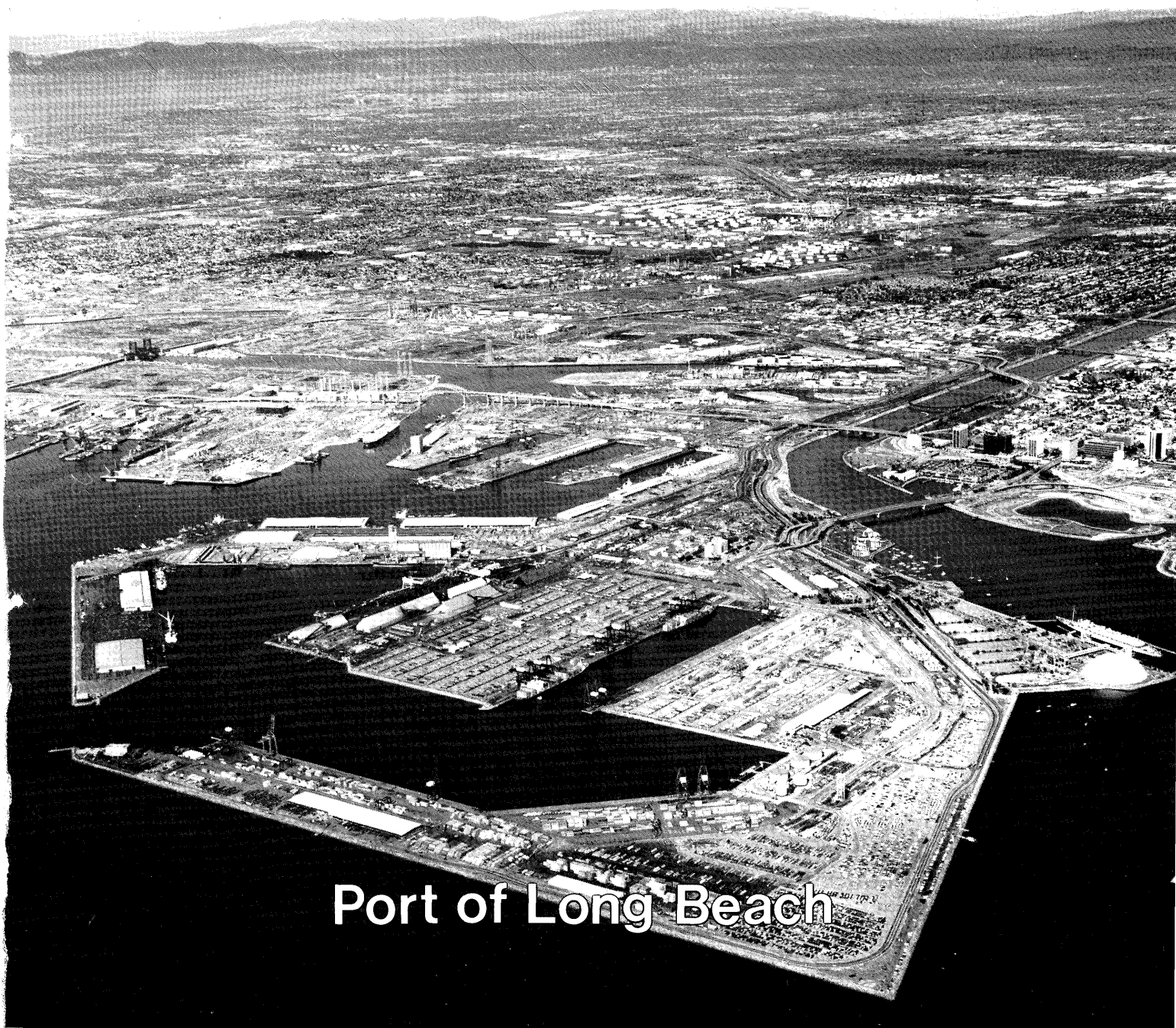


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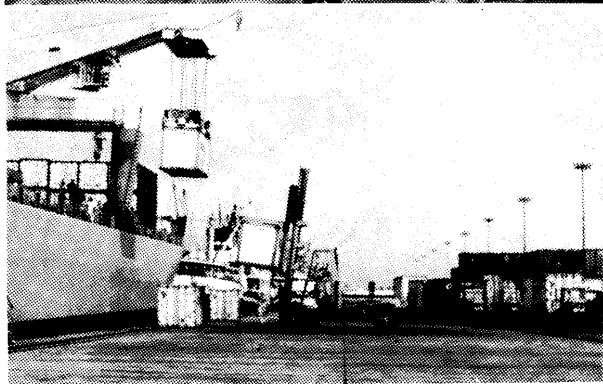
September, 1983 Vol. 28, No. 9



Port of Long Beach

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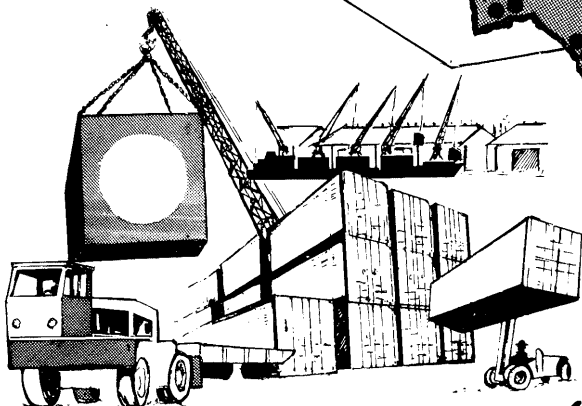
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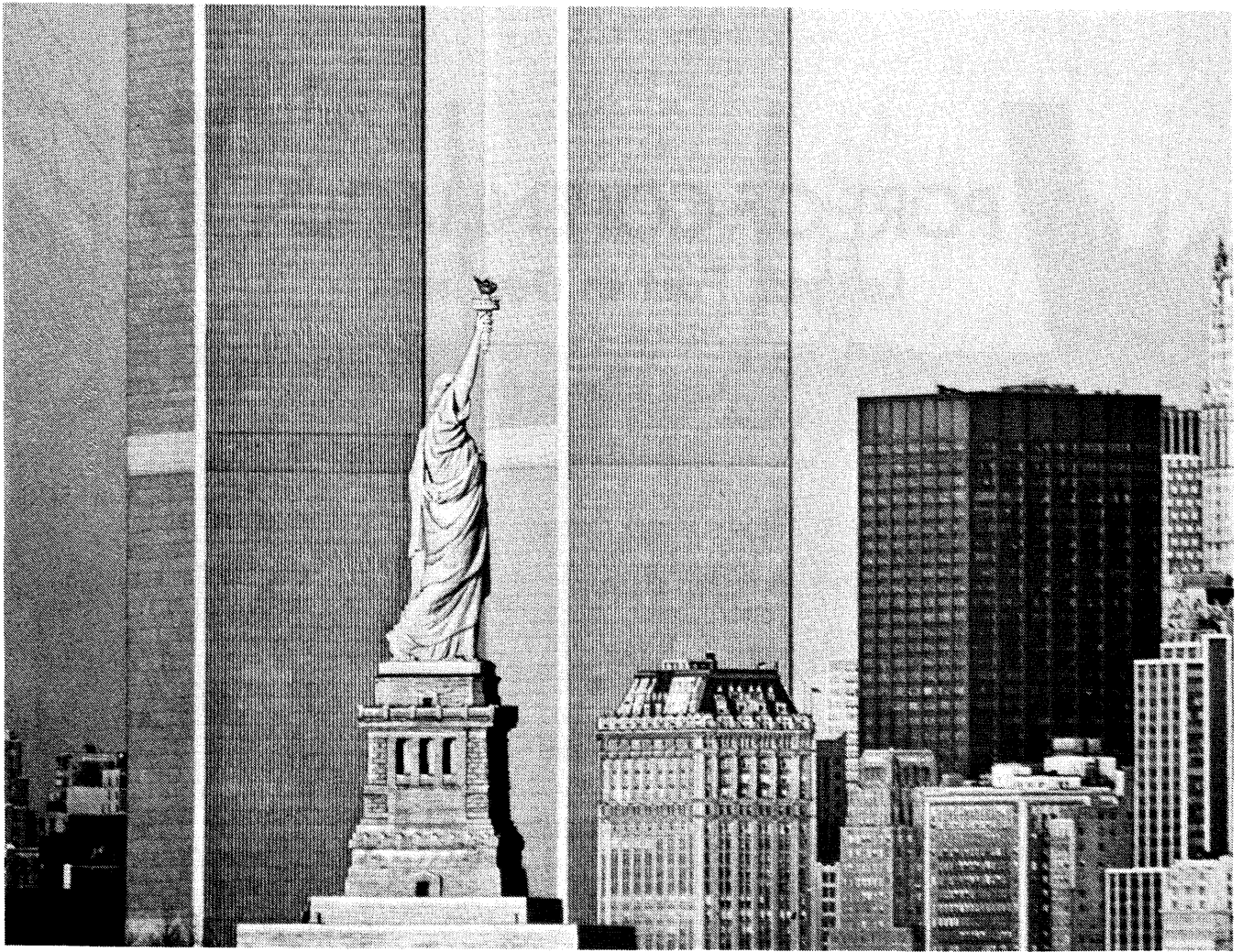
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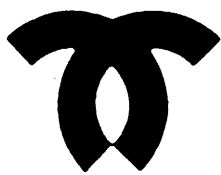
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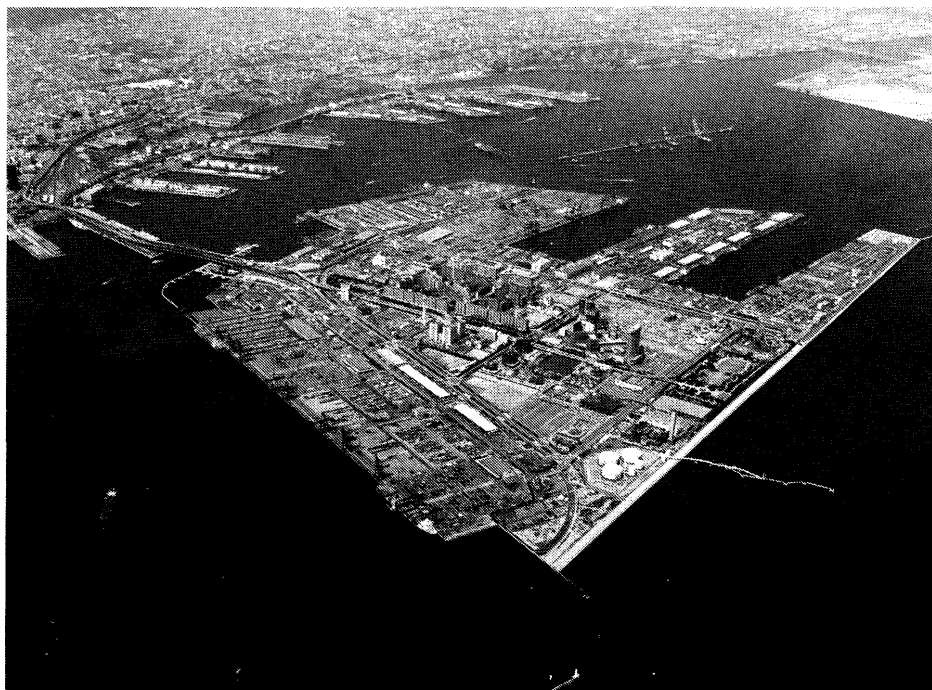
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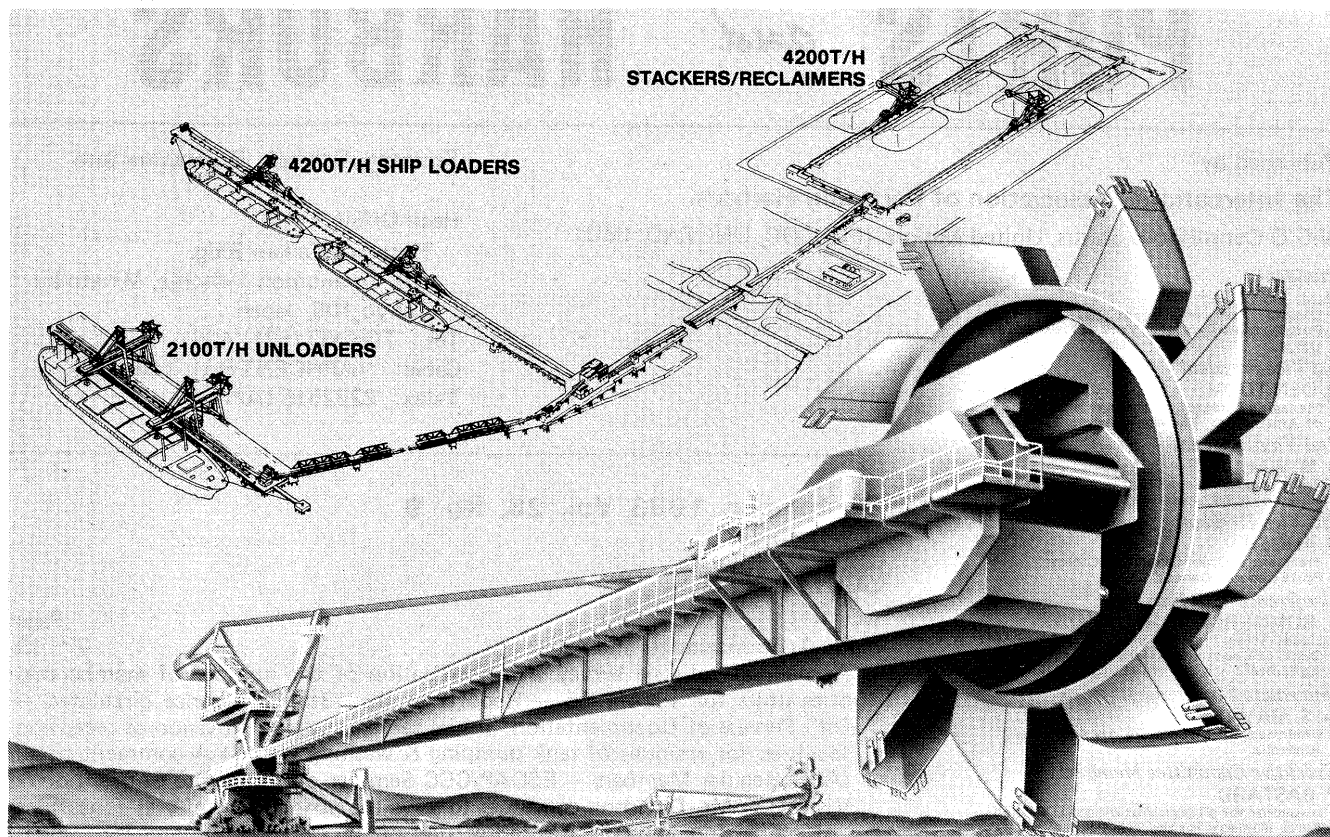
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Cover: Port of Long Beach

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PORTS and HARBORS — SEPTEMBER 1983 5



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IAPH announcements and news

A biennial tonnage survey and notification of the number of membership dues units for 1984/1985

Dr. Hajime Sato, Secretary General, in his July 15 letter, asked all IAPH Regular Members to file with him a report on the tonnages handled, in accordance with Sec. 5 of the By-Laws. He also requested each member to submit, by no later than September 15, the number of dues units to be subscribed for 1984 and 1985.

Reports to the 13th Conference circulated

Secretary General Hajime Sato circulated his Report to the 13th Conference to those who were unable to attend the Vancouver conference together with other conference papers, on July 30th.

Earlier than this the Secretary General circulated a 24-page report on the outcome of the Vancouver conference to all members of the Association.

