo Harbour News):—The Port of Nanaimo has developed fast and efficient handling systems for all types of forest products. One of those products, pulp, comes into the port mainly by road and is stored in warehouse space covering 100,000 sq. ft.

With a ship in port loading pulp, the bales are moved first by a lift truck, with special clamp attachments, to guide rails at the entrance to the warehouse.

When a load of 16 tonnes has been assembled, along comes one of four large straddle carriers to pick up the load in one lift.

Only a few minutes later, at shipside, the straddle carrier again runs outside a set of guide rails and, with a hiss of the hydraulics, let's down the 16 tonnes and is on the way back for another load.

Hooks from the Cranston head are placed at each end of the load by longshoremen and the ship's derrick raises the full 16 tonnes and lowers it into a nearby hold.

Depending on the ship, loading can average 150 tons an hour, but 200 is not unusual. The record is 240 tons an hour on a ship specially designed for fast loading.

Port Days planned

(Nanaimo Harbour News):—For the third year, the Port of Nanaimo will mark Canadian Port and Harbour week this time with a two day celebration—Friday, September 29, and Saturday, September 30.

Last year harbour tours on the Bastion City were very popular. This year the hourly tours will be available to the public over both days.

On Friday students from Nanaimo Secondary School will be shown around the Assembly Wharf and over a ship loading. On the Saturday it is hoped to arrange for an air-sea rescue demonstration, the work of the Harbour Commission's Harbour Protector in containing oil spills, rescue and patrol efforts by the N.H. Patrol boat and the Zodiac and an exhibition by the Nanaimo Water Ski Club.

Trigger price system could hurt shipping in the lakes

(Port of Toronto News):—The U.S. Treasury Department's new program to discourage cheap foreign steel imports could sting ports in the Great Lakes this year.

Concern has been expressed by Great Lakes industry, labour and the U.S. and Canadian Seaway agencies that the new program could pose an economic threat to the shipping industry in general.

Maritime interests claim that the department's steel protection plan will divert foreign steel shipments from the Great Lakes to other coasts, thus causing a loss of Seaway toll collections. It could also mean a severe shortage of trans-oceanic vessels that are needed to carry Midwestern grain overseas.

Great Lakes shipping interests are estimating that up to 80 per cent of the steel-laden vessels that formerly serviced the lakes could be diverted to the other coasts.

This could mean a loss of maritime industry jobs, possibly putting thousands of longshoremen, warehousemen, tug boat pilots and crewmen out of work. Eight

The Port of Vancouver, Canada

I.A.P.H. Feature (See front cover also.)

Age can sometimes be deceptive. The City of Vancouver on Canada's west coast is only a modest 92 years old, but the importance of its seaport bears little relation to its age. Recent spectacular growth has seen the Port of Vancouver rise to first place in cargo volume among North American Pacific ports. It now ranks among the dozen leading ports in the world.

The growth can be ascribed to many factors, not the least of which are Vancouver's strategic location and its natural attributes, as well as its position as the premier western window on the world for Canada—the world's second-largest country in terms of land mass.

Forty-nine of the 214 square miles comprising the Port of Vancouver are the deep inner harbour waters of Burrard Inlet—an area of vast, important shipping concentration, with a development potential only now being fully understood.

The authority of the port extends south from Burrard Inlet some 25 miles to the U.S. boundary along the 49th Parallel. It is an entity within the larger Greater Vancouver area, with its own special rights and obligations, its own police force, and important marine responsibilities applicable to all waterborne traffic.

The harbour approaches are sheltered by Vancouver Island and Washington's Olympic Peninsula. The port is ice-free, navigable every day of the year in all places. Its advantages are such that a sophisticated bulk handling terminal has been built 20 miles south of the central port area at Roberts Bank, capable of accommodating the largest bulk carriers.

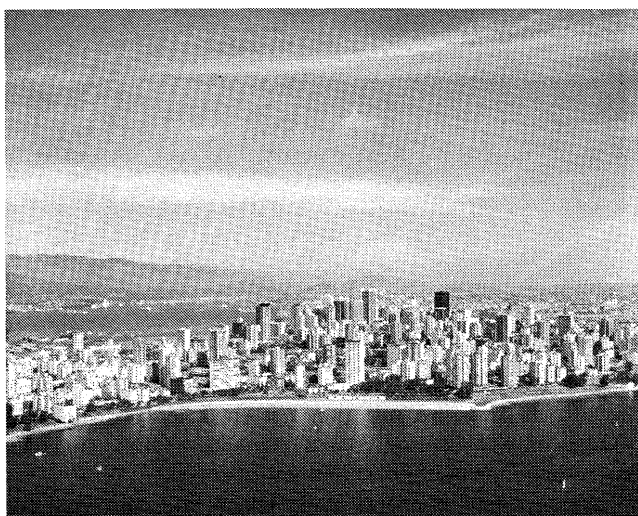
Vancouver's location makes it especially attractive for trade with all parts of the Pacific. Strong links have been strung across the Pacific to Japan, China, Asiatic Russia, and south to Malaysia, Indonesia, Australia and New Zealand. Half the world population lives in those lands. Half the Port of Vancouver's business is with those Pacific Rim countries, and of that half more than 50 percent is with Japan.

Although there has been steady port growth since the last century, the major impetus for trade expansion has come in the past decade. Cargo tonnage rose from 11.15 million short tons in 1967 to 30.4 million tons in 1973, had climbed to a record 47.1 million tons in 1977, and is expected to break that record in the current year.

In all, more than 20,000 ocean-going vessels call at the port every year and facilities are constantly being expanded to meet this growth. Underway is a 40 percent expansion in grain terminal capacity that will bring the port's total storage to 35 million bushels.

thousand of some 13,000 union workers in the Great Lakes are directly employed in maritime transportation jobs.

For the St. Lawrence Seaway, the trigger pricing could cause a loss of up to \$10 million in toll collections this year. Also, a loss of user fees, service charges and other revenue sources that port authorities use to maintain and operate shipping facilities could affect almost all Great Lakes ports.



Two new terminals, opened recently, have sharply increased the Port of Vancouver's cargo-handling capacity. "Vanterm", a 76-acre container terminal has given the port one of the continent's most extensive, sophisticated and competitive facilities for container and general cargo. The other, "Lynnterm", is a semi-bulk cargo terminal with a dock area of 67 acres backed up by a 29-acre industrial park. "Centennial Pier" is a fully-equipped general cargo facility with nearly 4,000 feet of berthing space.

In addition to the facilities owned by the National Harbours Board, coming under the jurisdiction of the Port, a number of major private terminals on N.H.B. property handle coal, sulphur, potash, mineral concentrates, bulk liquids, forest products and other resource exports.

To handle the larger ships coming into service, the Department of Public Works has widened, deepened, and improved both the entrance at the First Narrows and that at the Second Narrows several miles to the east on Burrard Inlet. These now provide 50 feet depth at low tide, compared with the previous 39 feet.

In all, the port offers 32 berths for general cargo, one for bulk sugar, 10 for grain, six for bulk potash, coal and sulphur, one for salt, five for oil, and one for liquid petroleum gas.

Crane capacity ranges from 7.5 long tons to 300 long tons. There are two drydocks, 480 and 556 feet long, handling vessels of up to 10,000 and 12,000 tons respectively. The federal government has announced approval of a new drydock capable of handling vessels in the range of 150,000 D.W.T., to be completed before the mid-80's.

Typical of ships using the port are container vessels of up to 1,200 unit capacities, rated at up to 27 knots; cruise ships of 450 to 650 passengers, up to 20 knots; general cargo, 12,000 to 15,000 tons, 15-17 knots; packaged lumber carriers, 25,000 to 45,000 tons, 14-19 knots; bulk cargo, 30,000 to 60,000 tons, 14-15 knots; and bulk coal, 80,000 to 120,000 tons, 13-15 knots. More than 30 overseas shipping companies maintain regular freight services.

Little known is the fact that the Port of Vancouver was prominent in containerization. In 1955, the custom-built



"Clifford J. Rogers", operated by the White Pass and Yukon Railway, became the first specially designed intermodal transport vessel in a system using ship, truck and train—handling containers of a uniform type.

Among new concepts with which the port has been closely associated is the sea-air shipping combination in which Air Canada has been heavily and successfully involved.

Vancouver's expansion potential has been demonstrated by the recent unveiling of programs affecting a large part of the south shore of the inner harbour, and the outerport of Roberts Bank.

Several miles of underdeveloped Inner Harbour waterfront are the subject of a detailed report proposing major upgrading and new construction. Featured is a \$40 Million convention and trade centre on the waterfront, combining a major pier for ocean liners, a passenger reception area and a unique conference facility—spectacularly backdropped by sea and mountains.

Roberts Bank development, termed vital to the economic progress of Western Canada, envisions a quadrupling of facilities and broad expansion of its current rôle as a bulk cargo facility.

Ranking with Vancouver's importance as a trade and communications centre is its appeal to visitors in general, and as a venue for conventions. Last year, cruise ships called on 140 occasions, bringing 120,000 visitors to the city. Charter flights attract increasing numbers from foreign lands, with Japan and Europe contributing rising totals. During 1978, the city will host 295 conventions arranged with the co-operation of the Greater Vancouver Convention and Visitors Bureau. These gatherings run from a few score in number to thousands.

Vancouver, a happy blending of location, resource availability, and continuing human enterprise and vision, obviously believes strongly in itself, holding the view its future is truly unlimited.

Port of San Juan is one of world's ten busiest containerports

(Port of Baltimore Bulletin):—Puerto Rico, fast becoming a major world trade center deeply dependent on ocean shipping, has a current total trade with the mainland United States and foreign countries of \$8.6 billion a year—a remarkable volume for an island with a population of a little more than three million people.

Her exports to the United States jumped from \$2.8 billion in 1976 to \$3.86 billion in 1977. Projections for 1995 are \$15.96 billion. Imports in 1976 totaled \$3.4 billion; projections for 1995 are \$16.9 billion. Puerto Rico has been one of the primary innovators and proponents of the current roll-on trailer shipping revolution since 1968.

There are 150 trucking companies within the island to speedily dispatch cargo to and from Puerto Rico's three ports—San Juan, Mayaguez, and Ponce. More than 30 shipping lines link Puerto Rico to her major trading areas. Of these lines, the single largest ocean cargo carrier is Navieras de Puerto Rico, operated by the Puerto Rico Maritime Shipping Authority.

The largest U.S. flag carrier serving non-contiguous domestic areas in the U.S./Puerto Rico trade, Navieras provides the most comprehensive service with movements of more than 170,000 container loads annually in and out of the port of San Juan alone.

Navieras maintains interchange agreements with carriers serving Japan and Europe in order to serve shippers effectively.