In his letter the Secretary General thanked all members, both those who gathered in Vancouver and those who were unable to be with him there but worked so tirelessly beforehand, for the valuable part they played in making the conference a great success. The report includes all the decisions made as a result of the deliberations in Vancouver covering personnel matters, bills and resolutions, financial matters and the dates and places of the 14th and 15th conferences, as well as the Executive Committee meeting in 1984.

The official proceedings of the 13th Conference are now under process of compilation and will be sent to all members and friendly organizations as soon as they are published in December of this year.

Int'l Service of Documentation: Initial service starts

A circular from the Head Office introducing the commencement of International Service of Documentation, which was originally proposed by Mr. P. Bastard back in 1980, was circulated to all IAPH Members.

Dr. Sato commented in the circular that members were encouraged to utilize the facility thus provided by the Port of Le Havre and three other member organizations (Port of Antwerp, British Ports Association and the Port Authority of New York and New Jersey), as the frequent use of the service would work to enhance and add polish to the service quality of the ISD. The circular, prepared both in English and French, is reproduced hereunder:—

On July 21, 1980, Mr. Paul Bastard, then-IAPH President, sent a circular letter to all the IAPH members, informing them about a project of creation of an International

Service of Documentation within our Association, and, for this purpose, appealed to volunteers to participate with the Port of Le Havre in the institution of this service.

The studies to work out this project proved to be long and delicate, especially because of the variety of the documentation scopes to take into account and of the geographical dispersion of the IAPH members.

Consequently, it was decided, after the meeting in Aruba, on 6th May, 1982, to start this Service of Documentation on a provisional basis, by relying upon the documentation departments of the following port organizations:—

- Port of Antwerp
- British Ports Association
- Le Havre Port Authority
- The Port Authority of New York and New Jersey

For this first step, only the following matters will be handled by the International Service of Documentation:—

- Civil engineering
- Port stevedoring

From now on, for all requests of documentation concerning these subjects but stating as precisely as possible the particular documentation you wish, you can please enquire to:—

Port Autonome du Havre
Centre de Documentation
B.P. 1413, 76067 Le Havre Cedex, France
Tel: (35) 22-81040, Ext: 341
Telex: PAHAVRE 190663 F

The Le Havre Port Authority, after consulting the other documentation departments that cooperate in this concern, will reply to you by sending:

- whether the documents or photocopies of articles about the matter you are interested in; (in the case of great amount of mailing, possibly subject to payment)
- or, bibliographical references for articles, documents or books that treat of the matter.

Provision of reception facilities for residues of tank pumping & washing waters: A comment to all IAPH Regular Members

Secretary-General's circular of July 7:—

The Entry into force of the 1973 MARPOL/1978 Protocol Convention

The 1973 MARPOL International Convention (International Convention for the Prevention of Pollution from Ships, 1973), completed by its 1978 Protocol is to enter into force on October 2nd, 1983.

Its Annex II lays down various provisions concerning the prevention of pollution susceptible to be created by noxious liquid substances carried in bulk.

Regulation No. 7 of that Annex stipulates that the government of each state party to the Convention shall undertake to ensure the provision of the required installations for the reception of residues of tank pumping, and of wash waters from these tanks.

The entry into force of Annex II is deferred for a period of 3 years after the entry into force of the Protocol. Accordingly, it will be effective on October 2nd, 1983.

It must be noted that:—

- the range of liquid chemical products is vast, in respect of both their physical characteristics and their chemical composition, as opposed to the difference of petroleum products which all stem from the same family, and which provides the ports with a large part of their revenues,
- the provision of reception facilities, as required by the 1973/1978 convention and its Annex II can hardly be disassociated from the provision of ongoing facilities for the collection and the processing of these residues and washing waters.
- the technical process involved in each case can vary to a very large extent, according to the characteristics and composition of these products. They can result in their recycling or in their destruction
- such problems are of general concern in industrial areas, where environment regulations are more and more in force. There, treatment plants are provided to cover the needs of the industries and, in first instance, by (or at the intention of) the chemical industries which receive part of their cargo through the nearby ports.

Consequently, the collection in ports of the residues of liquid chemical products, and of wash waters, and their processing may differ fundamentally from the collection and processing of oil residues, which has been taken over by port authorities in many ports.

Quite a lot of other participants are likely to be involved (ships, central and local governments, shipowners, consignees, shippers, industries).

I recommend to your port authority, if it is concerned by such an issue, to keep in touch with all these other parties concerned in order to elaborate in each case the best appropriate solution, both from the technical and financial point of view.

For example, I can mention to you that the Baltic States have recently decided to solve the problem of the reception and processing of these residues, without any financial participation of the port authorities of the region. Similarly when the SOLAS Convention (International Convention of Safety of Life at Sea, 1974) obliged states to provide the navigation with new aids, port authorities have not generally been compelled to participate in funding the cost of them.

Attachment:

IMO document MEPC 18/7/1, January 24, 1983

PROVISION OF RECEPTION FACILITIES

Principles for the establishment and operation of reception facilities for residues and mixtures containing noxious liquid substances and fees for the use of such facilities

Submitted by Sweden

A prerequisite for the successful implementation of the provisions on the discharge of noxious liquid sub-

stances carried in bulk is the provision in ports of reception facilities for residues and mixtures containing such substances.

In preparation for the entry into force on 1 July 1984 of the Helsinki Convention provisions on noxious liquid substances carried in bulk — corresponds to the provisions contained in Annex II of MARPOL 73/78 — the Swedish authorities have looked into the problems related to reception facilities and are on the basis of *inter alia* the work carried out by IMO, considering a scheme for the establishment of reception facilities and the introduction of a mandatory prewash in unloading ports based on the principles outlined in the Attachment to this paper.

The scheme has been discussed within the framework of the Helsinki Convention and support for its implementation in the Baltic Sea Area has been given by the German Democratic Republic, and Federal Republic of Germany, Poland and the Union of Soviet Socialist Republics. It was the opinion of the Baltic Sea Countries that the implementation of the requirements for a mandatory prewash should be made by amending the Helsinki Convention. It was further the opinion of the countries that IMO should be informed of the consideration in order to reach, through IMO, an international agreement on the proposal.

The scheme has been based on *inter alia* the following fundamental assumptions:—

1. A scheme under which facilities for the reception of chemical residues are primarily required where chemicals are unloaded would mean great simplification and benefits;
2. The need for reception facilities in loading ports and repair ports could be minimized if a prewash and discharge of the residues resulting from such prewash to reception facilities in the unloading ports were made mandatory;
3. The residues and mixtures resulting from the prewash could normally be handled by the industry receiving the cargo;
4. A prewash and discharge of the residues resulting from such a prewash should be made mandatory only if the amount of residues after unloading exceeds the limits for discharge into the sea specified in MARPOL 73/78;
5. Ships would be easier to operate as tank washings from tank cleaning following a prewash can be discharged directly into the sea only taking ship speed, position and overboard discharge location into account.

The Swedish delegation, in presenting the proposal on how to deal with the question of the establishment of reception facilities for noxious liquid substances, invites comments from other delegations especially on the requirement for ships to carry out a prewash procedure and to discharge the tank washings to a reception facility in the unloading port prior to departure. Such a requirement, if made mandatory in all countries, would in the opinion of the Swedish delegation not only be to the benefit of the marine environment, it would also minimize the need for reception facilities in loading ports and terminals and in repair ports. It would undoubtedly also be advantageous for the shipowners.

The Committee is invited to consider the proposal and to refer it to the BCH Sub-Committee for further elaboration taking into account the urgent need for this question to be solved.

ATTACHMENT

Principles for the establishment of reception facilities for residues and mixtures containing noxious liquid substances and requirements for mandatory prewash in unloading ports

1 RECEPTION FACILITIES

- 1.1 In respect of unloading ports and terminals
- 1.1.1 Reception facilities shall be provided for tank washings containing residues of the substances unloaded, provided the substance is in Category A, B or C.
- 1.1.2 Responsible for providing the facility and for the reception of tank washings is the consignee.
- 1.1.3 No fees shall be charged to the shipowner for the reception and treatment of tank washings resulting from a mandatory prewash procedure described in 2.2. For larger quantities, or if a shipowner chooses to make a prewash although such prewash is not required by the mandatory provisions fees may be charged.
- 1.1.4 A ship, having unloaded a substance in Category A, or a substance in Category B or C if the remaining residues exceed the quantities which under the provisions of the Convention may be discharged into the sea, is not allowed to sail before the tank has been prewashed, the tank washings have been discharged to a reception facility and a surveyor has certified the procedure in the cargo record book. Certain exemptions may be granted as outlined in 2.3.
- 1.2 In respect of loading ports and terminals and repair ports
- 1.2.1 Reception facilities shall be provided if ballast water or tank washings have to be removed from a tank intended to be loaded, in order to enable the loading or the repair to be carried out.
- 1.2.2 Responsible for providing the facility and for the reception of residues and mixtures containing noxious liquid substances is in loading ports and terminals the consignor, and in repair ports the shipyard.
- 1.2.3 Fees may be charged to the shipowner for the reception and treatment of residues and mixtures received.
- 1.2.4 A ship may not be loaded/repared if the consignor/shipyard is not prepared to receive residues or mixtures which have to be removed prior to loading/repair.

2 MANDATORY PREWASH PROCEDURE

- 2.1 General
- 2.1.1 According to the IMO document "Procedures and Arrangements for the Discharge of Noxious Liquid Substances" (P and A) every chemical tanker carrying Category A, B, C and D substances which will discharge residues or residue/water mixtures shall be provided with a P and A Manual. The Manual shall be approved by the Administration and shall inter alia contain information and operational instructions (Appendix C of the P and A) concerning tank prewash programmes for compliance with the Standards for P and A.
- 2.1.2 The prewash procedure required in 1.1.4 after unloading of Category A, B or C substances shall be carried out in accordance with the instructions contained in the approved P and A Manual.

2.2 Mandatory prewash

On completion of unloading cargo of Category A, B or C the tank shall be prewashed according to 2.1.2 except as provided for in 2.3 whenever:—

- 2.2.1 The cargo unloaded is a Category A substance.
- 2.2.2 The cargo unloaded is a Category B substance, and
- the remaining cargo residue as assessed in the P and A Manual exceeds the greater of 1 cubic metre or 1/3,000 of the tank capacity in cubic metres, or
 - the unloading takes place within a Special Area and the ship is to proceed to a port within the same Special Area.
- 2.2.3 The cargo unloaded is a Category C substance, and
- the remaining cargo residue as assessed in the P and A Manual exceeds the greater of 3 cubic metres or 1/1,000 of the tank capacity in cubic metres, or
 - the unloading takes place within a Special Area, the remaining cargo residue as assessed in the P and A Manual exceeds the greater of 1 cubic metre and 1/3,000 of the tank capacity in cubic metres and the ship is to proceed to a port within the same Special Area.

2.3 Exemptions from the mandatory prewash in unloading ports and the subsequent discharge to reception facilities

- 2.3.1 If an approved ventilation method is applied, no prewash is required.
- 2.3.2 If the tank being unloaded is intended to be used for the same type of substance, or a substance which can be mixed with the previous one, and provided the tank will not be used for other purposes, e.g. as ballast tank, the ship may sail without applying the prewash procedure in that tank. This exemption is intended to be granted on a case by case basis, e.g. in respect of ships engaged in "dedicated trades".

2.4 Measures of control

- 2.4.1 For Category A substances the measures of control shall be in accordance with the Convention requirements.
- 2.4.2 For Category B and C substances a surveyor duly authorized shall certify in the Cargo Record Book:—
- that the tank, its pump and piping system have been emptied,
 - the remaining quantity of cargo residue (by checking the tables in the P and A Manual for that tank and that substance),
 - that a prewash, if mandatory, has been carried out in accordance with the prewash procedure in the P and A Manual for that tank and that substance, and
 - that tank washings from such prewash have been discharged to a reception facility and the tank is empty.

ESCAP/CCC Seminar on the Kyoto Convention

Mr. G.D. Gotschlich, Director, Customs Technique Directorate, CCC, in his letter of July 4 (83/T.2079, T1-09, E1-41), informed Head Office the CCC was organizing jointly with ESCAP a seminar on the simplification and harmonization of Customs procedures (Kyoto Convention) for English-speaking ESCAP countries in Bangkok, Thailand,

from 18 to 23 November this year, and invited IAPH to take part in the seminar.

After Port of Antwerp Director-General Mr. R.L.M. Vleugels, IAPH Liaison Officer with CCC and Chairman of the IAPH Trade Facilitation Committee, had been consulted on the matter, the invitation was transmitted to the members of Mr. Vleugel's committee in the Asian Region, namely Mr. Wimal Amarasekera, Sri Lanka Ports Authority, Mr. J.G. Griffith, Department of Marine and Harbours, South Australia, and Mr. M. Islam, Chittagong Port Authority, Bangladesh.

CCC recommendation concerning action against Customs fraud relating to containers: Sir Ronald Radford, CCC Secretary-General, requested to attain wider support

In his letter to IAPH, dated July 12, 1983 (Ref: 83. T.2066, C2-1, T2-8038), he commented:—

As you will be aware, one of the Council's aims is to facilitate international trade through the simplification of Customs procedures, while remaining heedful of the fact that Customs administrations must exercise control over the movement of goods, including those transported by container, a mode of transport particularly sensitive to fraud.

In adopting the above Recommendation, the Council has endeavoured to maintain a balance between the facilitation required by the pace and volume of present-day international trade and the minimum requirements of Customs legislation in respect of control. The Recommendation is also aimed at encouraging greater co-operation between countries, in the context of bilateral or multi-lateral agreements, with a view to ensuring the effective surveillance of container traffic.

As you will appreciate, the Council attaches considerable importance to the implementation of this Recommendation and to the achievement of the aims set out therein, in order that the efforts made in an area where facilitation has been shown to be necessary are not called into question by divergent initiatives. It is therefore desirable that the Recommendation be accepted as widely as possible.

Accordingly, the Recommendation is open for acceptance by Customs and Economic Unions as well as Member countries, since the Council would like as many countries and regional and international organizations as possible to be associated with its endeavours to promote international trade and co-operation between States.

I should therefore be most grateful if you would encourage the competent authorities of your organization to take the steps necessary to ensure the acceptance of this Recommendation.

The full text of the recommendation is introduced on page 10 of this issue.

CCC Recommendation Concerning Action Against Customs Fraud Relating to Containers (June 15, 1983/30.230 E, C2-1, T2-8038)

THE CUSTOMS CO-OPERATION COUNCIL,
CONSIDERING that Customs fraud is prejudicial to the economic and fiscal interests of States and Customs and

Economic Unions, and to the legitimate interests of trade,

NOTING that Customs fraud relating to containers is giving increasing cause for concern,

NOTING that containerization has become one of the most commonly used means of facilitating the carriage of goods,

NOTING that containers are being used in illicit traffic in high-duty goods and prohibited or restricted goods, such as arms and ammunition,

NOTING also that containers are being used in illicit traffic in nationally and internationally controlled narcotic drugs and psychotropic substances which are an ever-growing danger to human health and society,

CONSIDERING that the Customs authorities are responsible for checking goods at importation and exportation to ensure that Customs and related laws and regulations are applied, whilst at the same time endeavouring to facilitate the rapid passage of goods,

HAVING REGARD to the international Convention on mutual administrative assistance for the prevention, investigation, and repression of Customs offences (Nairobi, 9 June 1977),

HAVING REGARD to the international Convention on the simplification and harmonization of Customs procedures (Kyoto, 18 May 1973),

HAVING REGARD to the Customs Convention on Containers, 1972, (Geneva, 2 December 1972),

HAVING REGARD to the Recommendation of the Customs Co-operation Council on mutual administrative assistance (5 December 1953),

HAVING REGARD to the Recommendation of the Customs Co-operation Council on Customs sealing systems in connection with the international transport of goods (11 June 1968),

HAVING REGARD to the Recommendation of the Customs Co-operation Council on the pooling of information concerning Customs fraud (22 May 1975),

RECOMMENDS that States, whether or not Members of the Council, and Customs or Economic Unions, should:

1. provide for the possibility of examining containers and their contents, to the extent that it is considered necessary, at the places where the goods are packed into or unpacked from the containers or at any other appropriate place designated or approved by the Customs authorities,
2. employ methods for selection of containers for examination which take into account physical, documentary and intelligence factors and random and systematic selection procedures. The basis for selection should be flexible enough to adapt to changes in fraud patterns and the flow of goods.
The number of containers examined should be consistent with adjudged risk and capacity of the authorities concerned to carry out such examination,
3. examine the selected containers and their contents to a degree compatible with the objectives of the search and method of packing used,
4. pay adequate attention to the value of post facto controls of documentation relating to goods carried in containers, particularly those which have not been physically examined,
5. check, if appropriate, in connection with the Customs examination, that containers still comply with the technical conditions of approval,

6. ensure, for the purposes of Customs control, the provision of appropriate levels of security in port installations and container storage areas,
7. promote the highest effective degree of exchange of information between the country of exportation, countries of transit and country of destination with a view to ensuring a proper control and security of containers and the goods carried; and conclude, where the need exists, bilateral or multi-lateral arrangements for the communication of all relevant details in respect of containers carried, including, wherever possible, place of loading, name and address of the carrier, the exporter and the real consignee, list of goods carried in the container, place of unloading, and nature of seals affixed to the container, to achieve the highest degree of effectiveness of control,
8. ensure that Customs officials concerned with the control and examination of containers receive training which takes particular account of the specific nature of the transport and the control of containers,
9. promote the closest possible co-operation between Customs authorities and professional bodies and authorities concerned with container operation,

REQUESTS States, whether or not Members of the Council, and Customs or Economic Unions which accept this Recommendation to notify the Secretary General of their acceptance, and of the date from which they will apply the Recommendation and the conditions of its application. The Secretary General will transmit this information to the Customs administrations of all Members. He will also transmit it to any Customs administrations of non-Members or any Customs or Economic Unions which have accepted this Recommendation.

Visitors

Mr. J. King, Chairman, and Mr. J.F. Stewart, General Manager, of Wellington Harbour Board, New Zealand, visited on June 13, 1983, the Port of Tokyo and inspected the facilities by boat. Mr. Stewart, on June 14, visited the head office.

Mr. Davidson continues to serve the port community as consultant

Mr. James P. Davidson, who has been a member of the Executive Committee of I.A.P.H. since the Houston Conference in 1977, has retired as Chairman of the Clyde Port Authority. Mr. Davidson was the U.K.'s Alternate Director of I.A.P.H. from March 1971 to December 1975 and became the U.K.'s Director in January 1976. He has served on the Committee on Large Ships, the Finance Committee, the Constitution and By-Laws Committee and the Membership Committee of which he has been Chairman since 1978.

Mr. Davidson was Chairman of the National Association of Port Employers in Great Britain from 1974 to 1979, Deputy Chairman of the British Ports Association from 1978 to 1980 and Chairman from 1980 until December 1982. In 1980 he and Past President Paul Bastard concluded the Agreement which was ratified at the Nagoya Conference whereby the British Ports Association acts for I.A.P.H. in Europe.

Mr. Davidson continues his association with the ports and shipping as a member of the Pilotage Commission in Great Britain and in a consultancy capacity. He is a Fellow of the Chartered Institute of Transport, a Companion of the British Institute of Management, a Fellow of the Royal Society of Arts and was awarded the C.B.E. in 1980.

His contact is as follows:—

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Customs and Ports

(Address to the General Assembly of the
Customs Co-operation Council, 14 June 1983)

By Robert L.M. Vleugels
Director General, Port of Antwerp
Chairman of E.V.H.A.
Chairman of the IAPH Committee on
Trade Facilitation, IAPH Liaison
Officer with CCC



Customs officers and port managers co-operate daily throughout the world in the practical service of international trade.

The opportunity to compare and exchange views between representative organizations is, therefore, most valuable.

Traditionally the customs and port functions were animated by quite different priorities. The primary aim of customs was to safeguard the revenue and for centuries, prior to the introduction of income and sales taxes customs were the staple source of national revenue.

The business of the port authority has always been the rapid and efficient movement of goods and ships in and out of their operational territory.

Every major port, therefore, represented a delicate balancing act between secure taxation and transport efficiency.

This is still the position in many developing economies but in most developed countries the contribution of customs revenue to total tax intake has greatly diminished and in some states it is doubtful whether receipts from duty justify the cost of customs administration. Here the primary customs responsibility has shifted to protection against drugs and the administration of instruments of trade policy such as quotas and other licensing systems or the application of health and safety regulations.

This has led to a growing identity of interest between customs and ports in the encouragement and facilitation of international trade — an activity which now provides the economic base for many developed countries.

As a result the CCC and IAPH have mutual concern with the support of more effective methods of maintaining essential customs control, obtaining necessary statistics, processing commercial, transport and official data and handling the concentrated flows of information which pass through modern ports in order to manage and service today's rapid freight movements — including container, roll-on roll-off and other unit-load through transport systems.

With this in mind the IAPH has noted, with warm appreciation, the growing CCC activity in the creation and promotion of standard, simplified customs procedures — notably those set out in the Kyoto Convention.

CCC help to developing countries through the secondment of customs experts in such techniques is also regarded by IAPH as a major contribution to the reduction of unnecessary handicaps on the vital flow of goods in and out of these economies.

IAPH itself is moving toward a parallel promotion and dissemination of modern facilitation techniques through the activity of one of its committees, i.e. the Committee on Trade Facilitation.

This Committee of which I am the chairman has already had the benefit of a number of discussions with CCC representatives, notably Sir Ronald Redford and Mr. Gotschlich.

As chairman of the Committee on Trade Facilitation of IAPH I had the privilege to introduce at the 13th conference of this Association in Vancouver (4-11 June 1983) the speakers of a working session dedicated to "Automated Data Processing and Communications between Ports and their Users".

The subject was developed by spokesmen of the Commission of the European Communities, the U.S. Department of Transportation, the port of Yokohama, the Lloyd's Shipping Information Services and of several European ports, who are member of the European Association for Data Processing in Ports (EVHA).

As chairman of EVHA, an organization founded 1979 with registered seat in the City Hall of Antwerp, I have the pleasure today to bring to your attention its achievements and aims.

It has become quite clear that in order to overcome the "red tape syndrom" and a lot of repetitive work, some basic requirements have to be fulfilled, such as:

- the alignment of documentation upon common standards;
- the development of real time data transfer and development of a free data flow to all interested parties.

Some European ports, aware of the necessity of a common approach of the problem, joined their efforts. With the strong support of the Commission of the European Communities they established EVHA, which I referred to. This Association was founded (1979) by Antwerp (seat of the organization), Bremen, Bremerhaven, Clyde Port, Copenhagen, Cork, Genoa, Hamburg, Le Havre, Rotterdam and the British Ports Association on behalf of UK ports.

At a later stage the port of Piraeus, Barcelona, Naples, Venice, Trieste and Amsterdam became members.

It was necessary, in the first instance, to examine the existing situation in different ECC Ports so as to identify and agree areas of common interest and mutual cooperation. In establishing these areas, it became evident that most Ports were favourably disposed to the idea of linkage to a computer system for the purpose of exchanging informative data of particular interest. The joint initiative, therefore, generated further studies, as follows:

1. a Pilot Data Communication System Feasibility Study;
2. a Dangerous Substances Study; and
3. a Final Network System Study.

(I then digressed on these subjects following the papers presented in Working Session No 2 of the 13th I.A.P.H. Conference and concluded as follows.)

Ports must bear in mind that the interconnection of EDP systems related to trade-, shipping-, customs- and port functions, must be made possible in order to bring the "missing links" of information in the transport-chain into existence.

I want to repeat what I declared at the 13th IAPH Conference: EVHA is open to any cooperation with other national and international bodies and associations because we believe that the efficiency and the optimal application of the communication network can even better be secured when implemented on a worldwide scale.

It is clear that, at some point in the not too distant future, this ECC initiative will have to link into and supplement a much wider concept of port telematic information management to replace the centuries old documentary system which still fills port and customs offices with innumerable pieces of official and commercial paper. We look forward — through our developing co-operation with the CCC Permanent Technical Committee — to growing joint progress in this important field of modernization and facilitation.

We believe that the discipline and logic inherent in computer programs will press the need for rationalized, standard customs and port procedures and we would welcome close collaboration between the ECC and IAPH to consider how our mutual information requirements can be best met in the light of the associate data handling needs of cargo owners and shipping companies.

This extended call for co-operation may well lead the

CCC and IAPH towards round-table consultation with other organizations including the International Chamber of Shipping, the International Chamber of Commerce, the Lloyds Information Services and other institutions. One apparently pedestrian subject, on which enormous savings in costs and efficiencies could readily be achieved by such inter-organizational co-operation, would be the general adoption in international trade practice of the United Nations Standard Cargo Marking System.

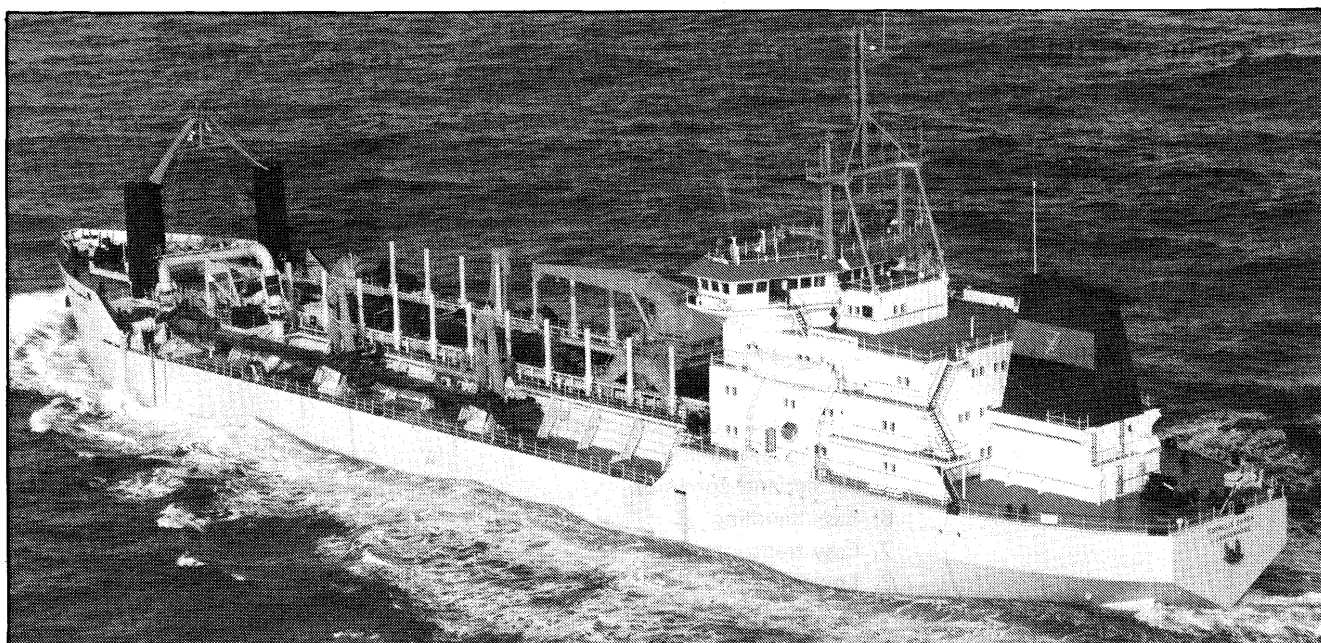
Against this background of very varied sophisticated and simple steps toward improved international trade movements through customs and operational port systems, the cooperation between the CCC and IAPH, already so happily begun, and reflected in my presence here today, will become more and more important to individual port managers and customs authorities in the years ahead.

The IAPH is most grateful for this special opportunity of testifying to its own enthusiasm.

Revised version of the Constitution and By-Laws is now available

The revised version of the Constitution and By-Laws of IAPH was published recently, covering all the amended provisions as resolved at the Vancouver Conference.

A copy of the revised version was airmailed to all members of the Association on July 5, 1983. Extra copies will be available on request to the Head Office in Tokyo.



Zanen Verstoep nv
Dredging Contractors

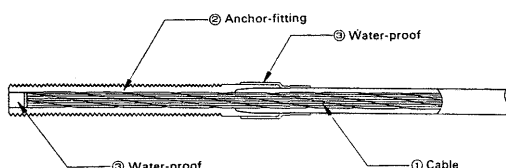
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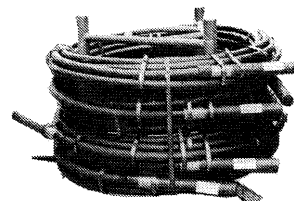
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Open forum:

THE DUMPING DILEMMA

Conforming to the London Dumping Convention and Beyond

(Paper presented at the annual meeting of the Central European Dredging Association,
The Hague—Amsterdam, Holland, May 31, 1983)

By Herbert R. Haar, Jr.
Assistant Executive
Port Director
Board of Commissioners
of the Port of New
Orleans
Chairman of the IAPH
Dredging Task Force
Past Chairman of the
AAPA Special
Dredging Committee



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Abstract

Domestic regulations in the United States restricting dredged material disposal in ocean waters is threatening the growth of the nation's trade economy. Currently, the United States has chosen to follow a stricter ocean disposal program than established by the international treaty requirements of the London Dumping Convention which has guided the development of similar regulatory policy in other nations worldwide. In the United States, we have experienced an imbalance in the interpretation and application of national and international ocean disposal criteria favoring environmental interest, and often neglecting an appropriate balance with those of waterborne commerce. This has resulted in a potentially drastic slowdown in the maintenance dredging necessary to operate our national ports and waterways system, a conflict which must be resolved.

Introduction

The Convention on the Prevention of Marine Pollution by Dumping of Waste and other matter, known as the London Dumping Convention (LDC), is an international treaty whose purpose is to regulate and reduce, on a global basis, the pollution of marine waters caused by dumping waste substances at sea. The provisions established by the LDC were negotiated in London in November, 1972, and came into force in August 1975. Fifty-two Contracting Parties including dumping -- at least to the extent provided by the Convention and according to their respective economic capabilities.

To achieve the goal of preventing the pollution of ocean waters, the Convention established different degrees of control for different classes of substances, depending upon their potential for harm to marine ecosystems. Under Article IV, (1), (a), substances listed in Annex I to the Convention are prohibited for dumping, unless they are present as only "trace contaminants" or are "rapidly rendered harmless" upon disposal. Annex II on the other hand contains a separate list of substances that may be disposed at sea but only if some special care procedures are utilized. This classification of substances into Annex I or Annex II is particularly significant for dredged material that contains substances listed in Annex I but for which there may be no reasonable alternative means of disposal other than dumping at sea. In such cases, application of the Annex I prohibition could seriously interfere with vital shipping operations, and in some cases, could result in port closures.

Ports and Ocean Disposal

Various countries have chosen to go beyond the LDC requirements and incorporate even stricter regulations due to the close environmental scrutiny that ocean disposal operations have come under in recent years. As more domestic regulatory laws are added, the conflict with national economic goals can be expected to intensify. We can see this happening in the United States today.

Many ports throughout the world, and particularly those in the United States, have experienced increased difficulty in obtaining the necessary government permits to accomplish the dredging required for normal operation and maintenance activities as well as capital improvements. Periodic maintenance dredging is essential for operations at seaports. Delays in performing this maintenance often means lost revenues, increased shipping cost, and lessened port efficiency. These impacts affect the very economic vitality of the port, its hinterland, and the nation.