Acreage purchased to expand Port of Baltimore's container facilities

(Port of Baltimore Bulletin):—A Prime harbor-front property known as Masonville has been purchased by the Maryland Port Administration for development as a major container facility.

The 215-acre site—174 acres of dry land and 41 acres of private wetlands—cost the MPA \$6 million. "This purchase was essential if the Port of Baltimore is to meet its goals as well as the projected demands of the future," said Dr. Walter C. Boyer, Deputy Port Administrator for Engineering and Operations.

Assuming an annual growth rate of four percent, projections (using 1976 as base year) show clearly that by 1990 substantial additional facility development in the Port of Baltimore will be required.

Using conservative projections, two container berths with sufficient back-up space to provide 500,000 tons capacity each will be needed in Baltimore by 1990. Higher projections call for four berths by that date. For that reason, the MPA feels it is imperative that a new container terminal be on line within the next decade.

By the years 1995 and 1998, two additional container berths of 500,000 tons capacity each will be required. In total, by the year 2000, projections call for between 7,300,000 and 9,820,000 tons of container capacity in the Port of Baltimore.

Before the construction of a container cargo facility at Masonville, however, the property will be used as a disposal site for harbor dredge spoils and other fill materials.

One of the conditions for the approval of the Masonville purchase was a commitment by the State to provide vehicular access to the site from the Harbor Tunnel

Thruway.

This access would enable the Port of Baltimore to maintain its superior highway connections. Substantial Chessie System rail facilities are in close proximity to the Masonville site.

Consulting engineers will develop a management plan for the property. "It is from their report that we will determine where, when and how much dredge spoil the property will accommodate and when and where the first two berths and their support facilities will be constructed," concluded Dr. Boyer.

Increased cargo volume points to a record breaking year

(Port of Baltimore Bulletin):—Tonnage Statistics during the first several months of this year at two Baltimore terminals indicate that the port is gaining in cargo volume and probably heading for a record-breaking year in container and general cargo.

The continued growth in port traffic, W. Gregory Halpin, Acting Maryland Port Administration said, "supports the Maryland Department of Transportation's program of continued development of new facilities."

During the first three months of 1978, new container tonnage records were attained at Dundalk Marine Terminal.

For the first quarter of this year 377 vessels discharged 684,894 tons of container cargo as compared to 632,650 tons handled by 334 vessels in 1977, an increase of 52,244 tons and 43 vessels.

General cargo tonnage through the LPMT North surpassed all previous records for the first four months of the year.

"It was the best April and the best four month net total we've had since we began operations in 1964," said George Jones, LPMT manager. "The increase represents a 20.5 per cent gain over the same period last year."

The net tonnage for April of this year was 85,645 tons as compared to 51,835 tons in 1977, an increase of 33,810 tons. For the first four months of the year, the net tonnage was 317,305 as compared to a 1977 total of 263,343, a difference of 53,962 tons.

Record monthly container movement at Boston

(Massport):—The Port of Boston, continuing to note record movements in container traffic, received 5,198 containers at its Moran Container Terminal during the month of June.

This is the largest number of containers ever discharged or unloaded at Moran in a one-month period. The previous record was 4,616 containers, received in December 1977.

Port Director Martin C. Pilsch, Jr., forecasts that Moran Terminal would move a record 48,000 containers this year, up approximately 10,000 boxes from the 1976 record of 37,966.

Levees under construction for 40-ft. harbor maintenance

(Port Corpus Christi News & Events):—The long-awaited maintenance dredging of the inner harbor drew closer in June when the Corps of Engineers received bids on construction of dikes and levees on two more dredge material disposal sites.

This work would return the main channel to its project

depth of 40 feet. Authorized dredging to deepen the harbor to 45 feet will be done later under separate Corps of Engineer contracts.

The disposal areas are adjacent but will be separated by a dike.

Levees around the two areas will be built to a height of 14 to 16 feet above mean sea level.

Public elevator seems headed for all-time record year

(Port Corpus Christi News & Events):—A huge new record year is foreseen for Corpus Christi Public Elevator.

The elevator loaded 53,838,609 bushels of grain during the first five months of this year, topping the same period of 1977 by more than 68 per cent.

The elevator is scheduled to close down the first of September for about six or seven weeks for modifications and maintenance. By the time of the shut-down, Roger Sanderfer, Public Elevator manager, said he expects to have exported close to 85 million bushels of grain. This would compare with 66,892,651 bushels loaded during the entire 12 months of 1977.

When the Public Elevator began operating in the mid-1950's it depended entirely on the South Texas grain crop, which is milo. Annual exports ranged from 15 to 20 million bushels.

With a port grain terminal to handle their crops, farmers put more of their land into milo. In the mid-1960's, still handling primarily the local grain harvest, the elevator's loadings rose to approximately 30 million bushels annually.

In 1965 the elevator management and port officials began exploring northern markets. Expansion of receipts from a greater area has grown until now the South Texas harvest accounts for about one-fourth to one-third of the total grain handled.

Grain is now received from throughout Texas, Oklahoma, Colorado, Kansas, Missouri and Nebraska.

Federal Harbor Deepening Project Vital to Port Growth and Safety

(Port Everglades News):—The Port Everglades Harbor Deepening Project provides in the overall for widening the entrance channel to 450 feet and deepening the channel and turning basin to 45 and 42 feet, respectively.

The project now has reached Sub-committees on Public Works in both Houses with recommendations for funding expected momentarily. The Port Everglades Project has the approval of the Corps of Engineers which has indicated a schedule and manpower capability of beginning the work in fiscal 1979.

The improvement is regarded as one of urgent need and necessity by the Port Authority because of safety and operational aspects.

Port Everglades is the one, and the only oil storage and distribution seaport for all of South Florida which includes 11 counties and about four million year-around or permanent residents, not counting the millions attracted to the area as tourists.

The proposed work will have an important effect on the safety of operations and thereby help to reduce the potential for oil spills and accidents. Some tankers now enter the port light loaded, an uneconomical use of ship capacity; others must wait for high tides.

The existing channel and turning basin are key links in the compositive structure of Port Everglades and their positive cost-benefit ratio will improve the port operationally and financially thereby helping to assure the Port's self-supportive and non-taxing posture.

Obviously the greatest benefit will be in providing an additional margin of safety to all ships entering or leaving the harbor.

Expansion of foreign trade zone approved

(Port Everglades News Release):—The U.S. Department of Commerce has approved Port Everglades' request to expand the Foreign Trade Zone from 30 to 82 acres. Commissioner Fred J. Stevens, Senior Member of the Port Commission, stated: "The 52 acre expansion area makes Port Everglades the largest Foreign Trade Zone in Florida." Stevens also stated: "The original 30 acres of the Zone should be filled with one and a half million square feet of building floor space within 3 years, which could mean about 200 new jobs in Broward County. We expect the additional 52 acres will be developed by 1985 and there should be over 700 people working in the Zone by then."

The Port's Zone is the first such facility authorized in Florida and is the only operating Zone in the State. During the past year more than 30 companies have used the Zone as a transshipment point to distribute merchandise from the Far East and Europe to South and Central America, and only about 10% of the merchandise handled has entered the United States.

Channel survey

(Port of Houston Magazine):—The U.S. Army Corps of Engineers has launched a 16-month preliminary study of the Houston Ship Channel with an eye toward enlarging the waterway. The study will cost \$419,901 and will put new emphasis on protection of the environment and the energy crisis, which have considerably changed the criteria for construction.

New Managing Director

(Jacksonville Port Authority News Release):—The Jacksonville Port Authority has a new managing director and a new director of trade development.

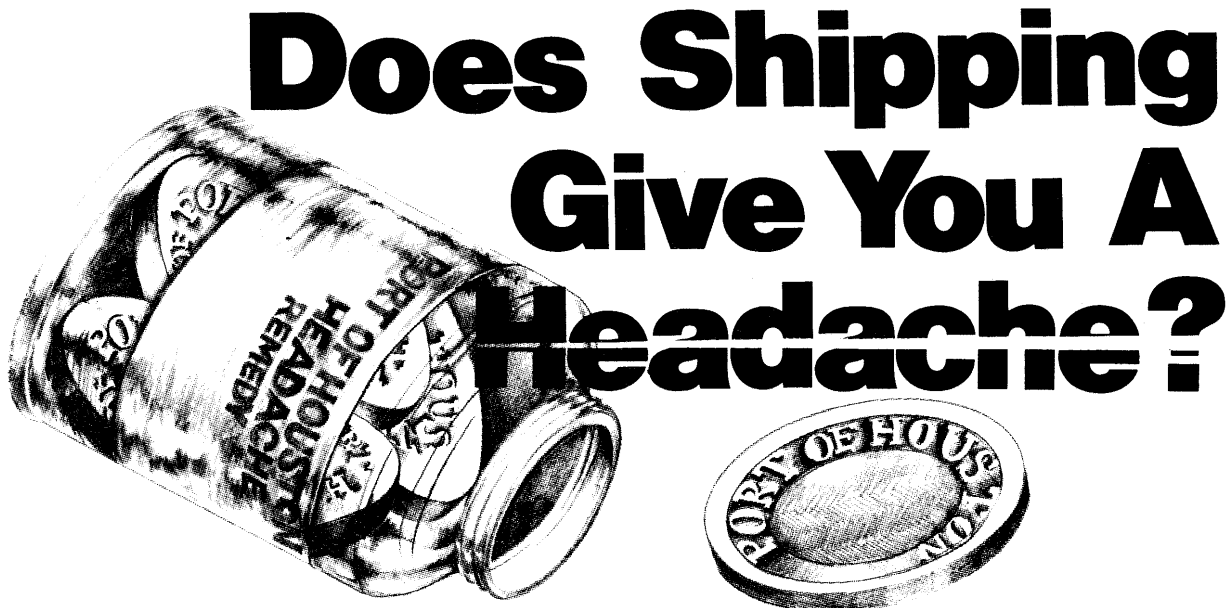
John R. Mackroth, a retired Navy captain, was named to the top post July 26 to succeed James J. Scott, Jr., who resigned effective July 21 to take a position with Sea-Land Services, Inc., in the Middle East.

At the same time, the JPA Board appointed M.F. Whelan as director of trade development.

L. A. Commission president elected

(Port of Los Angeles News):—Nate DiBiasi was elected president of the Los Angeles Board of Harbor Commissioners today (7/26) for the second time. He replaces out-going president, Roy S. Ferkich, a San Pedro attorney and civic leader. Frederic A. Heim, former three-term Commission president, was elected vice-president.

DiBiasi has been a member of the Board since 1973 and served as president from 1976-77 and as vice-president from 1974-75. His term as Commissioner expires on June 30, 1981.