The issue of ocean disposal of dredged material must be resolved in order that the ports and navigable waterways of the United States can continue to perform their historic role in the economic growth of the nation. In the United States, more than 350 million cubic yards of dredged material per year are dredged from more than 100 ports serving the nation. Ocean disposal accounts for 20% to 25% of the United States Army Corps of Engineers' annual disposal operations. A decade of research on the environmental consequences of dredged material disposal has shown that, more often than not, viable disposal options are limited, and ocean disposal of this material becomes the most economical alternative, least damaging to the environment, and the only practical method of disposal.

One example of the importance of ocean disposal material to ports and the national economy is the situation in the Lower Mississippi River area. Average annual maintenance of the deep-draft navigation channels, including both the Southwest Pass area of the Mississippi River and the Mississippi River-Gulf Outlet, accounted for 5.5 million cubic yards of dredged material disposed of into the ocean. Deep-draft, oceangoing commerce in the stretch of the Mississippi River from Baton Rouge to the Gulf of Mexico, a distance of 234 miles, was 235 million tons in 1980. Total waterborne commerce along this stretch of river equaled 368 million tons in 1980, making this the largest port complex in the world. Ocean disposal of significant quantities of dredged material is the only feasible method of keeping these vital shipping routes open.

The Federal Regulatory Labyrinth

The ports of the United States began feeling the pressures generated by new environmental laws during the early and mid 1970's. Mandates of the National Environmental Policy Act of 1969; the Federal Water Pollution Control Act of 1972; the Marine Protection, Research and Sanctuaries Act of 1972; and other federal laws impacted expansively on the scope and complexity of the federal regulatory program over port and channel construction and operation and maintenance activities. The Administrator of the United States Environmental Protection Agency (EPA), in conjunction with the Secretary of the Army, was required to develop regulations controlling dredging and filling activities in waters of the United States and adjacent wetlands and controlling disposal of dredged material in ocean waters (ocean dumping). These activities require evaluation and assessment of probable impacts on the marine environment, wildlife habitats, and, in general, the overall environment including the well-being of man.

Chemical analyses of materials to be dredged was required after the regulations were promulgated in 1974 and 1975. Soon afterward, water column chemistry was additionally required to prepare an assessment. The degree of testing accuracy was greatly increased when EPA published its "Quality Criteria for Water" in July of 1976. Costs and time required to obtain permit approval were increased considerably.

Public Law 92-532, "The Ocean Dumping Act of 1972," requires that the EPA consult with the United States Army Corps of Engineers prior to proposing revisions to the Ocean Dumping Regulations. The Corps of Engineers, which is responsible for the dredging and disposal of large volumes of sediment each year, in fulfilling its mission to

maintain, improve, and extend United States waterways, has been restricted in representing the interest of the nation's ports due to excessive bureaucratic interference and a growing web of red tape surrounding these negotiations. To put it bluntly, the partnership has been less than successful in my judgement.

On January 11, 1977, the United States Environmental Protection Agency revised the "Ocean Dumping" regulations and criteria, requiring additional testing of materials to be dredged. An interim test procedure called "bioassay" was included. Marine organisms such as juvenile shrimps, clams, worms, and fishes are exposed to sediments and water taken from the site to be dredged. Organism survival is evaluated after ninety-six hours. After ten days, the tissues of certain surviving organisms are analyzed for chemical content which would provide an indication of potential for bioaccumulation. On September 7, 1977, this bioassay test procedure became mandatory in evaluating ocean disposal of dredged material.

The environmental movement in the United States of the early and mid-seventies began exacting its toll -- serious problems were generated regarding the ocean dumping of dredged material at several major United States ports; e.g., New Orleans; Lake Charles; New York, resulting in light loading of ships and a significant loss in maritime efficiency. These problems have evolved, to some degree, from the stringent application and interpretation of the current EPA ocean dumping criteria and EPA's policy that ocean disposal should be regarded as a last alternative. These ports have remained open only through numerous crisis-oriented meetings among the various agencies involved in regulating and reviewing ocean disposal activities. These serious problems can be alleviated, to a great extent, by EPA's decisive action to give equal consideration to ocean dumping as is given to all other disposal alternatives for the disposal of dredged material. There is currently considerable congressional interest in the improvement of the United States deep draft port facilities. This interest will no doubt continue to exist, and intensify, as ports move to accommodate both domestic and international requirements for deep draft bulk carriers, and because expansion in United States naval defense capabilities is anticipated.

Available scientific information indicates that the ocean may, in many cases, provide the best available alternative for minimizing the environmental impacts of disposing of large volumes of dredged material. This information includes extensive scientific data assembled during the United States Army Corps of Engineer's five-year study, entitled "Dredged Material Research Program," costing \$32.5 million, as well as that gathered during a number of independent studies of both domestic and international origin. These indicate that in many cases, ocean disposal of dredged material offers the same, if not greater, protection to human health than does land disposal, and at significantly reduced costs.

The domestic ocean dumping regulations of the EPA, which incorporate provisions of the London Dumping Convention, specify "state of the art" biochemical evaluative guidance and testing procedures, and require a rigorous sequence of testing regardless of the type of operation, predicted consequences, field conditions, and available scientific research. Extensive testing under all circumstances is expensive and should be avoided when available data indicate that such tests are not reasonably justified.

Although both domestic criteria and the London Dumping Convention provide for important exclusions from these mandatory and comprehensive testing requirements, the international guidelines contain much broader exclusions than do the domestic criteria.

To date, several EPA Regional offices have taken the rigorous position that little, if any, dredged material can be excluded from the comprehensive "state of the art" testing program, and several disallow ocean disposal based solely upon laboratory test results. These positions often disregard the actual effects of ocean disposal and tend to reflect only the worse cases. In addition, these positions ignore economics of the case and the availability of land-based sites which are now most difficult to obtain without serious public protest.

Organizing for Survival

The cost of the U.S. ports of the environmental movement restricting ocean dumping to U.S. ports is seen in the form of time delays in obtaining dredging and dredged material disposal permits, denial of permits, delayed capital investment improvements, increased investment cost as well as increased operation and maintenance cost and lost revenues. To counter these impacts and to seek "state of the art" practices, both The American Association of Port Authorities (AAPA) and the International Association of Ports and Harbors (IAPH) established ad hoc dredging committees. Since late 1979, these two organizations, separately and jointly, have pursued similar goals to obtain political recognition and acquire influence to alter United States legislation and international convention. Decisions governing ports and port operations engaged in international trade must be made in the overall public interest and welfare and not excessively hampered by environmental considerations alone. Achieving organizational goals will require continued effort, organizational funding, and exploitation of opportunities to successfully influence future ocean disposal policy and regulations. All of this must be accomplished with a full regard for protecting the environment, and consistent with the governing laws, policies, and regulations.

The American Association of Port Authorities (AAPA)

In response to such ever-increasing problems of delays and escalating costs and to continue efforts of those proposing more stringent, if not always applicable, testing procedures, The American Association of Port Authorities (drawing its membership from the United States, Canada and Latin America) established an Ad Hoc Committee on Dredging in June, 1979. Its establishment was recognition that the then existing AAPA Committee structures and ensuing resolutions were ineffective in moderating the trend toward increasing environmental restrictions on dredging activities. Early-on goals were established. These goals included the identification and documentation of those laws, rules, regulations, agencies, procedures, and agreements which are creating dredging problems. Targeted for study were concerns over mitigation, compensation, endangered species, bioassay test criteria, local costs, permit delays, and interagency agreements. Additionally, the Committee was charged with developing recommended revisions to existing regulations and procedures that would provide needed relief as well as the necessary documentation to support those revisions. Finally, the new Com-

mittee was instructed to develop a strategy to be used to achieve adoption and implementation of these revisions and to compile data on key legislators, committees, boards, and administrators to whom these revisions must be officially transmitted.

The International Association of Ports and Harbors (IAPH)

In early 1980, a similar committee to coordinate on the international scene was established by the International Association of Ports and Harbors (IAPH).

The International Association of Ports and Harbors (IAPH) is an international association comprised of over 400 members in 74 countries. The IAPH, headquartered in Tokyo, is organized for the purpose of increasing the efficiency of ports and harbors through the development and dissemination of information useful to port and harbor administration, for furthering knowledge in the fields of port organization, management, administration, operation, development, and promotion, and for advancing international friendship and understanding and the growth of waterborne commerce.

The IAPH has been granted observership status at the Consultative Meeting of Contracting Parties to the LDC. In the course of port operations, IAPH ports are faced with a continuing need to dispose of dredged material. Therefore, a primary concern of the IAPH centers on the impact of the LDC upon the ability of ports to carry out periodic maintenance dredging activities and needed channel and harbor improvements essential to continued port operations.

The missions of the International Ad Hoc Dredging Committee are:

1. To review, report, advise, and submit recommendations on matters relating to seaport and inland port dredging and dredging equipment;
2. To meet and coordinate with the London Dumping Convention and the International Maritime Organization (IMO), the latter being the organization designated by the United Nations to serve as the Secretariat to the LDC;
3. To develop a program on disposal of dredged material problem areas for inland ports;
4. To publish an inventory of dredging equipment owned by dredging companies worldwide, including a special section on new innovative equipment;
5. To collect and publish information on the "state of the art";
6. To publish an information brochure on sources of information and assistance on dredging techniques and types of equipment best suited for given situations.

Working Toward the Goals (Highlights)

These two committees, the AD Hoc Dredging Committee of the IAPH and the AD Hoc Committee on Dredging of the AAPA (now known as the Harbor and Navigation Committee) have pushed forward in their efforts to resolve regulatory problems confronting the industry while seeking solutions that are environmentally and economically sound.

1980

During 1980, it became apparent that the United States EPA-chaired "Committee on Ocean Dumping" was dominated by the outlook of the parent agency (EPA) and some-

times unfounded concerns of environmental organizations and, thus, would not provide the vehicle to influence ocean dumping criteria so as to enhance dredging programs clearly in the national interest. A direct appeal to the London Dumping Convention appeared to be the only hope.

In appearing before the **Fifth Consultative Meeting of the Contracting Parties to the London Dumping Convention held in London, September 22-25, 1980**, the IAPH representative presented a position paper directing the attention of the Contracting Parties to possible interpretations of the terms of the LDC and their subsequent application to ocean disposal operations of dredged material. The application of differing interpretations could result in an absolute prohibition of ocean dumping of dredged material -- even when there may be no feasible or practical alternative means of disposal, and even when the disposal might be safely carried out if special care is taken. IAPH urged LDC Contracting Parties to consider these possible effects upon port operations. The IAPH also proposed a study on the dredged material issue with a view toward adopting whatever changes are needed in the LDC to assure that there will be no unintended or unnecessary interference with essential port operations.

The concerns expressed by the IAPH delegation at the Fifth Consultative Meeting were well received. The Contracting Parties recognized the significance of the technical issues raised by the IAPH; namely, the use of "special care" techniques in the ocean dumping of dredged material. The consultative parties directed that these issues be considered by the Ad Hoc Scientific Group of the Convention at its next intersessional meeting of May 1981, and to report to the Convention at the Sixth Consultative Meeting held in London in October, 1981.

IAPH employed an environmental lawyer from New Orleans, Mr. Joseph E. LeBlanc, Jr.; a technical consultant in the environmental field, Dr. Willis E. Pequegnat; and an oceanographer at Texas A & M University, to develop on a priority basis a technical paper for presentation to the international Ad Hoc Scientific Group. The paper focused upon the "special care" measures raised by the IAPH delegation during the Fifth Consultative Meeting. Dr. Pequegnat advanced the basic premise that ways must be found to permit ports and harbors to continue the dredging of new and existing waterways to ensure the safe passage of commercial shipping. He outlined a number of techniques (clean material capping, borrow pit disposal, split-side disposal, deep ocean disposal, hypersaline basin disposal, submarine canyon disposal, and erection of offshore islands) for the disposal in the marine environment of dredged material containing Annex I substances under the London Dumping Convention.

1981

There was general agreement at the May, 1981, Ad Hoc Scientific Group Meeting in Halifax, Canada, that, while many of the special measures showed promise for future use, there was very little information on the extent to which the techniques would be successful in practice. The Ad Hoc Scientific Group, therefore, agreed that dredged material (spoil) disposal operations involving "special care" techniques should be conducted as field research studies to gather experience with a view to allowing "special care" measures to be used on a routine basis. The following summarizes the Scientific Group's report to the Convention:

The Ad Hoc Scientific Group agreed that existing regulations, or the interpretation of the terms "trace contaminants" or "rapidly rendered harmless" in respect to Annex I contamination of dredged spoil, could be interpreted to allow national authorities to evaluate research results and utilize, as appropriate, "special care" measures in the disposal of dredged spoil. These measures should ensure that disposal was conducted in a manner which would avoid undesirable effects, especially the possibility of acute or chronic toxic effects on marine organisms or human health whether or not arising from bioaccumulation in marine organisms, and especially in food species.

The Ad Hoc Scientific Group, therefore, recommended to the **Sixth Consultative Meeting of the London Dumping Convention in October of 1981**, that Contracting Parties should take note of the possibility of using "special care" methods as suggested by the IAPH where disposal of dredged spoil contaminated by Annex I substances is being considered. The Group also recommended that Contracting Parties should be invited to submit details of any experience gained, with respect to using these methods, to future meetings of the Ad Hoc Scientific Group. IAPH additionally invited the Contracting Parties to express their views upon the applicability of the "emergency" provisions of the Convention to the disposal of dredged material containing Annex I substances which may not be within the "trace contaminant" and "rapidly rendered harmless" exception.

On the issue of "special care" measures, we received support for the Contracting Parties by the acceptance of the recommendations of the Ad Hoc Scientific Group. At the same time, the IAPH confirmed its continuing interest in the consideration of "special care" measures and extended a continuing offer of technical expertise in matters relating to dredged material. With regard to utilizing the "emergency" provisions of the Convention, the delegates expressed a decided preference of using one of the "special care" techniques proposed by the IAPH rather than consider the matter under the "emergency" clause.

Also, while in London for the Consultative Meeting, members of the IAPH delegation met with the President of the International Association of Dredging Companies to initiate a cooperative joint effort. The final product of this partnership was a reference booklet, entitled "Ports and Dredging in the Developing Countries," which, at this time, is being distributed to all attendees at the 1983 IAPH biennial convention being held in Vancouver, Canada. A copy of this booklet has been published with the current issue of *Terra Et Aqua* magazine.

Continued cooperation between the AAPA Committee on Harbors and Navigation and the IAPH Ad Hoc Dredging Committee is mutually beneficial and serves to intensify the efforts of both associations. These two committees jointly developed questionnaires for ports worldwide. These questionnaires were designed to determine the effect of national and international legal and regulatory controls on dredging efficiency. The final report, "A Survey of World Port Practices in The Ocean Disposal of Dredged Material as Related to The London Dumping Convention," was published in April, 1981.

1982

In June of 1982, representatives of AAPA again appeared before a subcommittee of the United States House of Representatives to voice concern on the direction that

the Committee appeared to be heading in reauthorizing Title I of the United States Marine Protection, Research and Sanctuaries Act of 1972. The United States Senate Environment and Public Works Committee approved a bill earlier that year to be presented to the full Senate that provided for a straight one-year authorization of the Marine Protection, Research and Sanctuaries Act. The version under consideration by the House Subcommittee provided for an amendment that, AAPA feared, might be urged as making the London Dumping Convention a self-executing treaty. Treaties are of two kinds; those that are self-executing and those that require enabling legislation. The London Dumping Convention is not self-executing. It was drafted in general terms for subsequent implementation by signatory countries according to their national authorities. We strongly opposed any "Convention Adherence" language being inserted as an amendment to the Marine Protection, Research and Sanctuaries Act of 1972. To suggest a separate application of the Convention apart from the National Marine Protection, Research and Sanctuaries Act would directly interfere with the administration of a national ocean dumping program. Such a provision would open the door to innumerable litigation proceedings whenever one was dissatisfied with decisions and permit conditions rendered under the National Marine Protection, Research and Sanctuaries Act program. As a result of the AAPA efforts, language was included in the report upon the bill (H.R. 6113) that was favorable to AAPA's position.

In preparing for the Sixth Meeting of the Ad Hoc Scientific Group on Dumping, the Chairman of the AAPA Special Dredging Committee appeared before the United States Environmental Protection Agency (EPA) Ocean Dumping Advisory Committee on September 16, 1982, as representative of the AAPA, for the purpose of presenting the views of AAPA and encouraging their adoption as the United States position.

We were not entirely successful in influencing the United States position to back that of the IAPH relating to the necessity to develop separate standards for the assignment of substances to Annex I or II of the Convention, and to that relating to the use of "special care" measures in the ocean dumping of polluted dredged materials. However, the United States is actively considering including the following concepts as an integral part of its waste management policy:

- With few exceptions, impacts of ocean disposal of dredged material are mainly associated with physical effects. These effects are known to be persistent and often irreversible. The biochemical interactions, however, are infrequent with no clear trends, and bioaccumulation of metals and hydrocarbons are usually negligible. Furthermore, land-based alternatives appear to offer limited additional protection in relation to human impact as compared to ocean discharge. Most conventional land-based alternatives often result in drastically changed geochemistry of the dredged material with a subsequent enhanced release potential of chemical constituents (especially materials such as mercury and cadmium).

- Dredged material containing Annex I constituents or exhibiting Annex I properties can be safely ocean disposed. Annex I constituents can be regarded as "trace contaminants" through application of disposal site selection and management to minimize unacceptable adverse effects. Ocean disposal can be carried out to prevent hazard to

human health, harm to living resources and marine life, damage to amenities, or interference with other legitimate uses of the sea. This approach is also in conformity with Annexes II and III of the Convention.

- Highly contaminated and toxic dredged material can be disposed of in open water if special care is exercised in site selection to ensure that the material is isolated from the biotic zone and if the approach involves significant disposal site management; e.g., capping, selection of an abiotic area.

- There is no single disposal alternative for dredged material disposal that is inherently suitable for a region or a group of projects and there is no single alternative, land or ocean based, that presumptively resulted in impacts of such nature that it can be categorically dismissed from consideration or arbitrarily chosen.

There followed in Paris in late September of 1982 the Sixth Meeting of the Ad Hoc Scientific Group (AHSG) on Dumping. Our IAPH delegation again attended in an invited observer status and participated in the consideration of matters relating to dredged material. Our consultant, Dr. Willis E. Pequegnat, presented an update regarding the experience or member nations in using "special care" techniques in lessening the environmental impact of disposing in the ocean dredged material containing Annex I and other toxic substances. Several delegations questioned whether the use of "special care" measures could properly fit under the "rapidly rendered harmless" exception clause for disposal in the ocean as contained in Paragraph 8 of Annex I. Additionally, they requested that the matter be referred to the Seventh Consultative Meeting in London, held in February of 1983.

Another major issue taken up by the Scientific Group at that meeting in Paris was the question of need for developing additional criteria for classifying substances to Annexes I or II of the Convention. The Ad Hoc Scientific Group decided to make a stronger effort to develop additional criteria. Considerable support was expressed for the adoption of "numerical standards" for classification purposes based upon laboratory toxicity testing and bulk sediment analysis. The application of such standards to dredged material could have disastrous effects upon this country's ocean dumping program. It would threaten an even greater "overregulation" of dredged material— in disregard of the known characteristics of sediment that mitigate the effects of any Annex I substances that may be present. In Paris, we emphasized the different treatment that should be given dredged material. Preliminary discussions at the meeting results in the EPA Committee on Ocean Dumping concurring with the preparation of a report and joining with the Ad Hoc Scientific Group in requesting that AAPA and IAPH jointly prepare such a report in time for consideration at the next meeting of the London Dumping Convention. Dr. Pequegnat was again contracted to develop this second technical paper.

1983

An IAPH delegation attended the recent **Seventh Consultative Meeting of the London Dumping Convention in London during mid-February, 1983**. The status of the reports being updated and prepared by the IAPH (Agenda Item 3) and consideration of proposed amendments to the Annexes to the Convention concerning the disposal of radioactive waste (Agenda Item 7) were two of the subjects discussed critical to the port industry.

IAPH announced to the Seventh Consultative Meeting its continuing willingness to present Contracting Parties and the Scientific Group with further reports upon the use of "special care" techniques. In this regard, IAPH will be prepared to submit to the next meeting of the Scientific Group a further report, prepared by Dr. Willis Pequegnat, regarding the experience gained with the worldwide use of "special care" measures since the IAPH submission at the 1982 Paris Meeting. The growing experience with the use of these techniques, it is hoped, will afford a recognized basis for carrying out certain essential dredging operations within the framework of the Convention.

The IAPH expressed to the Scientific Group in Paris a willingness to undertake a new study on the proposal to establish criteria for the inclusion of substances in the Annexes of the Convention, per the request made at the Sixth Consultative Meeting of LDC. This study, that would compare the properties of Annex I substances in dredged material with the properties that these substances exhibit in pure chemical form using "numerical standards," was subject to appropriate authorization and funding.

IAPH was pleased to report to the Seventh Consultative Meeting that it had obtained the necessary authorization and funding and is undertaking the proposed study according to the terms established by the Scientific Group. The study is planned for completion in time for presentation at the next intersessional meeting of the Scientific Group being held in London in October of 1983. It is hoped that this research will be of great assistance to the Scientific Group when considering the assignment of substances to the list of Annex I and II at future meetings.

With regard to the subject of radio-active wastes (Agenda Item 7 of the Seventh LDC), the Governments of Kiribati and Nauru proposed two amendments to Annexes I and II of the London Dumping Convention for consideration. They proposed to amend Paragraph 6 of Annex I (which prohibits the disposal of high level radioactive waste or matter) to establish an absolute prohibition against the dumping of all radioactive waste or radioactive matter, regardless of level, form, content, or method of containment; and they proposed to delete Paragraph D of Annex II, which presently allows the dumping of low level radioactive material under a "special permit."

To concerns expressed by IAPH at previous meetings have related to the disposal of dredged material containing substances listed in Paragraphs 1-5 of Annex I. Radioactive waste or matter has not been involved. However, the proposal of the Governments of Kiribati and Nauru could seriously affect IAPH ports and interfere with needed dredging operations in a manner that, IAPH believes, is not intended.

Virtually all harbor sediment contains some radioactive matter at naturally occurring background levels. In addition, waterways in the vicinity of nuclear power plants, certain mining operations, hospitals, and military installations may have low levels of radioactive wastes from these sources in their sediment. Any prohibition against the ocean disposal of such dredged material would have far reaching impacts upon affected ports and harbors for reasons that bear little relation to the occurrence of adverse effects within the marine environment.

The Seventh Meeting did not adopt the two amendments proposed by Kiribati and Nauru, but did pass (by a 19-6 vote) a resolution to suspend the dumping of radioactive waste at sea pending study of the issue by the Scientific Group. This resolution, however, was viewed by many delegations as non-binding, and Britain is proceeding with

plans to continue these activities this summer. The United States, Netherlands, and Switzerland joined the United Kingdom in saying they would not be bound by the resolution.

The resolution calls for a detailed scientific investigation to be carried out regarding the threat posed by such dumping. At the conclusion of the study, the experts are to present their findings and the moratorium will be either dropped or a fully fledged ban on dumping will be imposed.

To assure that the standard of work being prepared for the Scientific Group by IAPH consultants will be authoritative and of the highest scientific quality, a blue ribbon committee of experts will be appointed to review all research methods, findings, and conclusion before the final report is accepted for use. The IAPH feels that this "safeguard" is required to protect future decisions based on this research, and have, with a \$10,000 contribution made by the Port of New Orleans, appropriated the necessary funds to provide this review.

In Conclusion

The American Association of Port Authorities will need to continue current activities of providing input on ocean dumping issues with: The Administration and Congress of Marine Protection, Research, and Sanctuaries Act on ocean dumping; on Section 404 of the Clean Water Act; and on fast track provisions of future waterway user charge legislation. Both AAPA and the International Association of Ports and Harbors will need to keep up active involvement with the London Dumping Convention and its Ad Hoc Scientific Group, and will need to develop a greater public affairs publicity program to increase public awareness of the Port dredging problem. Maintaining an ongoing dialogue with key Congressional and Administration personnel, and raising a continuing fund of \$50,000 to \$75,000 per year for joint AAPA/IAPH work will be required to maintain the momentum. Through IAPH, surveillance and coordination is also necessary with the Save Our Seas Program of the United Nations. Such efforts on our part may well prevent the occurrence of similar problems as those we have experienced with our own national laws and regulatory procedures and the London Dumping Convention.

The American Association of Port Authorities and the International Association of Ports and Harbors have made an excellent start and progress during the last four years. The course has been charted -- their continuing active participation on both the national and international levels will be required on a long-term basis.

* * * * *

Note: For Annexes I, II and III to the Convention, please refer to the article entitled "Dredging in the United States: Problems associated with the London Convention" by Mr. A.J. Tozzoli on pages 25-31 of the September 1980 issue of "Ports and Harbors".
(Head Office secretariat)

International maritime information: World port news:

UNCTAD seminar for port management instructors

The second of a series of seminars for port management instructors will be conducted in Cardiff (United Kingdom) from 1 to 28 September 1983 by the United Nations Conference on Trade and Development (UNCTAD) in collaboration with the University of Wales. These seminars represent the culmination of a project financed by the Swedish International Development Authority (SIDA) to develop validated training materials for a course on the Management of General Cargo Operations and to train local instructors to deliver this course in their own countries. The seminar will be conducted in English, French and Spanish.

The course "The Management of General Cargo Operations" has been designed for traffic officers, quay and shed superintendents, etc. from both the public and the private sector. Its objective is to train such staff to plan and organize the discharging and loading of vessels and to control the transfer and storage of cargo within the port, making the most efficient use of available resources.

The course comprises a series of eighteen audio visual programmes together with a comprehensive workbook and has been designed to enable it to be delivered by local training instructors. Discussions and practical work related to local conditions will supplement the pre-prepared materials. Full instructions on how to conduct the course are given in an instructor's guide. Copies of the English version of this course are already available and the French, Spanish, Portuguese and Arabic versions will be ready by the end of the year.

The objective of this series of seminars is to train instructors to be able to conduct, independently, the above course. The seminar will be directed by Dr. Brian Thomas, Senior Lecturer in Maritime Studies at the University of Wales Institute of Science and Technology, who was also responsible for the preparation of the training materials.

Sixty two participants from 33 countries are expected to take part in this seminar. The countries concerned are: Algeria, Benin, Chile, Congo, Costa Rica, Djibouti, Dominican Republic, Egypt, El Salvador, Equatorial Guinea, Ethiopia, Ghana, Honduras, India, Ivory Coast, Jamaica, Kenya, Liberia, Malaysia, Malta, Nicaragua, Peru, Sierra Leone, Somalia, Sudan, Tanzania, Thailand, Togo, Tunisia, Turkey, United Arab Emirates, Yugoslavia, Zaire.

Belgium to host third UNCTAD/APEC seminar on container terminal management in Antwerp

The Government of Belgium will be host from 19 September to 7 October 1983 to the third seminar on container terminal management conducted by the United Nations Conference of Trade and Development (UNCTAD)

and Antwerp Port Engineering and Consulting (APEC).

This seminar is designed to assist senior officials of Government agencies, port authorities and private companies with present or future responsibilities for planning, managing or operating container terminals in efficiently running these specialized facilities.

The participants are expected at the end of the seminar to be capable of passing on the acquired knowledge to their colleagues and subordinates, and hence to contribute to improving terminal operations. Ultimately, the aim of the seminar is to allow the participant countries to obtain the maximum economic and social benefits from these highly capital-intensive facilities.

These objectives are embodied in the seminar programme, which includes lectures, panel discussions and case studies related to the following subjects: container terminal layouts for different types of operations, administration of container terminals, organization of labour, planning of container operations, container terminal information, operational problems in container terminals related to security, terminal liability and equipment maintenance, and container terminal tariffs.

An outstanding feature of the seminar will be the two weeks practical training which will follow the classroom segment of the seminar and that will allow participants to be actually involved in the operations of four major container/Ro-Ro/Multipurpose terminals in the Port of Antwerp.

The seminar will be conducted in English by the staff and members of the Ports Section of the UNCTAD secretariat, APEC, Antwerp Port Authority and private shipping and port organizations. The Co-Directors will be Mr. Coll M. Hunter (UNCTAD) and Professor G. Derkinderen (APEC).

The cost of the seminar will be met from funds placed at the disposal of the UNCTAD secretariat by the Government of Belgium.

The participants will come from the following countries: Argentina, Bahrain, China, Cyprus, Egypt, Honduras, India, Iran, Jamaica, Kenya, Libya, Malaysia, Malta, Oman, Panama, Republic of Korea, Saudi Arabia, Sierra Leone, Singapore, Sri Lanka, Sudan, Tanzania, Thailand, Turkey.

Program in port planning and development: M.I.T.

The Massachusetts Institute of Technology is proud to announce a one-week special program in PORT PLANNING AND DEVELOPMENT to be held at M.I.T., Cambridge, Mass, U.S.A., November 28 — December 2, 1983. The program, under the direction of Prof. Ernst Frankel, currently Port, Shipping, and Aviation Advisor to the World Bank, will include presentations by many world renowned experts such as Prof. Per Bruun, Prof. M. Abkowitz, and others from government, the port industry and civil en-

gineering firms.

The program will cover the latest developments in Traffic Forecasting, Port Capacity Analysis, Port Planning, Port Facility Layout, Port Project Management, Port Financing, Port Siting, Channel Design and Dredging, Breakwater Jetty and Pier Design and Construction, Ship Maneuvering and Motion Analysis, and Port Engineering. Recent developments in the use of computer techniques for port planning, design and simulation will also be reviewed.

For further information, please contact:

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Common Maritime Communication and Information Project European Association for Shipping Informatics (EASI)

1. Summary

EASI membership now comprises 11 EEC Shipping companies with a total fleet of about 400 vessels.

In terms of scale, EASI members handle some 10% of the total world containers traffic.

The membership offers an opportunity to stem, through cooperative technological action, the continuous loss of competitiveness and cargo carried by EEC shipowners (up to 1981, the loss of European tonnage was running at some 1% per annum).

The EASI members are aware that a consistent, coordinated and efficient utilization of new high technology can produce, through a common research activity, large economies of scale and apparent benefits. They have thus overcome some of the difficulties inherent with competition and have addressed themselves to the resolution of common problems aiming particularly at the standardization of procedures.

To ensure that the maximum gains could be made by the pooling of resources, the EASI members have subcontracted the study activities to an independent international consortium headed by the ERNO space technology concern (Bremen, West Germany), all activities being closely monitored by the EASI management group. External coordination and secretariat function are provided by the secretariat of CAACE (Comite des Assoc. d'Armateurs des CE) which provides the useful link between the technical activities of EASI and the more policy-oriented aims of CAACE. The Commission of the European Communities, for its part supervises the whole project and ensures the liaison between the Association and the other organizations. The project is part-financed under the quadriannual plan for the support of the European informatics industry.

2. The Project

Five study areas are under examination:

- a voyage calculation system
- a vessel and port performance system
- a fleet scheduling
- a container control system
- an optimal vessel operation system.

The subcontractors chose the classical method of questionnaires and extensive interviewing to gather global information and to become knowledgeable of the existing and planned technological activities in each of the member companies. This has permitted the creation of an extensive matrix of criteria from which a set of possible alternative solutions has been derived. The results of this phase are now being closely scrutinized by member companies who will, in early October, meet for a period of 2 weeks in order to examine and propose a complete set of solutions. The complex project requirements imply that a slight delay on the timetable is expected.