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Port of Los Angeles:—Roy S. Ferkich, left, then president of the Los Angeles Board of Harbor Commissioners, is shown making a General an Admiral. The occasion was a farewell luncheon at the Harbor held in honor of Brigadier General Hugh G. Robinson. General Robinson was the District Engineer, Los Angeles District, U.S. Army Corps of Engineers, and had just been promoted to the rank of Brigadier General by the Army. He was also ordered to transfer to Washington, D.C. to become the Deputy Director for Civil Works in the Office of the Corps of Engineers, Department of the Army. By special proclamation the Board of Harbor Commissioners named General Robinson an "Honorary Admiral" of the Port of Los Angeles.

L.A.'s modern rail system to reduce significantly air pollution

(Port of Los Angeles News):—The Los Angeles Board of Harbor Commissioners on 16th August adopted a resolution authorizing the Harbor Department to apply to the California Coastal Commission for a \$15 million loan from the Federal Coastal Energy Impact Program to finance the first phase of construction of a \$30 million railroad classification yard for the Port of Los Angeles and to make other needed improvements in the Port's rail system.

Department studies predict that construction of a modern rail yard in the Harbor area would offer an important improvement to the Port and would make it more attractive to shippers.

The proposed facility would also significantly reduce the quantity of air pollutants which are presently generated by trucks transporting cargo over 25 miles to the nearest rail yard, which is located in downtown Los Angeles. The new yard would also reduce traffic congestion in the Harbor area and would provide employment.

It is expected that the reduction in air pollution resulting from construction of the new yard would almost completely offset the environmental effects of tanker operations in San Pedro Bay. Approximately 800 tankers a

year call at the Port—delivering almost 22,000,000 tons of petroleum. During their transit along the coast of the South Coast Air Basin, and while in port, it has been estimated that they emit 1,686 tons of pollutants annually. Divertment of cargo from truck to rail would remove approximately 90 percent of this amount.

Number one status for net port income

(Port of Los Angeles News):—Los Angeles Harbor Department General Manager, Fred B. Crawford has reported that during the 1977-78 fiscal year the Port of Los Angeles had retained its number one status for net port income among all ports in the nation. The net income attained for the past year was \$25.7 million. This increase of 82 percent over the prior year's \$14.1 million net income was reported in the Department's Interim Fourth Quarter Financial Report.

According to the Fourth Quarter Report, the Port's 77-78 gross revenues from operations totaled \$45.8 million, a 32 percent increase of \$11.0 million from \$34.8 million in the prior year. Shipping services revenue increased \$10.2 million, a 43 percent increase, while rentals revenue increased \$1.5 million—a 17 percent increase.

Crawford praised port management for holding down increases in expenses to just eight percent (to \$17.3 million) while they increased port revenue 32 percent—resulting in an 82 percent increase in net Port income.

The Financial Statement shows a total cash flow of \$51.8 million received in 77-78 while \$34.3 was expended. Cash on hand increased \$17.5 million to a total of \$50.5 million on July 1. Most of this cash however, is encumbered for the construction of new facilities.

Preliminary tonnage statistics reveal that the past year's total billed revenue tons for the year amounted to 38.6 million tons. This compares to 35.1 million tons in 1977, a 3.5 million ton increase. There were 2.5 million tons of the increased tonnage in general cargo while one million tons were in bulk petroleum.

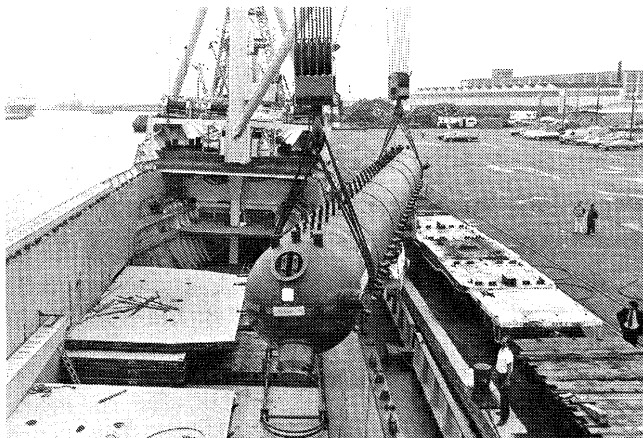
The Port of Los Angeles is one of the few major ports of the world that is entirely self-supporting without relying on taxation of any kind. All funds for operation, new construction, maintenance, bond repayments come from port charges and rentals.

New York opens "Super Berth"

(News from The Port Authority of New York & New Jersey):—A new specialized heavy-lift "Super Berth" capable of handling the heaviest rail-car loadings in the United States was opened recently at Port Newark in the Port of New York and New Jersey with the loading of a 263,000 kilo steam generator drum going to Taiwan.

The first heavy lift at the new facility, designated as Berth 23, was destined to the Port of Keelung for the Taiwan Electric Power Company and was transported to Port Newark from Barberton, Ohio, on a special flatbed rail car. Shortly after its arrival at Berth 23, the 25 meter long generator was hoisted aboard the heavy-lift vessel, GABRIELLA. Operated by Jumbo Shipping Company of The Netherlands, GABRIELLA used its own powerful gear to accomplish the lift.

Following the loading operation, Anthony J. Tozzoli, Director of Marine Terminals for the Port Authority of



From wheel to keel—The first shipment to move across the Port of New York-New Jersey's new heavy lift berth at the Newark Marine Terminal was this 263,000 kilo steam generator. It was moved to shipside on the flatbed rail car shown at the right. (The Port Authority of New York & New Jersey)..

New York and New Jersey, presided at a brief ceremony marking the opening of the new berth. Mr. Tozzoli stated that the new berth was built with a reinforced apron area to withstand exceptionally heavy weights and stressed that it is capable of supporting rail cars having loads of 38,600 kilos per axle. The tracks leading to the high-capacity dockside rail siding have curvatures with a radius of no less than 109 meters, a feature which permits use of the long, specially designed railroad cars called for in the movement of unusually long or heavy pieces of cargo.

Export from U.S. West Coast up 9%: Oakland Foreign Trade Analysis Service

(Port of Oakland Public Relations Department):—Export trade aboard liner vessels from U.S. West Coast ports was up 9 percent for the first quarter of 1978 over the same period a year earlier, new figures compiled by the Port of Oakland indicate.

Seventy percent of that increase was accounted for by Northern California ports, whose export cargo share was up by 30 percent over the same period in 1977.

In all, West Coast ports handled 2.3 million short tons of liner vessel exports between January and March of this year, valued at \$2.2 billion.

Liner vessel imports for U.S. Pacific ports totaled 1.9 million tons in the first three months of this year—valued at \$4.5 billion.

In all, West Coast ports exported some \$155 million-worth of fruits and vegetables, \$323 million-worth of cotton and textile fibers, \$104 million-worth of lumber, wood, pulp and waste paper, \$460 million-worth of industrial and electrical machinery and parts, and \$145 million-worth of road vehicles and transport equipment during the first quarter of 1978.

These and other data on West Coast maritime trade, including tramp exports and imports, with special emphasis on commodities passing through ports of the San Francisco/Oakland Customs District by country of origin and destination, are being made available by the Port of Oakland for the first time on a quarterly basis to

subscribers to the Port's Foreign Trade Analysis Service.

Subscribers receive a quarterly compilation of U.S. Department of Commerce statistics, translated into easily read and readily interpreted form. The new publication makes such data accessible to shipping lines, shippers, importers, exporters, freight forwarders, consignees and consulate commercial departments in a uniquely convenient and timely format.

Requests for subscriptions or more detailed information about the service should be addressed to Charles Seifert, Port of Oakland Public Relations Department, 66 Jack London Square, Oakland 94607, (415) 444-3188.

Hearing Due on Foreign-Trade Zone

(“Portside” International Edition):—A public hearing is expected to be held next month on the subject of the Port's recent application for the establishment of a foreign-trade zone (FTZ) in Rivergate Industrial District. If the application is approved by the Commerce Department's Foreign-Trade Zones Board, the area may be in operation by next January.

The proposed FTZ will be located on a 66-acre site in North Rivergate that includes the existing 200,000-square-foot cargo distribution center. Portland's FTZ would be the only such facility on the West Coast between San Francisco and Seattle. Within designated FTZs, imported items, such as component machinery, can be stored, processed, assembled and exhibited without immediate payment of import duties.

Huge improvements program unveiled

(Port of Seattle TRADELINES):—At the Commission meeting on June 13, the Port of Seattle disclosed its major requirements for capital improvements for the next two and a half years at its waterfront terminals and at Sea-Tac International Airport. A total of \$180 million will be needed for these improvements extending from April 1978 through December 1980.

This vast expenditure of funds is necessary to enable the Port to provide expanded shipping facilities for the anticipated increase in maritime traffic and also to complete the acquisition of property and noise abatement programs at Sea-Tac Airport.

About \$120 million would be needed for the marine projects and \$60 million for airport requirements.

The principal marine projects and their proposed financial outlays are listed as follows:

The new container complex at Terminal 37, now under construction, extending from Piers 37 to 46—\$40.1 million.

Expansion of Terminal 25, involving the purchase of private properties on East Waterway for the development of a new marine facility—\$38.3 million.

New warehouse facilities providing 900,000 square feet of space—\$15 million.

Completion of Terminal 19 and integrating it into the Terminals 18 and 20 system—\$5.18 million.

Rehabilitation of Terminal 91—\$4.9 million.

Marine equipment, development of Seacrest Marina and Pier 66 renovation—\$15.9 million.

In order to achieve its new money requirements for these contemplated projects, the Port is considering various available bond-issuance alternatives.

Foreign Trade 1977: The Port of New York and New Jersey

Summary of Foreign Trade - Year 1977

The eight week dock strike in October and November was the principal cause of decline to 14,284,993 tons, or a drop of 6.8 per cent from 1976, in the oceanborne general cargo handled in the New York-New Jersey port in 1977. General cargo exports dropped 11.0% to 4,863,646 tons, while general cargo imports declined 4.5% to 9,421,347 tons.

In contrast to the decline in general cargo, the Port's foreign oceanborne bulk cargo trade rose 16.7% to 50.1

million tons. Petroleum imports, which account for over 95% of the Port's bulk cargo, rose 17.2% to 48.1 million tons.

Foreign air cargo moving via the New York-New Jersey air gateway set another record in 1977. Volume was 581,743 tons, up 15.2% from 1976.

The value of the Port of New York-New Jersey's foreign trade also reached record levels in 1977. The Port's oceanborne and airborne foreign trade was valued at \$47 billion in 1977, up 8% from 1976.