3. The Symposium

The Commission of the European Communities, conscious of the multiplicity of development areas in the shipping industry and of the requirements for a closer cross-fertilization of results between the parties concerned, is organizing a major symposium on the subject of "high technology in Ports and Shipping". The symposium will be held in Brussels in October 1983. The EASI results will provide the theme for a full session and will form the basis for a realistic assessment of future trends and implications on the utilization of high technology in the sector.

4. The EASI Association

Members are convinced that the opportunity for considerable technical progress is now at hand and have expressed their wish to continue, in some form or other, to exist and expand as an Association after the end of the studies in hand. It was suggested that the Association could become the focal point for producing considerable economies in hardware and software purchasing and in the standardization of documents for cargo handling. The normalization of procedures in Ports would have a positive effect on port users and therefore shipping companies. Members were agreed that EVHA's (the sister Ports Association) and EASI's efforts should be coordinated and closer links established.

It was also considered whether the Association should institute closer links with its "parent" body, CAACE which could become, if circumstances were right, the exponent of the political considerations attached to the work and generally be more closely involved.

5. Parallel Development

The EVHA Association is continuing to evolve along the successful lines that have been established during 5 years of coordinated development.

The ERNO consortium has now gained - through a unanimous decision of the Steering group - the contract for the study of the 'final' network in European ports.

Since the ERNO consortium is carrying out the EASI work, it is thought that the development will usefully serve to crossfertilize the different Associations and to produce a consistent result.

The Port State Control Authorities are examining

several proposals for the transmission of the informative data on sub-standard vessels. This could best be achieved through the utilization of a network such as EVHA's where information could be kept discrete to different authorities and where common on-confidential information could be shared.

6. Future Proposals

The Commission is now putting forward a proposal to Council for the extension of the quadriannual plan.

Part of the new programs is addressed to furthering the technological development in Shipping companies.

The new development is tailored to stimulate the practical utilization of the most recent techniques in data transmission and distributed data processing and would put participating European shipping companies in the forefront of technology in this field. Further information about the proposal, which must pass through the Council of ministers before finalization, can be obtained from my office on request.

Our office is now producing regular bulletins on the following:

- European Associations of Shipping Informatics (EASI)
- European Ports Data Processing Association (EVHA)
- Chambers of Commerce
- External Trade Departments.

These bulletins can be obtained on request.

A. Sarich

Project Manager

Commission of the European Communities

DG III/B/1 A-25 3/3

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B-1049 Brussels (Belgium)

New ICHCA President elected

Francois Bureau, president and director general of la Compagnie de Navigation Denis Frères (France), was elected president of the International Cargo Handling Co-ordination Association (ICHCA) at its XVIth General Assembly in Bordeaux on 24 May. He succeeds Mr. R.G. McFarlane of Canada.

Publications

New Associated British Ports Guide

"Ports '83" this year's edition of ABP's guide to its 19 ports, has just been published.

The 124 page guide gives comprehensive information on ABP's ports of Hull, Grimsby, Immingham and Goole on the Humber, Southampton, the South Wales ports of Cardiff, Barry, Newport, Swansea and Port Talbot, and the group's other ports of King's Lynn, Lowestoft, Plymouth, Garston, Fleetwood, Barrow, Silloth, Ayr and Iroon.

Facilities and trades at all the 19 ports are fully described, with detailed technical information and a list of port service companies. Each port is provided with a new map, and the guide includes a directory of all liner services operating from ABP ports.

"Ports '83" is published by Charter Publications, and

copies are available, free of charge, from:—

The Commercial Director,
Associated British Ports,
Melbury House,
Melbury Terrace,
London. NW1 6JY

Stevedoring/Marine Terminal Industry

The U.S. marine terminal and stevedoring industry is a significant contributor to the American economy. That point is sharply made and well supported in a fine study recently produced by the U.S. Maritime Administration's Office of Port and Intermodal Development. In 1980, the study shows, that industry (values in 1982 dollars) accounted, directly and indirectly, for:

- \$8.4 billion in revenues
- 138,000 jobs
- \$2.5 billion in wages and salaries
- \$1.4 billion in business income
- \$1.0 billion in federal tax revenues

The report examines the structure of the industry, the relationships and contrasting functions of marine terminal operators and stevedores, and describes in some detail, the nature of longshore work in breakbulk, containerized, ro/ro and LASH cargo operations.

The final chapter synthesizes relevant legal decisions that have shaped the industry. A selected bibliography completes the 16-page report. Copies of **The U.S. Stevedoring and Marine Terminal Industry** are available from the U.S. Maritime Administration, Office of Port and Intermodal Development, 400 Seventh Street, SW, Washington, DC 20290, (202) 426-4357. (AAPAADVISORY)

South American Ports

The 1983 edition of Wylie's **South American Ports Handbook** is in print. The book has been completely revised to reflect changes that have occurred in the 16 countries covered since 1979. It covers port development, port regulations, customs matters, trade trends and other topics of related significance. Copies of the 660-page Handbook sell for \$65 each and can be ordered from Agencia Maritima, International S.A., Av. Julio A. Roca, 716/8th Floor, 1067 Buenos Aires, Argentina. (AAPAADVISORY)

New Guide to Contingency Planning for Gas Carriers

A new publication - "Guide to Contingency Planning for the Gas Carrier at Sea and in Port Approaches" - has been issued by the International Chamber of Shipping, the Oil Companies International Marine Forum, and the Society of International Gas Tanker and Terminal Operators Ltd., with the co-operation of the International Salvage Union.

The prime objective of the guide is to assist in the formulation of contingency planning to avert or minimise the escalation of a casualty which might pose a threat to the containment of cargo by a liquefied gas carrier. The guide is therefore addressed primarily to the operating managements of gas carriers who, in formulating or reviewing their own contingency planning specific to their ships, will find the guide a useful aide memoire and check list.

The guide contains descriptions of various emergencies in which a gas carrier may be involved and suggests some considerations in the formulation of a contingency plan to

deal with them. It outlines some precautionary measures which might be taken to minimise the threat of spillage of cargo and describes the pattern of events which could follow the rupture of a cargo tank in various circumstances.

In 1981, the Society of International Gas Tanker and Terminal Operators Ltd. commissioned the UK National Maritime Institute to investigate the behaviour of gas carriers when disabled and freely drifting in heavy weather, and the use of rescue towage in controlling the drift. The results of the investigation are published as an Appendix to the guide and also as a separate document.

The guide is A4 in format, bound in durable soft covers, and is available from Witherby and Co., Ltd., 32/36, Aylensbury Street, London EC1 at a price of £7.50 inclusive of surface mail. The Drift and Rescue Towage of Disabled Gas Tankers is also available separately at a cost of £2.00 . . . (*International Chamber of Shipping*)

Waterborne Hazardous Materials Documentation Survey

A new, 32-page brochure is now available as a guide to the proper documentation of packaged hazardous materials and dangerous goods shipped from the United States by water.

Produced by the Hazardous Cargo Documentation Committee of the National Committee on International Trade Documentation (NCITD), the summary guide was prepared in cooperation with the United States Coast Guard and the Office of Hazardous Materials Regulation, United States Department of Transportation.

While not a total manual -- requiring in use reference to cited appropriate laws, regulations and codes -- the new guide includes 18 exhibits of various documents, comparisons (IMO and U.S. DOT classes) and other key source information.

A "must" for shippers, forwarders, carriers and others involved in the exportation of hazardous materials and dangerous cargoes, the totally current guide is available for \$2.50 plus \$1 handling and postage charges (California residents add 6%) from the Marine Exchange, 303 World Trade Center, San Francisco, Ca. 94111.

(*Marine Exchange of the San Francisco Bay Region*)

Golden Gate Atlas

The 96 page unique **ATLAS AND WORLD TRADE DIRECTORY** provides a wealth of information on Northern California maritime industry and commerce. Eight detailed maps plus indices fully describe the ports and terminals of the three-bay and inland waterways complex. A unique "reverse index" of over 500 shipowners worldwide and their 70-plus Golden Gate Region agents is nowhere else available. An updated chart and description of ship anchorages throughout the region, details on ocean routes to and from the Golden Gate, and a directory of maritime and related services and sources are also included.

The **ATLAS** is heavily-illustrated and enjoys worldwide distribution and use. Copies are available from the Marine Exchange, 303 World Trade Center, San Francisco, Ca. 94111; \$5.95 plus tax. Mail orders will be filled including postage and handling for \$7.00.

(*Marine Exchange of the San Francisco Bay Region*)

World Dredging Congress 1983

BHRA, the Fluid Engineering Centre, has published the

volume of papers presented at its fourth Symposium on Dredging Technology, which was part of the world Dredging Congress in Singapore in April.

The Netherlands Delta Project to provide storm surge protection for the islands in the southwest of the country has stimulated many innovations in dredging technology over the past 25 years. A group of papers describe the achievements of contractors, designers, operators and researchers, including the use of mathematical models to improve the efficiency of cutter suction dredgers operating in waves, and the development of a dredger to work to unusually narrow tolerances on the construction of the final Oosterschelde Barrier.

In contrast, a Third World country like India is facing recurring problems caused by monsoon weather, littoral drift and the build up of very fine silty sand. To maintain navigable depths around many busy Indian ports dredging must follow immediately after the monsoons while constant maintenance efforts must be made against the moving shoals and realigned channels caused by fast littoral drift. Any 'throttling' effect at the estuaries must also be tackled as flooding upriver may be added to the dredging problems that already exist. Portable cutter suction dredgers are used inland where roads allow access; otherwise submersible pumps, boosters and back-hoe are used. Further problems are caused by inadequate spoil disposal which can result in the dredged material being returned to the rivers. A contribution from the Dredging Corporation of India describes these problems and outlines some possible solutions.

Other contributions include the construction of artificial islands for oil and gas exploration, long-lasting rubber pump liners, sea bed sampling and seismic refraction techniques, soil mechanics, port and harbour dredging and the feasibility of dredging from open-cast mines.

The volume of papers is obtainable, price £42.00 (UK & EEC) \$92.00 (N. America) and £45.00 (Elsewhere), from: Publications Sales, BHRA, the Fluid Engineering Centre, Cranfield, Bedford MK43 0AJ, England; Tel (0234) 750422; Telex 825059.

Brazilian ports news in brief

- Accounting to Protobras' President Arno Markus, the works in the port sector in 1983 shall be the recuperation of the Port of Recife and the construction of the ports of Praia Mole and Vila do Conde.
- This year Brazil will be concentrating investments in the 12 most important ports of the country, in a real 'war' for the increase of efficiency of ports services.
- The Port of Santos, with the strong restraint of importations which is a consequence of the present economic-conjuncture, has exported more than imported, in 1982, with 12,695,600 tons of exportation against 11,131,109 tons of importation.
- Companhia Docas do Rio Grande do Norte (Codern) has taken over the Port of the State's Capital, assuming its administration together with that of the Salt Terminal of Areia Branca.
- Companhia Docas do Maranhao is speeding up the works for modernization of the Port of Itaqui, preparing for the needs generated by the economic projects which are being developed in the Northern Region.
- In 1982 the Port of Paranaguá handled a total of 11

million tons of merchandise, and in the same time developed an effort towards modernization, simplifying the bureaucracy and improving the installations.

- Cargo handling in the Port of Rio de Janeiro totalled 29,105,396 tons in 1982, showing an increase of 1.7% with respect to last year.

International shipping traffic through the Ports of Canada 1981 (Metric Tons)

Vancouver	48,817,471	Windsor	2,032,234
Port Cartier	24,443,120	Hantsport	1,436,983
Sept-Iles	22,282,082	Trois-Rivieres	1,337,685
Saint John	11,408,101	Nanaimo	1,249,118
Montreal	11,149,606	Kitimat	1,192,391
Halifax	8,918,907	Lakeview	1,179,843
Quebec	7,634,756	Port Colborne	1,110,081
Hamilton	6,354,747	Sydney	914,743
Baie Comeau	6,261,161	Toronto	857,579
Sault Ste-Marie	5,515,299	Dalhousie	740,123
Nanticoke	4,741,137	Picton	650,165
Port Alfred	3,651,210	Crofton	585,164
Levis	3,541,580	Port Alberni	570,943
Thunder Bay	3,282,088	Serpent River	561,563
Courtright	3,215,952	Holyrood	539,167
Sorel	3,159,508	Tasu	536,360
Contrecoeur	2,846,076	St. George's Harbour	535,504
Sarnia	2,532,960	Little Narrows	456,855
Pointe Noire	2,412,629	Churchill	451,475
Prince Rupert	2,193,859	Victoria	431,449
New Westminster	2,191,531	Goderich	423,990
Port Hawkesbury	2,127,458		

Ice management: Lakehead Harbour Commission

The Port of Thunder Bay, which presently operates 8½ months a year, is an essential link in Canada's vast transportation system, and enjoys a worldwide reputation for efficiency.

Situated at the head of the Great Lakes/St. Lawrence Seaway System, 3200 kilometres from tidewater and 180 metres above sea level, Thunder Bay — in the geographic centre of Canada — is the world's largest grain handling port, and in 1982 became No.2 in Canada in terms of overall tonnage.

17 million tonnes of grain moved through the Port of Thunder Bay in 1982, and it is estimated that by 1985 this total will have risen to 18-20 million tonnes; by 1990 to 25 million tonnes. Moderate growth is anticipated for other cargoes.

In its Master Port Plan, released in October of 1981, the Lakehead Harbour Commission recognized that a critical element in the Port's continued viability as a world leader in shipping was a guaranteed opening and closing date for navigation in and out of Thunder Bay harbour.

Presently, opening and closing dates are dependent upon the severity of the winter, and have ranged from as early as March 25 this past year, to as late as May 5 in 1923, and May 3 in 1936.

During the mid 1970's the locks at Sault Ste. Marie were opened experimentally on a year-round basis, providing a 12-month shipping season for Thunder Bay and other ports on the Upper Great Lakes. This prompted a number

of experiments involving numerous techniques in ice control, and in 1982 the Port of Thunder Bay hosted and Ice Management Program at which five separate systems were presented: the traditional line bubbler system, the Atari approach to bubbling, an Archimedian Screw Tractor, an Air Cushion Icebreaking Bow, and the traditional method of ramming using a 1100 Class ice-breaker.

All of the systems had favourable qualities: some had drawbacks. Two of them — the line bubbler system, and the Air Cushion Icebreaking Bow — underwent intensive evaluation in the winter of 1982-83 as joint projects of Transport Canada and the Lakehead Harbour Commission.

The bubbler system consists of several lines of perforated pipe laid along the harbour bottom and attached to compressors on the dock. When activated, the air bubbles forced through the pipes move the relatively warmer water from the bottom to the surface, creating a convection current which allows this warmer water to melt the ice.

In a severe winter ice thicknesses may reach 100 cm; in 1982-83 the average was 65 cm.

Local elevator companies extended their cooperation to the Lakehead Harbour Commission and the bubbler system went into operation experimentally at Saskatchewan Wheat Pool Elevator's Slip No. 7A in 1979/80. Modifications and improvements continued until 1982, when Saskatchewan Wheat Pool installed their own system.

"We've had a few problems, but we're solving them," states Don Trost Manager, Terminal Elevator Division, Thunder Bay. "It's effective."

Saskatchewan Wheat Pool put about \$4,000 into the experiment in its early days, and donated a further \$11,000 to the Research and Development arm of Transport Canada.

The bubbler system was also in operation experimentally at Manitoba Pool Elevators; again, it is described as "effective, although the ice was the lightest in 20 years," (hence it was not a typical test).

Traditionally, a Canadian Coast Guard Icebreaker is used to break tracks into and around the Harbour, but is not allowed in the slips, where ramming by a ship the size of the Alexander Henry could force large blocks of ice into the dock face, and weaken the elevator's structural integrity.