Exports		Long Tons		Thousands of Dollars	
	1977	1976	1977	1976	
Oceanborne:					
Bulk Cargo	866,412	704,053	159,215	140,233	
General Cargo	4,863,646	5,465,339	10,847,716	11,642,300	
Airborne	308,390	263,868	9,452,470	8,160,966	
Total Exports	6,038,448	6,433,260	20,459,401	19,943,499	
Imports		Long Tons		Thousands of Dollars	
	1977	1976	1977	1976	
Oceanborne:					
Bulk Cargo	49,186,832	42,180,651	4,625,656	3,524,956	
General Cargo	9,421,347	9,865,904	15,490,782	14,736,514	
Airborne	273,353	241,365	6,445,264	5,352,223	
Total Imports	58,881,532	52,287,920	26,561,702	23,613,693	
Total (Exports and Imports)		Long Tons		Thousands of Dollars	
	1977	1976	1977	1976	
Oceanborne:					
Bulk Cargo	50,053,244	42,884,704	4,784,871	3,665,189	
General Cargo	14,284,993	15,331,243	26,338,498	26,378,814	
Airborne	581,743	505,233	15,897,734	13,513,189	
Total Trade	64,919,980	58,721,180	47,021,103	43,557,192	

Note: In addition to the above amounts, consisting of only foreign commercial trade, it is estimated that in 1977 the Port of New York-New Jersey handled 56 million long tons of oceanborne coastal, intercoastal trade and government shipments. Therefore, total trade—foreign, domestic and military—through this Port was approximately 121 million long tons in 1977.

Port begins the move to metrics

(Port of Seattle TRADELINES):—As of July 1, the Port of Seattle is taking a giant step toward converting its operations to the metric system. The first major change involves the computerized records of its marine transportation systems and the Seattle Terminals Tariff.

In announcing the move, Executive Director Richard D. Ford said that it is appropriate that Seattle, as a leader in innovations in the maritime industry, should take the initiative in making the conversion before the required date. The federal government has set January 1, 1980, as the deadline for the nation as a whole to begin using the metric system.

Ford also noted that there are advantages in moving to metric ahead of the national schedule. It allows a gradual conversion, with time for more orderly planning and for solving any problems which arise.

MarAd and CAORF

(Information from Grumman Corporation):—The Maritime Administration (MarAd), U.S. Department of Commerce, is responsible for promoting the development, operation, and maintenance of an efficient U.S.-flag merchant marine capable of meeting the requirements of this nation's waterborne commerce and providing military support during an emergency. To carry out this mission, MarAd conducts a variety of programs aimed at increasing the productivity and competitiveness of all segments of the American maritime industry.

One of the Agency's most significant programs is its research and development program which endeavors to apply advanced technology to maritime operations. One of MarAd's major R & D projects was the development of the CAORF (Computer-Aided Operations Research Facility) simulator which is dedicated exclusively to solving maritime problems.

The facility, which is a vital part of the National Maritime Research Center in Kings Point, N.Y., was designed and constructed by Sperry Systems Management, an operating unit of Sperry Division, Sperry Rand Corporation. Officially opened May 10, 1976, the facility is operated by ADI Transportation Systems of Grumman Data Systems Corporation under contract with MarAd.

CAORF is a land-based maritime research facility that realistically simulates vessel operations in port or at sea. CAORF accurately reproduces the response of a vessel to its crew's actions and its environment. It is unique in its ability.

The objectives of CAORF research are to improve ship operations and reduce collisions and groundings, and to increase the efficiency of vessels and harbors. Experiments to date have centered on analyses of the human factor in responding to high-stress navigational situations. CAORF research also evaluates proposed shipboard equipment, tests new vessel operating procedures, and studies the effect of traffic densities and harbor configurations on ship operations.

Reorganization of Customs Houses

(Carta de la C.A. Venezolana de Navegación):—The Ministry of Finance reported that there has been placed underway an integral reorganization of the country's customs houses, in order to make them more adequate for the requirements of economic growth—especially imports and exports—and for the obligations arising from the treaties executed by the Republic, especially those relating to Latin American integration.

It has been stated that imports have increased from 4 million tons in 1970 to 11 million tons in 1977, with values changing from 7 billion Bolivars to 38 billion 600 million Bolivars between those dates. It is well to point out that there is at present before the National Congress a bill for the Organic Law of Customs, which will form the bases for the modernization of customs houses in line with the new dimensions of Venezuela economy.

More cargo in Antwerp

(Port of Antwerp Promotion Association):—From data, communicated by the General Management of the Port of Antwerp, it appears that during the first three months of 1978 over 17,775,800 tons of cargo were handled in the port. Compared with the corresponding period of 1977, this means an almost 6% increase.

Outgoing traffic (plus 10.5%) largely contributed to this positive result. Imports on the other hand revealed a 2.2% increase. This traffic increase was to be noted with bulk cargo (+2.4%) as well as with general cargo (+11.9%).

Mr. J. Huyghebaert elected Alderman of the Port of Antwerp

(Port of Antwerp Promotion Association):—The City council of Antwerp has elected J. Huyghebaert as alderman of the port of Antwerp in succession of Mr. L. Delwaide, who recently passed away.

After his nomination as alderman of the port, Mr. Huyghebaert declared to pursue a port policy, surpassing party politics because important common decisions have to be taken within the near future. Few days after his election Alderman Huyghebaert headed an important delegation representing all Antwerp sectors to submit a five-year plan

for the port of Antwerp to the government.

ACL sign five year contract with Liverpool

(Port of Liverpool News Bulletin):—The Port of Liverpool's Royal Seaforth Container Terminal has received a major vote of confidence from Atlantic Container Line, one of its biggest and most regular users.

The Line, one of the major operators on the North Atlantic with two sailings a week from Seaforth, has agreed a five year contract with the Mersey Docks and Harbour Company.

The contract was won in the face of keen competition from other ports. And a second major user of Royal Seaforth Container Terminal is expected to sign a similar agreement within the next few weeks.

Mr. James Fitzpatrick, Dock Company managing director said, "We are delighted that the service we have given ACL has been rewarded in this way. We hope that they are only the first of our many customers to enter into a long term agreement with us. Negotiations on a similar deal with another company are already well advanced."

"The ACL contract will enable us to offer them an even better service. It gives us the basis on which to plan for the future; to purchase equipment and provide other resources with confidence".

Mr. Richard Orman, director and general manager of the ACL Division of Cunard Brocklebank Limited, commented on improvements at Royal Seaforth.

"The approach of management towards resolving the problems at Seaforth and improvements achieved since early this year have given us the confidence to enter into this contract", he said.

Mr. Orman added that success would depend to a great extent on the attitudes of dock labour and of other essential ancillary workers within the port.

The Container Terminal which is part of the £50 million Royal Seaforth Dock, has 3,600 feet of quay space backed by a computerised stacking area of more than 60 acres.

New Chairman, M. Francois Le Chevalier

(Port of Le Havre Flashes):—Mr. François Le Chevalier had been elected Chairman of the Board of Directors of the Port of Le Havre Authority.

Mr. Le Chevalier has been a member of the Havre Chamber of Commerce since 1964 and was its Chairman from 1974 to 1977, when he gave his especial attention to the creation of a World Trade Centre in Le Havre and to the establishment of industrial bridgeheads here for the developing nations. He became a member of the Board of the Port of Le Havre Authority on September 24th 1971 and had been Vice-Chairman since January 28th 1972.

Container traffic in 1977

(Port of Le Havre Flashes):—Container traffic grew rapidly during 1977, rising to 3,300,000 tonnes from 2,915,000 tonnes the previous year, an increase of 13.2%. Put into terms of 20ft equivalent units, this means that 367,714 containers were handled during the year compared with 327,910 in 1976, enabling Le Havre to maintain its position as France's No. 1 container port. An interesting point is that 49.8% of all non-bulk general cargo was containerised in 1977, compared with 45.6% in 1976.

Helicopter Service at Port of Le Havre

(IAPH 11th Conference at Le Havre, May 12-18, 1979)
Port of Le Havre Series No. 6

Put into operation since 1976 onwards, the helicopter was designed first and foremost to put pilots aboard the large vessels bound to Antifer. The entrance to the new oil terminal comprises landing buoys, a waiting zone off-shore and an entrance channel other than that of the Port of Le Havre. This big increase in distances required the putting into service of additional air pilots' transport means.

The use of the helicopter was then extended to other large vessels, especially as regards pilots' embarking and landing off fast vessels or vessels having to comply with tight schedules.

This aircraft, property of Le Havre Pilot Station, is an Alouette 3, manufactured by the AEROSPATIALE. This single-engined weighing 2 tonnes is driven by a turbine TURBOMECA and fitted out with 2 floats enabling it to land on board any vessel or, should the occasion arise, on water. It carries 7 persons (5 passengers and 2 crew members: 1 pilot and 1 operational engineer) and moves at a speed of a hundred knots. 2 pilots and 2 operational engineers take over from each other and work from 6.00 am to 10.00 pm. Pilots are put aboard mainly by landing on deck (90% by landing and 10% by winching). The helicopter is fitted out with aerial and maritime radio systems, a direction finder on H.F. band (410 khz) and a V.H.F. system. (channels 6, 8, 12).

For 2 years, the average number of movements has been 80 per month. Thanks to the helicopter we can save time when putting pilots aboard off-shore, improve the safety by working outside the big traffic areas and therefore, reach a higher efficiency (use of the aircraft with winds reaching 50 to 60 knots whereas nautical means can't work (pilot-boat, pilot-launches).

In addition to the pilotage, the helicopter can either, if need be, carry out traffic supervision, assistance and air-sea rescuing tasks operating in connection with the Civil Defence or locate pollution, if any. The long and the short of it is that this tool suits the Port of Le Havre requirements.



condition.

The handling machinery conveys the fruit from ship to shore horizontally and handling by dock labour is limited to loading the fruit onto the conveyor in the ship's hold and supervising the unloading into the lorries or wagons. These operations are in fact simultaneous, as the handling machinery can load twenty lorries and twenty railway wagons at the same time. This system enables cargoes of up to 2,000 tonnes of fruit to be discharged continuously and without interruption, thus avoiding the costs of intermediate stockpiling and handling between the ship and the inland transport.

The quay of the banana terminal is 200 meters long and 10 meters deep. The ground surface of the terminal covers 25,000 m² and includes a shelter for the handling machinery (2,500 m²), a transit shed of 3,500 m² for classification and deferred deliveries, an access corridor, a loading corridor for two lines of trucks, a marshalling area for lorries and space for office accommodation. The quay is long.

A new contract with Egypt

(Europort South):—A Franco-British consortium, the French members' of which are the Port of Marseilles Authority, the Bureau Central d'Etudes pour les Equipements d'Outre-Mer (B.C.E.O.M.), and the Port of Le Havre Authority, recently signed a contract to carry out an organization study of the Port of Alexandria Authority (A.P.A.). This contract, the total value of which is 2.7 million dollars, is financed by the A.P.A. through a loan by the World Bank and is due for completion within two and a half years.