Small icebreaking tugs are used to clear the slips.

Typically, the Alexander Henry begins about the first week in March, to establish 3 tracks into the harbour by ramming. This would require about 3 weeks, working 24 hours a day.

Frank has been the Alexander Henry's Chief Officer for the past three years and has come to know the Air Cushion Bow intimately during its many tests.

The Alexander Henry's Captain McDonald has high praise for the Bow as well, although he too, admits the need for some modifications.

Fuel consumption increases when the Bow is in place, but in overall efficiency the task of icebreaking becomes considerably more cost efficient.

The millions of dollars invested in the Air Cushion Bow by Transport Canada (\$1.8 million just to build the Bow); the time and efforts of the Canadian Coast Guard, the elevator companies and the Lakehead Harbour Commission, all underline the high priority being given to the establish-

ment of firm opening and closing dates for the port.

Not only have these authorities recognized the need for permanent navigation deadlines; collectively they are doing something about it. The result can only be the greater utilization of vessels, capital, facilities and labour, with the accompanying greater profits and benefits for shippers, shipping companies, the labour force and the world-class Port of Thunder Bay.

(TRANSPORT OF THUNDER BAY)

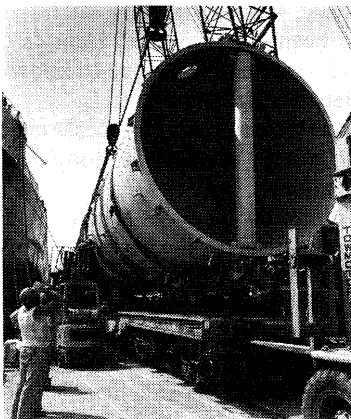
CN Rail, Port succeed in attracting oversize Japanese cargo through Port of Thunder Bay

Oversize heat exchangers from Japan arrived at the Port of Thunder Bay on June 27th aboard the vessel "Regent Tampopo". The two cylinders, weighing approximately 100 mt and 220 mt respectively, were unloaded at the Keefer Terminal Marine Facility and were placed on CN's heavy-duty flats for rail movement to the Shell Canada Plant in Scotford, Alberta. The cylinders will be used in the production of styrene, a raw material used in the manufacturing of automobile tires, styro products, such as cups and meat trays, insulation materials, etc. Some of the styrene will be used in Canada and the remainder will be exported to the United States and Pacific Rim countries.

In a joint effort, CN Rail and Thunder Bay's Port Authority convinced Sumitomo Heavy Industries Ltd. to ship their heat exchangers through the Port of Thunder Bay. Special marine and rail conditions were arranged for the oversize cargo.

Shell Canada's Alberta plant has had other pieces of equipment for the project shipped via the Ports of Portland, Oregon, and Vancouver, British Columbia. When asked why the Port of Thunder Bay was chosen to handle this shipment, Matthew Hart, Manager — Machinery Department of Sumitomo Canada Limited in Calgary, said, "The co-operation received from both the Port Authority and CN Rail made our decision very easy. The marine facility is excellent and there is no barrier between Thunder Bay and the Rockies. Our equipment is very large and very heavy and will require special handling".

Lakehead Harbour Commission Chairman, Pat Gilbridge, agreed with CN's Doug Fletcher, Vice-President, Prairie Region, that co-operative planning such as this is the key to the future. Both parties will be involved in studies to ensure that the rail infrastructure at Thunder Bay complements the Port's shipping facilities to achieve maximum throughput.



Police service at the Port of Montreal

The Port's police force plays an important role in the development and the reputation of the Port. The vast network of installations as well as the large volume and variety of goods handled through the Port requires continuous and effective protection. It falls therefore to the police force to ensure the safety of individuals and goods within Port limits.

After receiving professional training and ongoing specialized training, police constables undertake to patrol the Port, ensure that peace and order are maintained, prevent illegal acts, apprehend and question suspects, control traffic, assist those in trouble and attend to emergency calls.

The force comprises 123 individuals viz., 89 officers and men, 25 security guards and 9 civilian employees. Shift work ensures that protection is provided 24 hours per day throughout the year.

In accordance with the provisions of the Canada Ports Corporation Act, Port police have authority to apply the Criminal Code, the laws of Canada and of the Province as well as to enforce the operating by-laws of the Port.

They also have power to search vehicles for stolen goods, to identify criminals and to bring the accused to justice.

The Police Department is structured in such way as to cooperate with other bodies empowered to enforce law as well as with other police forces — be they local, national or international, including Interpol. There is of course cooperation with the police of other Ports Canada harbours.

In collaboration with the Canadian Coast Guard, Port police patrol by water to ensure the safety of navigation, to apprehend those suspected of illegal activities, enforce laws and regulations and to provide assistance to any in distress.

Specially trained Security guards assist the Police in their work and provide protection at the Port of Montreal Building (which houses the Port's administrative offices). They also control access/egress at Port entrances and assure protection of the Port's maintenance shops and stores.

The Police Department has a fleet of vehicles which are specially equipped to render first aid, fight fires, etc. It is backed up by an excellent system of communications comprising radio telephones, telecopier, telephone call recorder and the like. The conference room at the Police station has been adapted to enable it to serve as a control center in case of an emergency. From there, radio communication can be effected to mobile units operated by Port police and security guards as well as the Security guards employed by shed and container terminal operators. The telecopier can be used for outside communication and an emergency telephone system running along the waterfront is available to anyone having to reach the Police in an emergency.

Over the years, Port police have kept in touch with all parties concerned in order to promote better security at the Port, whether such pertains to guard services, by private agencies, physical security of Port installations or scrutiny of documents related to the transport of goods. The competence and training of the Port police permit them to provide advice on a wide range of security related topics.

The excellent security at the Port of Montreal did not come about by accident. The Port's enviable reputation

with respect to cargo security depends to a very large degree on the collective efforts and cooperation afforded the Police force by Port users and the Port administration as a whole.

Nanaimo Harbour cleanup aids vessel operation

The hazards from floating debris are well known to operators of vessels along the B.C. coast. Small craft, particularly pleasure boats, are vulnerable to damage from floating or partly submerged logs, especially the upright "deadheads" and similar objects which can punch a hole in the underwater hull.

This province has some of the finest saltwater cruising grounds in the world. It also has a very large and important forest industry along the coast. Each boating season brings its toll of damaged boats, attributed in many cases to drift logs or deadheads.

Flag-a-snap program, promoted by Council of B.C. Yacht Clubs helps boaters distinguish deadheads but does not eliminate the hazard.

However, in Nanaimo Harbour the chances of a mishap from hitting a floating log has been reduced greatly by an on going cleanup program.

Keeping harbour water clean of debris is the responsibility of Nanaimo Harbour Commission. Patrols are made daily of the complete area within the boundaries of the harbour. A small mountain of logs on N.H.C. property near the shore, testifies to the effectiveness of the operation.

Nanaimo Harbour cleanup

The Commission organizes and manages a cleanup program which was started eight years ago. The program is funded by a "user group" consisting of forest product companies located adjacent to tidewater in the Nanaimo area.

The Commission's vessel N.H. Patrol II and crew are involved from time to time but the bulk of the cleanup work is done by private contractor. Seven days a week Paul Sinclair, the present contractor, is out on his tug picking up logs and towing them to a work site just south of the Assembly Wharf.

Sinclair makes a sweep of harbour waters from the inner harbour out to the northern boundary and south to Dodd Narrows. In addition to routine sweeps he makes special trips if required. He also carries a pager in case of emergency calls.

Log sorting

The logs are towed to the work site on a high tide and when the tide has dropped tug operator Sinclair becomes a land based machine operator. With his grapple front-end loader he picks up the jumble of logs and debris and drops them on one of three piles.

One pile is for merchantable timber, another is for logs which could be used for fuel, the third is "junk", wood and debris of no value which will be burned to get rid of it.

Sinclair picks up on an average, some 300 pieces a month. About 20 percent of it will be merchantable. The remainder will be about half and half fuel wood and "junk". The really dangerous ones as far as boaters are concerned,

the deadheads, amount to about 20 to 30 a month.

At the moment, the pile of merchantable timber is worth between \$8,000 and \$10,000 says Sinclair. It was early last December he began collecting the present pile. Proceeds from the sale of merchantable timber go into the user group fund, thereby helping to offset member contributions.

Comes from the South

Where does it all come from? Sinclair believes a lot of it comes through Dodd Narrows. High tides and storms float logs off beaches south of the Narrows. Winds and tides push them into the current which disgorges them into Northumberland Channel.

The biggest log Sinclair has encountered so far was a giant cottonwood about 100 feet long and of a large diameter.

"It had to be cut into three sections to get it up to the sorting site", Sinclair recalls. He found it in the Nanaimo River estuary.

At times there are heavy concentrations of logs and debris.

"There was a call from Gabriola Island ferry one time. A large mass of logs off the Gabriola Island shore was blocking the ferry route", Sinclair said.

N.H. Patrol and Sinclair's tug work together on occasions. With a drag chain stretched between the two vessels they are able to clear concentrations of debris quickly.

A glance at the piles of logs in the sorting area makes one realize the scope of the cleanup. If they had been left to float, to move with tide and wind what would Nanaimo Harbour be like?

Export shipping not expected to repeat last year's slump: Nanaimo Port Manager

The Port of Nanaimo weathered the year 1982 despite the slump in shipping activity due to economic conditions. Nanaimo Harbour Commission maintained its sound financial position even with the decrease in export tonnage of forest products from Nanaimo.

Lumber shipments decreased to 710,084 tonnes last year from 758,545 tonnes in 1981. Pulp shipments dropped to 242,465 tonnes from 293,441 tonnes the previous year.

Lumber shipment in metric tonnes (with 1981 figures in brackets) went to Japan, 411,171 (329,663); U.S. Atlantic Coast, 203,611 (199,647); the European continent, 37,482 (77,864); United Kingdom, 26,860 (65,888); U.S. Pacific Coast, 7,513 (35,270); Australia, 3,472 (34,983); Italy, 3,499 (5,921); Peoples' Republic of China, 1,525 (2,943); Spain, 3,261 (2,106); South America 669 (42).

While the steady growth rate the Port has experienced each year failed to be realized in 1982, there is no need for concern, points out Harbour Commission Chairman Don Rawlins. Indications are for the resumption of the year to year increase in shipping activity.

Port Manager Lloyd Bingham is optimistic about 1983 noting that the general recovery in the economic situation will be reflected in export shipping through the port.

"Our positive approach to the future and our confidence in the port, enables us to go ahead with harbour developments such as construction of the new park and lagoon on the waterfront adjacent to Maffeo-Sutton Park," the Port Manager states.

World's largest rail barge — AquaTrain doubles carrying capacity: Port of Prince Rupert, Ports Canada

The world's largest railcar barge was recently put into service between the Port of Prince and Whittier, Alaska.

With room for 56 standard railway cars, the 130-metre barge doubles the capacity of Aqua Train, a service introduced in 1962 to provide a marine link between CN Rail's transcontinental railway at its Prince Rupert terminus and Alaska.

A partner in Aqua Train with CN Rail is the Knappton Corporation of Portland, Oregon, who owns and operates the barge and tug which perform the services.

J.H.D. Sturgess, vice-president of marketing for CN Rail, says Alaska's major growth over the past decade is expected to continue, resulting in an increased demand for transportation services.

Aqua Train handles all types of traffic from the U.S. and Canada, including bulk products, manufactured goods, oil field supplies and building materials.

After the 4-day, 1,350 kilometre trip between Prince Rupert and Whittier, railcars are transferred onto the Alaska Railroad for delivery to Anchorage, Fairbanks and other interior points.

The barge is 5,670 gross tonnes, 30 metres wide, with a draught of 6.3 metres. It is equipped with eight tracks. The 176-tonne, 4,320-horsepower tug John Brix tows the barge.

1982: The year in retrospect: Port of Quebec

Increases in the tonnage of grain and noncontainerized general cargo offset a drop in shipments of coal, mineral and petrochemical products to enable the Port of Quebec to register a slight growth in tonnage handled on Ports Canada facilities in 1982. The overall figures, which include cargo handled at private facilities, show a 3% decrease in tonnage compared to 1981.

Solid overseas markets combined with the efficiency of the facilities operated by Bunge of Canada Limited kept a steady flow of lakers in summer and unit trains in winter carrying grain to the Port of Quebec in 1982.

The U.S.S.R. was an important Canadian Wheat Board client and dispatched the **Marshall Zhukov** to Bunge's loading facilities to pick up 85 175 metric tons of grain in a single shipment, the largest in the port's history.

General cargo was another bright spot in 1982 tonnage statistics, with shipments of vegetable oils, dairy and forest products remaining strong throughout the year. Producers of lumber continued to develop export markets mainly in the Middle East as Port of Quebec stevedoring companies added names such as Domtar Inc. and Cebec Inc. to their list of clients. A huge, single shipment of powdered milk (9 000 tons) was sent by the Canadian

Daily Commission to Mexico and the port's role as Canada's largest public liquid bulk storage and shipment center was confirmed by a growing volume of vegetable oils, mollasses and tallow.

On the other side of the coin, the bottom fell out of the export coal market and little improvement is expected in the near future. At the end of 1982, the countries of the European Economic Community had accumulated reserves of 120 million tons of coal and coke, the equivalent of 150 days supply. The recession also cut into the tonnage of mineral concentrates, while imports of petroleum and chemical products declined as Ultramar of Canada re-tooled its St. Romuald refinery for the production of more gasoline.

The port administration has evaluated 1983 on a note of cautious optimism: the Port of Quebec will continue to develop principally as a bulk transshipment center, the deepwater connection to the Great Lakes, while exports of general cargo will continue to grow. (*Port de Québec*)

\$14.5 million investment to modernize Bunge grain elevator: Port of Quebec

A \$14.5 million investment program to modernize grain-handling installations operated by Bunge of Canada Ltd. will provide the Port of Quebec with the highest-speed intermodal grain receiving and shipping facility on the St. Lawrence River transshipment system. The cost of the project will be shared equally between Bunge and the Port of Quebec, while funds for the public investment will come from the port's working capital.

The volume of grain handled at the Port of Quebec has grown steadily in recent years, rising from a level of 4.2 million metric tons in 1975 to more than 9.6 million tons in 1982. The Port of Quebec's strategic advantages for the export of grain, including deep water, year-round navigation and links to the Canadian National and Canadian Pacific railway networks, coupled with increased shipments of U.S. grain through St. Lawrence River ports and forecasts of rising Canadian grain production prompted both Bunge and the Port of Quebec to develop a joint investment program. The project will add to the elevator's throughput capacity, increase rail-car receiving capacity and respond to self-unloading technology in the transport of grain by Great Lakes bulk-carrying vessels.

The growing volume of grain being carried in bulk by self-unloading vessels was a key factor in the decision to expand the scope of a \$7 million project announced in June of 1982 for the renovation of "Annex 1", the oldest of the Bunge-operated facilities, which make up a total of 640 storage silos. The expanded investment program will enable Bunge to offer a fully-integrated intermodal system for receiving and shipping grain. When the project is completed early in 1984, the Port of Quebec's competitive position in the handling of grain will be greatly strengthened.

Dockworkers, harbor employers conclude 3-year industrywide pact; Early accord continues port labor peace in East-Gulf Coast Areas

The International Longshoremen's Association, AFL-

CIO and seven major waterfront employer groups in Atlantic and Gulf Coast Seaports completed record early settlement of a new three-year industrywide Master Contract. Resolved after four days of negotiations and some five-and-a-half-months before deadline, the new Master Contract will become effective October 1, 1983.

In a joint announcement, ILA President Thomas W. (Teddy) Gleason and lead management negotiator James J. Dickman said the agreement was an historic accord that extends the current pattern of waterfront industry labor peace to September 30, 1986. Mr. Dickman is President of New York Shipping Association, Inc.