The P.M.A.'s share of the contract is 1,085,000 francs and concerns personnel training, port maintenance and the organization of the workshops.

Record results in difficult times, but a difficult year from the financial angle

(Rouen Port International Issue):—1977 results for the Port of Rouen are in direct contrast to the general economic climate.

Banana terminal at Marseilles

(Europort South):—The 'Société du Terminal Bananier (S.T.B.) is a private limited company which, under the terms of an agreement with the Port of Marseilles Authority, operates the banana terminal at Marseilles as a public service. This modern terminal came into operation on 26th October 1977 with the declared intention of unloading banana boats as rapidly and efficiently as possible.

The terminal is equipped with handling machinery that can be adapted to all types of ships, including large polythermal cargo ships with a capacity of up to 400,000 cu.ft., and all types of fruit, but especially bananas and pineapples. This machinery can unload a cargo of 2,000 tonnes in one day in all weathers, even in our heavy Mediterranean rainstorms.

These high performances are necessitated by the perishable nature of tropical fruit cargoes and the necessity of getting the fruit to its final destination in prime

Actually, in attaining a trade figure of 16.9 m. tonnes, the Port of Rouen set up its own record. This figure represents an 8.4% increase on the preceding year. This advance in trade is the greatest of all the French chief ports.

And so, Rouen remains the 4th French port after Marseilles, Le Havre and Dunkirk. Two kinds of trade command our special attention, namely general cargo, which shows a 21% rise, and containerised trade with a 46% rate of growth.

If, during the course of 1977 the Port of Rouen has been able to disperse the general economic gloom, the same is not the case when it comes to finance, where the Port of Rouen has experienced a difficult year.

A year ago, forecasts we had drawn up for 1977 bore a pessimistic stamp; in effect, measures to combat inflation set a 6.5% limit on increases in public-service charges (port and equipment dues) while higher charges ranging from 12 to 15% alone could have ensured a sound balance.

Of course, when that limit was imposed, a drop in our resources was the result. They dropped further by reduced income from dredging dues.

For various reasons, the 1977 programme ended, as foreseen, with a deficit in the region of 2.6 million francs. Hence, the self-financing now stands at 18 million francs which comes below the 1976 figure.

As regards the investment programme, the 1977 budget reached 108,710,000 francs, including the State support.

For the year 1978 the Port of Rouen will have a working budget of 198 million francs at their disposal, and the capital projects will total 161 million francs.

M. Pierre Cintrat resigns from President of the Port of Rouen: M. Henry de Rochelbouet elected new President

(Rouen Port International Issue):—Having reached the age limit laid down by the law governing the work of president of the Board of Directors, M. Pierre CINTRAT has just given up being president of the Port of Rouen Authority.

His qualities and his efficiency were already confirmed in the Chambre Syndicale des Entrepreneurs de Manutention and at the Chamber of Commerce and Industry of Rouen and this qualified him to be chosen as President of the Board of the Port of Rouen Authority from the time when it was created in 1966.

Through his drive, the dimension of the Port was completely changed from its traditional limited rôle of a port for coasters. New horizons were opened up after the new estuary channel and a considerable technical change in its equipment came into being.

M. Henry de Rochebouet, who was among the Port Authority Administrators since the beginning of 1974, was elected president.

Born in 1923 in Cotes-du-Nord, M. de Rochebouet graduated in law with a diploma of the Institut d'Etudes Politiques de Paris.

He is also chief of S.E.R.M.A. C.O.A. (Service Commun de Réception et de Livraison des Marchandises de Côte Occidentale d'Afrique), President of G.I.E. «Rouen



Paris is a sea port

Turntable of the navigable waterways of France, Paris is directly linked with the channel by a modern waterway.

Sea going vessels of up to 2000 d.w.t cargo capacity are able to navigate the Seine up to Paris, and 200,000 tons per year are transported to and from the U.K., Ireland, Germany, Scandinavia and Spain, without transshipment, therefore without risk of damage or pilferage and at a lower price of transport. The Port of Paris Authority is also able to offer wharves and port complexes for the reception, transit, storage or shipment of goods.



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Terminal)), first vice-president of the *Chambre de Commerce et d'Industrie de Rouen*, vice-president of the *Union des Usagers du Port de Rouen*, and judge on the *Tribunal de Commerce*.

Ghana to set up maritime administration

London, (IMCO News):—Ghana is planning to establish its own Maritime Administration, under the general direction of the Ministry of Transport and Communications.

A draft project has been drawn up by IMCO, at the request of the Ghanaian Government, and has been submitted to UNDP for approval. If approved, it is expected that the project will last for three years.

The establishment of such an administration has been made necessary by the steady growth of Ghana's merchant marine.

Among the most urgent requirements are qualified surveyors able to inspect and survey foreign and Ghanaian vessels, and to issue appropriate certificates in accordance with international requirements and standards.

There is also a need for Ghanaian personnel trained as ship-surveyors and examiners of masters, mates and engineers of Ghanaian ships.

The main long-term objective of the project is to provide an administration which will enable the government to implement the requirements of international conventions and national legislation.

The upkeep of the national fleet and the operation of related activities such as shipbuilding, repairing, dry-docking and port operations will also be greatly assisted by the establishment of a maritime administration.

Bremen International

- **Bremen/Bremerhaven 1st-half 1978 Total Cargo Handled: +4.7% Of all Universal Ports—Best Generals/Bulk Cargo-proportion**

Bremen/Bremerhaven, 14.8.78 (BremIn). The first half of 1978 saw two important cargo-handling results for the Bremen ports. Firstly a handling increase of 4.7% over the same 1977 period. Secondly, as Bremen's Senator for Ports, Shipping and Traffic, Oswald Brinkmann emphasised, the best generals/bulk ratio of any universal port, with 63% generals as opposed to 37% bulk-commodities, of the total cargo handled by the Bremen/Bremerhaven port-group.

With a total handling of 11.887 million tons, the same 1977 period was exceeded by 538,100 tons. 7.475 million tons (= +1.4%) was in respect of labour-intense general-cargo, attributable particularly to the continued container-traffic growth in Bremerhaven. In a prognosis for the 2nd half-year now entered, Senator Brinkmann foresees similarly favourable developments, whereby the 1978 year's result should be around 23.5 million tons—15 millions of which should be generals.

- **Suez Canal Now at Approx. 60 Percent of Previous Capacity**

The year 1978, based on traffic to date, will see a total transit traffic in both directions through the Suez Canal of some 145 million tons (1977: 127). This represents only 60% of the traffic prior to the blockade. Then (1966) the

movements came to 242 million tons. It is oil above all else which has declined (1966 = 75%: 1977 = 20%).

Traffic development in Hamburg 1977: positive trend

(Port of Hamburg Topics):—Structural adjustment processes in the wake of dollar devaluation are becoming constantly more difficult, particularly as regards ports and shipping. As far as German shipping is concerned, the fact that 80% of the shipping companies' revenue is based upon dollar quotations is a barrier which cannot be overcome.

If, however, the currency in which revenue is obtained continuously declines, attempts must be made to compensate for this on the costs side, by also paying these in the devalued currency, in other words the dollar. This means, however, as the Hamburg Chamber of Commerce points out, capital export for the national economy and ship reregistration.

In this situation the liner shipping companies are trying to add surcharges, due to currency adjustment factors, to the usually firmly laid down conference rates. In view of the fact that shipping companies have for some time been differentiating in the sense that in ports with "soft" currencies, e.g. the British and Italian, different surcharges are levied from those where there is a "hard" currency, such as the Federal Republic, the gap between the currency adjustment factors is becoming ever wider.

In the Chamber of Commerce's view this is quite considerably influencing port competition. For the German ports this aspect—in addition to the continuing slack business situation and other handicaps—brings home a further painful realisation. This is that anybody exporting from a country with a hard currency has a tougher time in the event of devaluations of the partner currency. It is difficult to counter this development by stepped up efficiency.

Dollar devaluation hits German ports

(Port of Hamburg Topics):—The Hamburg port economy's overall trend in 1977 is considered as having been quite satisfactory.

In 1977 transshipment in the Port of Hamburg in terms of quantity was, at 54.1 million tons, about 3.3% higher than in the preceding year. With regard to general cargo, the increase was 6.5% (15.8 million tons), and bulk cargo 1% (38.289 million tons).

In view of the fact that a total of just under 150 million tons of cargo were transhipped in the seaports of the Federal Republic of Germany, this again confirms that Hamburg accounted for more than one third of goods transported by sea.

As regards general cargo, half of the growth—a total of 1 million tons—can be traced back to increasing container traffic. In 1977, 472,000 large containers (20-ft and above) were handled; this is some 37,000 (= 10%) more than in 1976.

The rise was particularly marked in the wake of opening of new full container services in traffic with South Africa and Central America. Container traffic with East Asia is now, as before, of especial importance, accounting in 1977 for 41% of total container transshipment.

'Harbour Tip' informative — and attractive

Hamburg ("via Hamburg" 1978):—After "Hamburg Tip"—Hamburg's information service at Gerhart-Hauptmann-Platz—had become a fixed institution for citizens and visitors during the course of the past few years, and had grown into a central communication point in the city, Hamburg Information decided to extend its services for citizens and visitors by opening a further information centre.

Its name: "Harbour Tip", the new information pavillon which has been offering its services since Thursday April 14th of last year. It can be found at a place particularly attractive to tourists—at the Port Information Point, the new information centre in between pier 4 and 5 of St. Pauli Landungsbrücken. This is an ideally-situated starting point for an exploratory trip round Hamburg. All the necessary information, either in verbal or printed form, can be obtained from "Harbour Tip". And a hostess will be available from 9 a.m. to 6 p.m. to try to answer all the questions. And should there be a question she can't answer regarding the complication going on in the port, she'll be only too glad to put the enquirer in touch with the man with the answer. "Harbour Tip" is one further step taken by the Arbeitsgemeinschaft Hamburg-Information e. V. to make Hamburg easier to understand. And an additional "base" for visitors to Hamburg to help them to have an even more pleasant stay here.

World Trade Center Amsterdam

(Haven Amsterdam):—The chairman of the World Trade Center Amsterdam Foundation, Mr. E.G. Stijkel, who also heads the Amsterdam Chamber of Commerce and Industry, hailed the plan at a recent press conference to announce the project.

With the set-up of a World Trade Center a complex of buildings will be constructed to bring together various types of businesses and organisations which are involved in providing international goods or services.

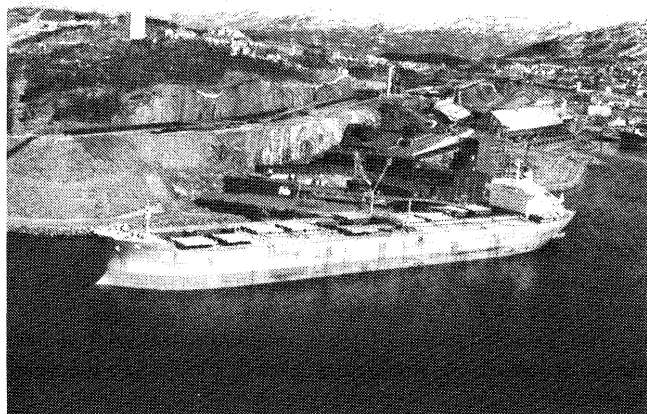
The World Trade Center Amsterdam will offer:

1. Information on world trade to tenants.
2. Outstanding communications possibilities.
3. A beneficial interchange of goods and services among fellow-tenants.

Mr. Stijkel said the construction of this complex had great importance to Amsterdam. It was a major extension of the service rendering sector which had great economic importance to the entire region. The proximity of Shiphof, the central European position, the fact that most Amsterdammers speak a number of languages and the Dutch Capital's long traditions and involvement with trade, make the city and thus the World Trade Center make it an ideal entry to the European markets.

The costs of the complex is put at about f 190 million and total area will be 50,000 square meters. Construction time will be about two-and-a half years. Eventually, the Center will employ about 3,000 and thus it favourably affects the local labour market.

Record 234,938 tons loaded at Narvik



LKAB (Luossavaara-Kiirunavaara AB) established a record at the new 11,000 tons per hour capacity loading installation engineered by Soros Associates. The 245,000 DWT Hoegh Hood took on a mixed cargo of 234,938 tons, consisting of 135,687 tons of iron ore and 99,251 tons of iron ore fines. (Soros Associates)

Cause for optimism: Tonnage up in 1st quarter

(Haven Amsterdam):—Things are looking up in shipping and this is reflected in the figures for the first quarter of 1978, just released by the Economic Department of the Amsterdam Municipal Port Management. Total international seagoing goods traffic rose by about 5 percent in the period from January through March, when compared to the same period in 1977.

The sharpest rise was seen in cattle fodders, which, with oilseeds in the same category, rose by more than 80 percent.

There was a drop in the tonnage of iron ores, reflecting the worldwide malaise in the steel industry as well as grain, which was more than made up for by the dramatic increase in cattle fodder tonnage.

The amount of general cargo moving by containers increased sharply as well, largely due to the relatively new CAROL (Caribbean Overseas Lines) service.

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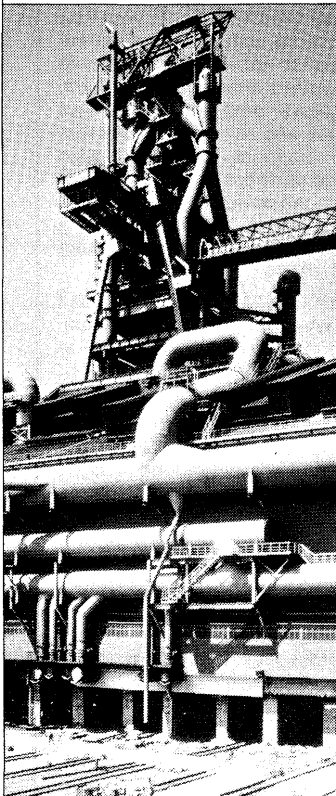
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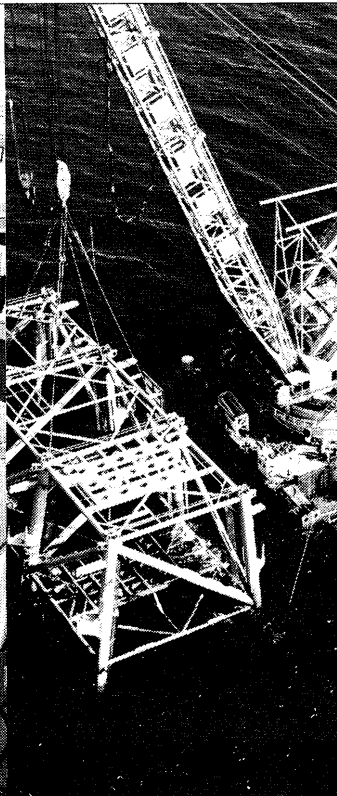
Like to know more? Send for our Engineering Divisions Group brochure. Write to: 6-3, Otemachi 2-chome, Chiyoda-ku, Tokyo 100, Japan.



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Nippon Steel can engineer entire steel mills—and provide guidance for their operation.



Nippon Steel undertakes all aspects of oil/gas-related offshore projects.



Nippon Steel's prefabricated housing systems answer the need for economical housing.

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Tokyo, Japan

Huge Port Project at Helsingborg

Helsingborg, Sweden, June 28, 1978 (Port of Helsingborg Press Release):—At a recent port board meeting it was decided to prepare for a considerable extension of the harbour facilities at Helsingborg by the construction of a new harbour unit for deep sea and short sea traffic under the Swedish name of Westhamnen (West Harbour).

The new facility is designed for unit traffic, but has a flexible layout in technic and operation so that adaption to the development during the next decades can take place.

The old facilities in the North and South Harbours are all occupied by ferry and general cargo traffic, and the RoRo terminal Sundsterminalen, built in 1975, is soon unable to accommodate additional traffic.

Extension badly needed at Helsingborg

The geographical situation of the port with the present hinterland extended up to north Sweden, Norway, Finland and Denmark has a great share in the growth to the leading position among Swedish ports. The port facilities at Helsingborg are thus of national as well as of Nordic importance. Professor Lars Nordström at the University of Gothenburg has made a scientific research on the future transport needs at Port of Helsingborg. The study indicates an increased unit cargo throughput in the eighties of around 2 million tons a year, and the increase will continue until the year 2000. Railferry and oil traffic are excluded.

During the past decade unit cargo throughput has increased by 6.7 percent annually, and with this growth port capacity has reached its maximum in 1981. Any possibility to take care of additional traffic within existing acreage does not exist.

To cater for the additional traffic until the year 2000 it is necessary to avail of some 275.000 square metres of new land. This can only be made by land reclamation. All other alternatives would involve environmental interference and enormous expenses in connecting roads, etc.

The only realistic location for the new facility is between the North and the South Harbours.

Technical conditions

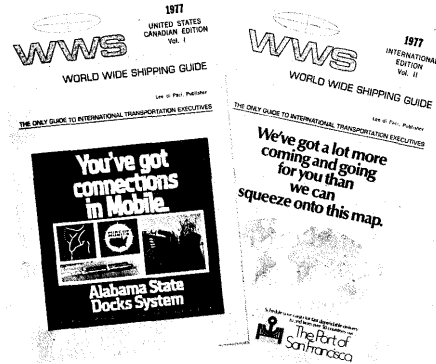
The new harbour must be adapted to existing and ordered ships being in operation in the eighties. The size of the vessels is growing in certain cases by 30 percent (RoRo) in tonnage and consequently also in length. The lay-days of the freight is of decisive importance. As mentioned above an additional cargo throughput of at least 2 million tons is expected in 1990. With a normal throughput it is estimated that an area of 275.000–300.000 square metres of land is required in 2000.

The construction of the West Harbour is planned to take place in two stages in order to adapt the port to the estimated traffic growth. Stage I is intended to meet the demand until 1990 and Stage II until 2000 or longer.

Cost estimate

The costs for Stage No. I are estimated at 130 million SwCrs including dredging, breakwaters, filling up, quays, RoRo berths and other technical equipment, etc.

It is anticipated that quay cranes would not be required because the ships referred to will be built for Ro/Ro handling or equipped by ship cranes. Stage No. II is



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estimated at 85 million SwCrS including another RoRo berth and other technical equipment.

The total cost for the West Harbour in final shape will thus come to 215 million SwCrS at current prices.

Construction schedule

Building of Stage No. I is planned to be performed in 1980-82.

Building of Stage No. II is scheduled for completion in 1990-91.

Berthing statistics in the Gulf ports

(from the Gray Mackenzie Monthly Bulletin)

Port	May	June
Bahrain	No delay	No delay
Dammam	No delay	No delay
Abu Dhabi	No delay	No delay
Khorramshahr	Nil to 5 days	Nil to 4 days
Abadan	Nil to 4 days	5 to 14 days
Bandar Shahpour	Nil to 4 days	Nil to 2 days
Bandar Abbas	Nil to 5 days	Nil to 4 days
Bushire	Nil to 5 days	Nil to 5 days
Kuwait	No delay	Nil to 1 day

Quo Vadis. . . ?

(South Australian Ports and Shipping Journal):—There is a tide in the affairs of men and, undoubtedly, in the affairs of States.

As far as South Australia is concerned, that tide takes

with it on the ebb more than 90 p.c. of the State's containerised exports. Those same containers leave Australia from interstate ports, chiefly Melbourne. When the tide is on the make it brings in between 80 and 90 p.c. of South Australia's imports which have arrived at interstate ports and then been sent on by rail and road.

Recent reports indicate that the two Australian giants in terms of container handling—Sydney and Melbourne are, even now, involved in yet another highly competitive development race.

The danger is, of course, that these two major centres, holding, as they always have, the core of the national political and trading power—may become so involved in their competitive struggles they may not see the national problems they undoubtedly generate.

In return for centralised facilities in the competing centres, they are virtually permitted to dictate the trade patterns of a whole nation. The combination of their sea-going and shore-based interests, particularly with the comparatively recent advent of containerisation, threatens to cause traumatic and long-term changes in the pattern of Australian development, especially as it concerns those States other than New South Wales and Victoria.

This is, in the case of South Australia, born out by the huge loss of trade initiative. Western Australia is also beginning to feel the pinch and there is little doubt that Queensland and Tasmania have cause for similar concern.

As Sydney and Melbourne gather increasingly unto themselves almost sole rights to container handling in Australia they also gather in a tighter grip on investment,

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New Tasmanian freight equalisation rates

(South Australian Ports and Shipping Journal):—The Minister for Transport, Mr. Peter Nixon, has released the Bureau of Transport Economics report, "Tasmanian Freight Equalisation Scheme: Recommended Assistance Rates as at January 1, 1978", and announced new rates for assistance paid under the Tasmanian Freight Equalisation Scheme.

New rates have been announced to cover the movement of Tasmanian produced goods shipped by sea as non-bulk cargo for sale or use on the Australian mainland.

Mr. Nixon said the new schedule of rates applied to eligible commodities shipped on or after July 1 this year.

This rate review was undertaken by the Bureau of Transport Economics. The BTE determined the door-to-door cost of moving freight on the various routes from Tasmania to the mainland, and the costs of moving a similar consignment along comparable interstate routes on the mainland. The difference between the Tasmanian and mainland cost had been recommended as the new rate of assistance.

It's not only ships

(South Australian Ports and Shipping Journal):—The Swedish National Academy of Science has published figures which give shipping a comparatively clean bill of health in the area of marine pollution.

The academy states that of the 6.1 m tonnes of oil which finds its way into the sea every year, 65 p.c. comes from non shipping activities. The largest amount of oil pollution—41 p.c.—originates from onshore activities and is carried to the sea through rivers and port entrances. A further 11 p.c. comes from leakages in the sea bed, both natural and in connection with drillings.

The pollution directly related to shipping falls into three categories: the general handling of tankers, the handling and wrecking of ships other than tankers and, accounting for only three p.c., the result of accidents involving tankers. Although the figure for tanker casualties is very low, more attention is given to these as they are isolated incidents, generally affecting a section of the public. Little attention is given in the press to the fact that two thirds of oil pollution in the seas is a result of onshore activity. ("Marine Week")

His Helmet Habit Had Happy Result

Melbourne, Australia, Autumn, 1978 (Melbourne Harbor Trust Port Gazette):—The wisdom of wearing safety helmets at all times when on the job was vividly illustrated recently at Swanson Dock when assistant carpenter Mr. Salvation Delorinzie escaped injury when struck on the side of the head by a sling eye.

As no injury was sustained Mr. Delorinzie has been nominated for membership in the Tortoise Club. This club was recently formed by the National Safety Council to promote widespread acceptance and use of safety helmets by recognising that members have been protected from serious injury through wearing their helmet.

Mr. Delorinzie is the first Melbourne Harbor Trust

employee to be nominated for the Tortoise Club. On his application being accepted he will receive a certificate and lapel badge.

Similar clubs have been established by the National Safety Council for accidents involving the wearing of safety glasses (the Wise Owl Club), and safety shoes (the Intactoes Club).

The accident in which Mr. Delorinzie was involved occurred when he was working on wharf construction at Swanson Dock. While lifting wharf beams he tried to separate two wire slings, one flew back and the sling eye struck the side of his head damaging the helmet.

Safety Committee to review policies

Melbourne, Australia, Autumn, 1978 (Melbourne Harbor Trust Port Gazette):—Over the years the Melbourne Harbor Trust has, through its safety programmes, reduced the incidence of industrial accidents.

In order to gain further improvement a Management Safety Committee has been established to formulate, and review as necessary, policies on accident prevention and occupational health.

The Committee will at regular intervals study safety statistics, lost time and other significant accidents, accident causes and aspects of Departmental safety programmes, including training.

At the inaugural meeting of the Safety Committee in March the Chairman of the Melbourne Harbor Trust Commissioners, Mr. A.S. Mayne, said: 'The prevention of industrial accidents is one of the most important aspects of our job and I am sure that I can count on your wholehearted support in establishing an outstanding record for safe working in our operations.'

While recognising that it is unrealistic to believe that industrial accidents can be eliminated, the Committee believes that industrial accidents can be reduced to an absolute minimum by the application of sound principles of management.

All employees of the Trust will be encouraged to actively and constructively participate in prevention programmes as, without their co-operation, a satisfactory safety record will not be achieved.

Co-ordination of all aspects of safety, liaison with Section Managers, and the planning of education programmes, are the responsibility of the Trust's Accident Control Officer, Mr. W. Duthie.

Hopper Barges Ordered

Melbourne, Australia, Autumn, 1978 (Melbourne Harbor Trust Port Gazette):—The Melbourne Harbor Trust Commissioners have placed an order with Carrington Slipways Pty Ltd of Newcastle for the design procurement, construction and delivery to the Port of Melbourne of two 500 cubic metre capacity split-hull dumb hopper barges.

Estimated to cost a total of \$2 million, the barges are scheduled for delivery in August.

The two new barges will be replacing the three aged Numbers 10, 11 and 18 dumb hopper barges which were built in the period 1880-90.

The split-hulled type dumb hopper barge is fast replacing the conventional type of barge throughout the world, and with this in mind a comparative study was undertaken to investigate six designs for split-hull type hopper barges. This

Annual Report: Townsville Harbour Board

CHAIRMAN'S MESSAGE

The year ended 30th June, 1977, the first of the present Board's triennium, has seen major changes, both in the constitution and the management of the Board.

Following upon the election of City and Shire Councils within its district, the new Board was reconstituted on 17th July with Messrs. P.J.R. Tucker and K.V. McElligott replacing the two former representatives of the Townsville City Council and Mr. J.P. Defranciscis replacing the former representative of the Shire of Ayr.

Following the transfer away from the Board's district of one of the two Queensland Government's representatives, the Government increased the number of non-elective members to three and appointed Mr. A.J. Hope, a former Deputy Chairman, and Mr. A.W. Shield to fill the vacancies on the Board.

The Manager, Mr. H.J. Taylor, retired on 30th June after 44 years of service and the Secretary, Mr. I.G. Malpas, was elevated to the Chief Executive position.

The year under review has been an extremely busy one in respect of both development and trade. Improved facilities provided in recent years such as the installation of the container crane, deepening and widening of the access channel, improved berth depths and reconstruction of old timber wharves with modern concrete structures has made Townsville a most popular port for vessels wishing to load and discharge full cargoes and to top off their cargoes loaded at other ports before proceeding overseas.

There remains, however, much more work to be done to keep pace with modern shipping demands and the Board has commissioned expert advisers to recommend guide lines for future port development.

In the field of staff training, the Board has taken advantage of every opportunity to send its senior technical and administrative staff to conferences and seminars which would assist them in their professions.

Revenue increased by 15% on last year's figures to a record \$3,199,021 whilst operating expenditure amounted to \$2,248,198.

Cargo throughput also constituted a new record showing an increase of 13.87% on last year. Of the 2 551 289 tonnes handled, 974 589 tonnes was imported and 1 576 700 tonnes exported.

These results have been achieved by a splendid team effort and I would like to thank the members of the Board

and all staff for their ready co-operation and continuing loyalty.

A.G. FIELD,
CHAIRMAN.

PORT OPERATION HIGHLIGHTS

Trade of the Port

Cargo handled for the year ended 30th June, 1977 amounted to 2 551 289 tonnes, an increase of 310 721 tonnes or 13.87% on last year, establishing an all time record. Imports totalled 974 589 tonnes and exports 1 576 700 tonnes.

On an industry basis, the mining industry was the largest port user with 871 294 tonnes of product, followed closely by the oil industry with 870 821 tonnes and the sugar industry with 647 906 tonnes. However, on a revenue basis, the Oil industry contributed 37%, the mining industry 29% and the sugar industry 23%. Other industries contributed the remaining 11%.

Cargo vessels which entered the port during the year numbered 351, with gross registered tonnage of 3 327 368.

Receipts and Payments for the year ended 30th June 1977

	1977		1976	
	\$000	\$000	\$000	\$000
Harbour Fund		30		(219)
Receipts				
Harbour Dues	2,364		2,026	
Tonnage Rates	519		459	
Rents	206		242	
Others	897	3,986	853	3,580
Payments		4,057		3,331
		<u>\$(41)</u>		<u>\$30</u>

Balance Sheet as at 30th June 1977

	1977	1976
	\$000	\$000
Accumulated Funds	7,705	7,273
Reserves	2,633	2,091
Total	<u>\$10,338</u>	<u>\$9,365</u>
Represented by		
Current Assets & Investments	713	897
Deduct Current Liabilities	241	384
Works Capital	472	512
Fixed Asset	22,974	21,872
Deduct Long Term Liabilities	2,828	2,934
Loans	10,279	10,084
Accumulated Funds	<u>\$10,338</u>	<u>\$9,365</u>

design was new to the Melbourne Harbor Trust as conventional 'bottom-door' opening barges have been used in the past.

Advantages

Distinct advantages are gained from the use of the split-hull design as it does away with bottom doors and all associated gear to lower and raise them, thus reducing the cost of maintenance. The design also allows for a maximum opening of five metres with the sides of the hopper being smoothly curved without protuberances to hold up sticky clay debris such as wires, timbers etc.

Kelang Port Authority: Progress Report '76

Kelang Port Authority Malaysia

Trade

The recovery of the country's economy in 1976 was reflected in the increase in trade passing through Port Kelang. The port handled 5,280,161 deadweight tons of cargo, an increase of 420,879 tons or 8.7% compared with the 1975 tonnage of 4,859,282 tons. The total tonnage for this year, valued at \$6,453.5 million, or 34.8% of the total value of Peninsular Malaysia's trade, emphasises afresh the important role of Port Kelang in the country's economy.

Exports

2,892,387 deadweight tons of export cargo were handled through the port compared with 2,720,003 deadweight tons in 1975 or an increase of 6.3% over 1975.

The increase was brought about by the economic recovery of Malaysia's major trading partners. The main export commodities which showed an increase were timber, plywood, latex in bulk, palm oil and palm kernel oil in bulk, and palm kernel waste and general cargo.

Imports

Imports for 1976 totalled 2,387,774 tons which is an increase of 11.6% compared with the 2,139,279 tons of imports handled in 1975. Imports accounted for 45.2% of the total tonnage handled for the year. Of the total import tonnage, dry cargo accounted for 75.5% and liquid cargo 24.5%.

Cargo handled through LPK facilities

In 1976, 75.3% of the total tonnage of 5,280,161 tons were handled through LPK facilities and 24.7% through the private jetties, private junks and foreshore.

The tonnage of imports handled through LPK wharves was 2,093,939 tons and exports 1,663,690 tons.

Value of trade through Port Kelang

The Port handled \$6,453.5 million worth of cargo in 1976. This is a 34.8% share of Peninsular Malaysia's total trade value of \$18,555.8 million.

Imports through the port were valued at \$3,155.6 million and exports \$3,297.9 million.

Container cargo

The overall throughput of container cargo handled by Port Kelang rose by 22.5%, from 463,061 tons in 1975 to 567,490 tons this year. The number of TEUs rose from 49,927 TEUs in 1975 to 59,288 TEUs. This new record in containerised cargo was achieved inspite of restricted use of the container berths owing to repair works on some damaged piles late in the year and industrial dispute which led to a slow-down of work at the Container Terminal in the early half of the year.

The volume of containerised cargo is expected to continue to increase by absorbing an increasingly larger

proportion of cargo to be handled in the future.

ADMINISTRATION

Industrial Relations

On the whole 1976 was a year of industrial harmony. The Management held ten meetings with unions to discuss and resolve the many issues brought forward by the latter. A 'Work-to-rule' occurred during the year when dissatisfaction arose over matters of discipline and the implementation of decisions by the Industrial Court which the Management could not implement as fast as the unions desired.

However, many issues brought up by the Senior Officers' Association were resolved at the conference table. The issues settled included deferment of salary increment, underrest allowance for Traffic Officers overtime claims for Labour Supervisors and movement allowance during public holidays and off-days for pilots.

Where the Port Authority Staff Union was concerned, the Management had settled all issues arising from the industrial Court's decisions. Several other issues involving promotion for clerks, appointment of Assistant Administrative Officers, the upgrading of marine crewmen and work schedule are still under discussion.

The Harbour Workers' Union also had several issues settled with the Management. These included transport allowance for wharf workers, bicycle loans, special medical leave, housing loans and filling of vacancies in the Cargo Handling and Stevedoring Department. Other issues under discussion included the tonnage bonus, Port Provident Fund contributions, meal allowance, provision of uniforms, overtime rates and other welfare matters.

On the whole the Management and unions worked together well in discussing and resolving the many problems inevitable in the running of an organisation with over 7,000 employees. Unions and Management were able to reach mutual understanding on many aspects of port work and this has contributed to improved industrial relations during the year.

DEVELOPMENT

North Port Second Extension

The end of 1976 saw the virtual completion of the \$60.6 million North Port Second Extension. The project consists of the construction of 2,100 feet of container cum conventional wharves, 1,400 feet of bulk wharves, six approach bridges and major roads and drains. The roads built will serve the wharves and also all other back-up facilities designed by the Authority's engineering department and built by other contractors.

The progress of the works was 88% by the end of 1976.

Back-up facilities for the project included three godowns and one transit shed, a ten-acre stacking yard behind the 2,100 ft. general cargo wharves, a 2-acre stacking yard behind the bulk wharves, 2 check posts and a customs office at the wharf godown.

Container Quay Cranes

The order for two new container quay cranes was signed in late 1976. The new cranes which are of the same model and design as the existing cranes cost \$5 million each. They are expected to be commissioned by late 1977.

Other Principal Projects

SLIPWAY NO: 3 was completed in November 1976 after a series of delays and testing of the new slipway is being carried out.

The ACCESS BRIDGE TO BERTH 12 was completed in August at a cost of \$1.7 million. The new bridge is meant for use by vehicles carrying conventional cargo thereby relieving pressure on the other two bridges used for container traffic.

Busy year 1977: Hong Kong

(The Week in Hong Kong):—HONG KONG'S port had a busy year in 1977 when it handled an average of 250 vessels a day with a combined net tonnage of 97 million operating in the harbour.

The Marine Department said this represented about 90,000 vessels from oceangoing ships to local craft and there was a 9.7 per cent increase in cargo handled.

Container cargo represented 48.9 per cent of the total cargo handled compared with 44.6 per cent the previous year.

A total of 25.2 million tonnes of cargo was loaded and unloaded during that year compared with 22.97 million tonnes in the previous year.

Rising exports

(The Week in Hong Kong):—Statistics released by the Census and Statistics Department show that exports rose for the first half of the year which would indicate that at year's end, exports will not be below 10 per cent.

Domestic exports were valued at HK\$17.47 billion in the first half of this year and that the value of imports rose by 21 per cent to HK\$28.25 billion. Re-exports rose by 29 per cent to HK\$5.93 billion.

Hong Kong's domestic exports to the United States amounted to HK\$6.75 billion which was up by 12 per cent over the first six months of 1977.

In second place was West Germany which saw exports jump nine per cent to HK\$1.79 billion. Third place was Britain which was up 15 per cent to HK\$1.56 billion.

Accelerated increases in imports were in the major raw material lines and consumer goods.

Wave-power generator installed

(IHI Bulletin):—"Kaimei", a wave electric generator completed at IHI's Aioi Shipyard was recently installed offshore at Tsuruoka, Yamagata Prefecture, Japan for a series of sea tests.

This experimental equipment can generate electricity by making use of waves and at the same time pacify waves.

The generator was ordered by the Japan Marine Science and Technology Center and IHI built its main mechanism excluding turbines and generators.

Measuring 80 meters in length and 12 meters in width, weighing 500 tons and shaped like a ship, the main

New Port Launch cruising



(Nagoya Port News):—Christened and now cruising the harbor since April 1st is our blue-lined, white-bodied "PORT OF NAGOYA" launch. The new boat was built to commemorate our port's 70th anniversary of last year and its topping the 100-million-ton cargo handling mark. Besides being a means of maritime observation for an increasing number of port visitors from at home and abroad, the launch is a multipurpose type that serves as an emergency vessel for port control.

The port covers a huge area of 81 million meters square in which facilities are effectively arranged throughout the port district. For many visitors to take these in requires a fast, large-capacity boat that we had long been hoping to have.

"PORT OF NAGOYA" LAUNCH SPECIFICATIONS

Gross tonnage :	111.13 t
Cruising speed :	18 knots
Capacity :	44 passengers and crew

mechanism is used in the wave power-generating system.

The main mechanism has 22 air chambers, each measuring 6 meters long and 4.5 meters wide, and every two air chambers are equipped with one air turbine power generator, for a total of 11 such generators.

Air flow transformed from energy of wave motions turns the air turbines which in turn revolve the power generators, enabling them to generate a maximum of 2,000 kW of power.

Cargo tops 100 million tons

(Nagoya Port News):—Fresh '77 statistics from Port of Nagoya tell the story. Despite the economic downturn, overall cargo handling came in at a record-breaking 100.83 million tons, and incoming ship tonnage also set a record at 117.56 million tons.

Foreign trade came in at virtually the same level as the previous year, but domestic handling showed an unexpected spurt, nudging the totals past the 100-million mark and 1.9% over the earlier year's level.

In comparing the foreign and domestic totals, we see the typical Port of Nagoya feature, namely, foreign cargo outpacing the domestic category.

Port of Kuching places importance on training

(Pelabuhan Kuching):—About 62 frontline supervisors of the Kuching Port Authority are currently attending a series of supervisory management courses at the Authority's Training Centre near Pending. Organised by the National Productivity Centre in conjunction with the Malaysian Association of productivity (Sarawak Branch) the courses which started earlier this year and conducted in Bahasa Malaysia and English, include 'Job Simplification,' 'Leadership and Human Relations', 'Supervisor as a Trainer and an Instructor', 'Groupwork and Discussion Leading' and lastly 'Industrial Relations for Supervisors'.

Speaking at the opening of the course on 'Leadership and Human Relations'—the first in the series—on 20th March, the Authority's General Manager, Mr. Andrew Chan Nam Wah who is also Government Ports Advisor, emphasised the importance of training and the role of ports in the context of our national efforts towards economic development and industrialisation.

"It is our intention, as from this year, to concentrate our efforts on the training of our frontline supervisors because we feel that you, as important part of our human resources and valuable assets shouldering heavy responsibilities and duties, would be the critical factors in determining our productivity and efficiency," he said.

Kuching Port tonnage

(Pelabuhan Kuching):—In the period January to March, 1978 the total volume of cargo handled across the Authority's wharves increased by 16.7% to 168,213 tons compared to 144,081 tons during the corresponding period in 1977.

During the three-month period the import tonnage handled amounted to 145,639 tons compared to 127,452 tons in the same period in 1977, an increase of 14.3%. This is mainly due to a substantial increase in the imports of two principal commodities—rice and fertiliser.

A substantial increase of 62.0% was recorded for the imports of bulk fuel oil, bitumen, gasoline and kerosene. A total of 30,334 tons were handled during the period compared to 18,725 tons during the corresponding period last year.

Penang Port's Container cum Ro-Ro Berth in operation

(Pelabuhan Pulau Pinang):—THE Penang Port Commission's Container cum Ro-Ro Berth at Butterworth, which was constructed at a cost of 24 million was opened to traffic in April 1978.

Construction of the berth started in 1976 in response to the need for modern container handling facilities in the port of Penang. In conjunction with the commissioning of the berth, the Commission will be taking delivery of additional container handling equipment at the end of the year to meet the anticipated growth of container traffic.

When delivered by the end of the year, the port, with a mobile container crane and a gantry crane, will be able to meet the requirements of any non self sustained container vessel that calls at the port.

With the acquirement of all the modern container handling equipment, the Port of Penang will become one of

the modern container ports in the region.

Decline in bulk cargo

(Pelabuhan Pulau Pinang):—The port experienced a fall of 3% in the overall tonnage handled for the first quarter of 1978 over the same period in 1977. This was mainly attributed to the decline of bulk cargo traffic. During the period January to March bulk fuel oil dropped from 262,493 tonnes in 1977 to 188,690 tonnes in 1978. This represented a fall of 28%.

On general cargo, iron and steel increased from 25,029 tonnes in 1977 to 46,183 tonnes in 1978 an increase of 85%.

During the same period Container Traffic handled also showed a marked increase from 3,956 TEU's in 1977 to 5,724 TEU's in 1978, an increase of 45%. Tonnage handled through containers followed the same trend and increased by 61%.

High praise for NHB initiative

("Points North" Whangarei):—Initiative and determination of the Northland Harbour Board has attracted to Whangarei the Bradbury-Wilkinson organisation to establish a security printing works.

The deal is for a lease of 13.6755 ha on the board's Te Wharuroa Block, at Awaroa Creek, between Whangarei and Onerahi, with the board providing the building which is to be sold to the company over a 21-year period.

Board chairman, Mr. Jim Carney, has described the land deal as "one of the most profitable real estate ventures in which the Northland Harbour Board has ever participated."

By the early 1980s it is expected the plant will employ a staff of 200 and it could make New Zealand a multi-million dollar exporter of bank notes, travellers' cheques and other "security" documents.

Whangarei's Mayor, Mr. E.M. Elliott, said the new plant would "give a tremendous boost to confidence in the town."

"It will provide much-needed employment opportunities, particularly for women," he added.

"I congratulate the Northland Harbour Board, its chairman and senior officers on their enterprise in producing this industry for the city."

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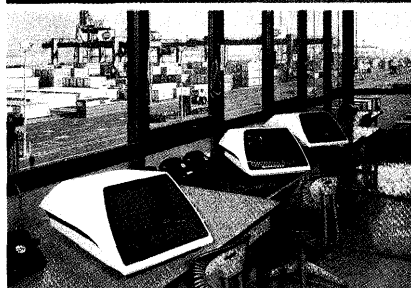
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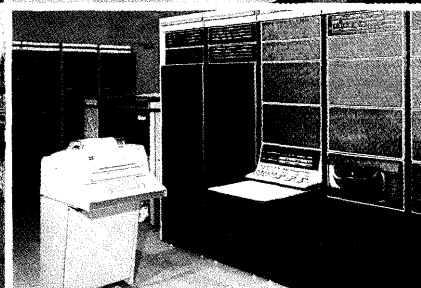
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