The seven point Master Contract establishes coastwide standards on wages and other conditions for upwards of 50,000 ILA dockworkers and their employers in some three dozen ports ranging from Canada to Mexico. Highlights of the agreement include:

- * An annual increase in wages of \$1.00 per hour,
- * Higher employer contributions to union pension funds totaling 75 cents per hour over the life of the agreement, and
- * Increased contributions to welfare funds of 50 cents per hour over the three years.

In addition to New York Shipping Association, Inc., the employer organizations participating in the contract talks here were the Council of North Atlantic Shipping Associations, West Gulf Maritime Association, New Orleans Steamship Association, Inc., Mobile Steamship Association, Inc., Southeast Florida Employers Association and South Atlantic Employers Negotiating Committee.

This market the first time in the history of waterfront collective bargaining that labor and management were able to agree on terms of a new contract at the first and only round of negotiations.

Also, this was the earliest date of settlement of a port industry labor contract. The previous record for settlement was in 1980 when the parties negotiated a coastwide Master Contract some four months before the deadline on September 30, 1980.

The ILA represents longshoremen in all ports from Maine to Texas as well as other ports in eastern Canada, the U.S. Great Lakes and Puerto Rico.

The Master Contract covers wages; contributions to welfare plans, but not benefits; contributions to pension plans, but not benefits; hours of work, term of agreement; containerization, including Rules on Containers; and the agreement for LASH and other forms of oceangoing barge vessels. (NYSA-ILA Contract Board)

U.S. exports-economic impacts

The export market is a major source of U.S. jobs says the Department of Commerce. In 1982, for example, 25,200 jobs were created for every \$1 billion in U.S. exports, with total export-related employment amounting to 4.4 million jobs. While down markedly from the 6.2 million jobs reported in 1980 — the result of the recession abroad and the high standing of the dollar in the international money market — the fact remains, says Commerce, that “exports continue to contribute importantly to overall U.S. employment” — accounting for one job out of eight in manufacturing, one in six in the “non-

manufactured goods industries” and one in 30 jobs in the service industries. Overall, an average of 25,200 jobs were created in 1982 for every \$1 billion worth of U.S. exports. (AAPAADVISORY)

'The Effect of Port User Fees on U.S. Coal Exports': Harvard University

To what extent would port user fees ultimately benefit or injure the United States? Or, put a different way, who wins and who loses from user-financed dredging? Those are the questions posed in a study of “The Effect of Port User Fees on U.S. Coal Exports” published this March by the Energy & Environmental Policy Center at Harvard University's John F. Kennedy School of Government. And the answers may come as rather a surprise. What the study concludes is that the U.S. would realize the greatest net economic benefit from the “selective” deepening of just two ports — New Orleans and Los Angeles/Long Beach — to serve colliers of 120,000 deadweight tons (dwt) or larger, with the federal government and not users paying the full project costs.

In tackling the problem, the author, Boyce I. Greer, used an analytical model of the international coal market to compare alternative dredging strategies and user fee formulas. The model itself is a linear program that depicts the major elements of “the coal product chain” — supply regions, demand markets and transportation connections. It includes estimates of export coal volume and prices (in 1980 dollars) for the year 1990. Inland modes, ports and ocean transport are included in the transport component. Eight U.S. ports or groupings of ports (Hampton Roads and Baltimore, for example, are grouped as one) are represented, for all four coasts, including the Great Lakes.

Specifically, the study looks at the need and various ways of financing port deepening to serve 120,000 + dwt colliers, bearing in mind questions of equity and the Constitutional provisions that forbid the federal government to give preference to the ports of one state over those of another.

Based on his analysis, Greer reaches these conclusions:

1. Failure to dredge U.S. ports adequately by 1990 would cost the U.S. more than \$150 million annually in foregone economic opportunities from the sale of export coal.
2. Congress and the Administration must act quickly on a national dredging program, including drastic reform of the authorization and appropriation process, to assure prompt action. To do otherwise means that “non-discounted cumulative losses could easily exceed \$3 billion.
3. Few ports would benefit from deepening to accommodate 120,000 + dwt colliers. In fact, economies of scale from using these vessels are a function of the distance traveled — e.g., the longer the trip the more you save. On that basis, says Greer, only New Orleans and Long Beach are logically expected to serve ships of that size.
4. User fees could have adverse indirect effects on U.S. interests and could provoke economic retaliation from U.S. customers and counter deals with U.S. competitors.

5. Full federal financing, from general tax revenues, of New Orleans and Los Angeles/Long Beach would yield the greatest net benefit to the U.S. market share, a decrease of about eight million tons of export coal per year from 1990 onward.
6. The selective dredging strategy at federal expense would have "the most equitable effects among the ports." (AAPAADVISORY)

Research into documentary requirements on ocean vs. air international transportation: Marine Exchange of the San Francisco Bay Region

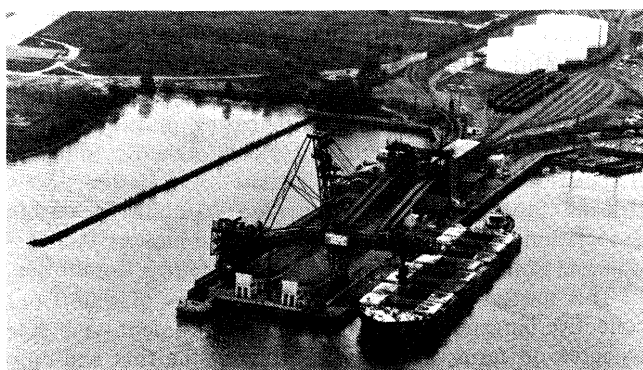


"THE TAPE HEARD ROUND THE WORLD" == or at least, a report with major impact, was the publication 25 years ago of "Merchant Shipping on a Sea of Red Tape". This "call to arms" of the maritime industry effectively to focus on reducing excessive documentary and procedural barriers to waterborne commerce received retrospective examination by representatives of the originating organization. On hand in San Francisco's World Trade Center (left) were Ivan Joens, facilitation committee chairman of the Marine Exchange of the San Francisco Bay Region; Exchange executive director Bob Langner, one of the original editors of the publication in May, 1959; facilitator Gary Taylor, American President Lines, and Pacific Coast Council of Customs Brokers and Freight Forwarders chairman, Bill Bosque, J.E. Lowden & Co.

Commissioned by the Marine Exchange in cooperation with the Pacific American Steamship Association and the Pacific Foreign Trade Steamship Association, the then-San Francisco State College's School of World Business provided directed research to compare regulatory requirements on ocean vs. air international transportation. Procedural and documentary demands on ships, passengers, crews and cargoes were compared with similar applications on aircraft movements. Results were startling: five to ten times more types of documents and (and corresponding multiplication of copies) to clear a ship as compared to an aircraft. Examples were New York, where 22 sets of documents were necessary, compared to only four for an airplane; Yokohama, Japan, needing 32 sets vs. 3 for air, and Copenhagen, where ship operators had to present 21 different types of documents to enter and clear their vessel,

where none were required for an aircraft. In a resulting quarter of a century, the San Francisco initiative sparked creation of the National Committee on International Trade Documentation, headquartered in New York and which it represents on the Pacific Coast, a formal Federal program, involving applicable U.S. agencies impacting on trade and documentation, and U.S. leadership in increasingly-successful international programs for simplification, reduction and standardization of paperwork and procedures. Estimates of annual savings due to reduced "tolls" which would otherwise be imposed on U.S. exports and imports due excessive "red tape" are estimated at \$4 billion to \$6 billion, according to NCITD. The San Francisco facilitators agreed that it was a "silver anniversary" which deserved appropriate recognition.

SOROS completes training of operators at Conrail's Pier 124



Training of operating personnel at Conrail's modernized coal loading Pier 124, located in South Philadelphia, was recently completed by Soros Associates, a New York consulting firm specializing in marine terminals and bulk handling systems (an Associate Member of IAPH).

The focal point of the training program centered on the start-up and operation of a new travelling shiploader weighing 1400 tons. This machine is designed to load Panamax class vessels at the rate of 5000 tons per hour by means of an 84" wide belt conveyor having a shuttling head end with about 35' of travel. A telescopic chute is attached to the shuttle, equipped with an unique automatic control system which can maintain a head of material within the chute, thus minimizing free fall and resultant degradation and dusting of sized anthracite coal. This is the first time that the concept of using a telescopic chute as a bin has been successfully operated in high capacity systems.

The shiploader is also designed to load barges on the opposite side of the finger pier by diverting material flow into a separate telescopic barge loading chute system.

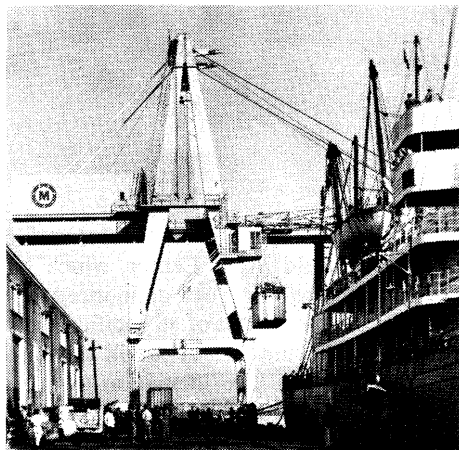
The modernization included the structural rehabilitation of the 55 year old pier, the installation of a new car thawing facility, the addition of an automated car retarding system eliminating the use of car riders, modernization of the existing rotary dumpers, new hoppers, frozen coal lump breakers, high capacity vibrating feeders, and a conveying system that will ultimately combine the output of 2 car dumpers, resulting in an annual throughput capability of

about 10 million tons.

Soros Associates was responsible for engineering and construction management. The project was started in June of 1980, and was in operation in December of 1982.

Conrail has expressed its confidence in the reliability of operations at Pier 124, by recently announcing that it will pay demurrage if shiploading performance is not met, the first such guarantee by a U.S. coal exporting port.

World's first high speed container crane



The photo above shows the world's first high speed dockside container handling crane unloading its first shipload of containers. The crane was dedicated May 5, 1983 as an International Historic Engineering Landmark by the American Society of Mechanical Engineers. The crane was manufactured by PACECO, Inc. for Matson Navigation Company.

Port of Savannah container crane 6 in operation



With the most recent visit of Mitsui O.S.K. Line's M/V New York Maru, Georgia Ports Authority had added a sixth crane to its fleet at CONTAINERPORT Savannah. The new unit possesses identical capabilities to its predecessors including a lift capacity of 90,000 lbs. and a high speed 90 second cycle time.

All six cranes have both out and backreach of 113.5 feet. This configuration permits easy restowing of con-

tainers behind the back leg without truck transfer to and retrieval from temporary holding areas. Crane 6 is the fourth to be equipped with curve capable trucks, enabling it to traverse the entire container berthing area, a distance of 3,675 feet.

Coming off three record container tonnage months in succession, the Port of Savannah has been eagerly awaiting this newest addition to its equipment lineup. In addition, the Georgia Ports Authority has approved funds for design of a fifth berth. To be located adjacent to existing CONTAINERPORT facilities, it will comprise 1,000 feet of berthing, 60 acres of paved storage, and 200,000 square feet of stuffing and stripping shed. Construction is slated to begin next year.

City dock area in Brunswick to become GPA's breakbulk handling center

Georgia Ports Authority has unveiled the master utilization plan for its newly acquired property, the former city dock in Brunswick. Simply stated, the 17 acre site will become the center of GPA's breakbulk handling activities along the East River.

The \$14 million project will produce a 1,500 foot dock capable of simultaneously handling up to three vessels or a combination of ships and barges. One thousand feet of the total will be newly built including a 350 foot section of the existing dock which will be resurfaced to provide a sturdier tie-in. A ramp at the south end will provide loop access to a 50 foot wide apron, assuring ease of transit and shipside handling. A 35 ton gantry crane, to be transferred from Savannah, will afford heavy lift capability.

Berthing will be backed up by a 145,000 square foot transit shed. Dual rail spurs will be extended to the rear of the building with platform height truck docks at its ends. Even after construction of the shed, 330,000 square feet of open storage area will remain for marshalling of breakbulk cargoes which lend themselves to outside storage. Advanced marketing intelligence indicates that lumber and paper products will be among the commodities expected to initially traverse the facility.

Completion of the city dock improvements in late 1984 will permit dedication of the East River Terminal exclusively to dry bulk handling. Transit shed II, currently utilized for breakbulks, will become available for bulk storage. Several planned construction projects will further enhance the throughput capacity.

In mid-1984, a third bulk warehouse will add 72,000 square feet of storage space. Transit shed I, now employed as a bulk export facility, will be expanded by 96,000 square feet to handle feeds, feed ingredients, and assorted minerals. The rail layout will be realigned to provide double siding access to all newly constructed and expanded facilities. New open storage sites will be prepared to accept dry bulks.

The largest addition to the Brunswick bulk handling scene will be the mid-1985 opening of GPA's Colonel's Island complex. The \$40 million project features a single berth, 140,000 square feet of flat storage and a total system throughput capability of 2,000 tons per hour. The site plan incorporates future expansions to the facility

including a quadrupling of flat storage and 50 or more silos as needed. The northern bluff of the island will accommodate up to 6 more berths.

The unanticipated acquisition of the city dock property has added fuel to GPA's already intense development efforts in the Port of Brunswick. The improvements at the East River Terminal, city dock construction and Colonel's Island dry bulk facility represent a combined investment of some \$70 million. These expenditures are predicated on well-defined shipper demand for an efficient, uncongested South Atlantic port to handle increasing volumes of dry bulk and breakbulk commodities. Brunswick looms as the only east coast port with rail, truck, and port infrastructure in place, and ample deepwater sites available. GPA's ambitious capital improvements program will assure that these resources do not go untapped. (*Georgia Anchor Age*)

Houston foreign-trade zone application approved

The Port of Houston Authority's application for a foreign-trade zone has been approved, Sen. John G. Tower, R-Texas, has announced.

Approximately 15 enterprises, mostly engaged in warehousing and light manufacturing, will be the first FTZ projects activated, according to Curtis Spencer, general manager of Houston Foreign-Trade Zone Corp., the Port Authority's contract management firm for the zone.

The Houston Foreign-Trade Zone will be unusual in that it will contain multiple sites, including some with existing facilities owned by corporations. Most Authority property is expected to be included in the zone.

Houston Ship Channel dredging underway

Maintenance dredging of the Houston Ship Channel from Carpenter's Bayou, opposite the San Jacinto Monument upstream to Greens Bayou, is underway under a Corps of Engineers contract with completion scheduled in mid-October.

The dredging will cover a distance of five and a half miles, with removal of about one million cubic yards of silt. The dredged material will be pumped approximately six miles from the upper end of the dredging to Lost Lake Disposal Area near Carpenter's Bayou.

The channel, which requires maintenance dredging every four to five years, has an authorized depth of 40 feet and width of 400 feet, reduced to 300 feet in the upper reaches. (*Port of Houston*)

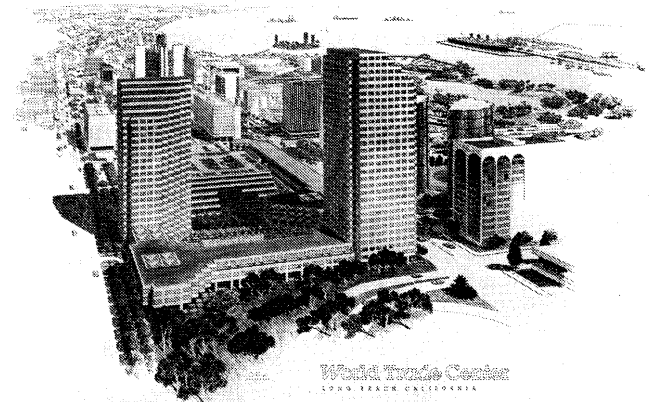
C. Robert Langslet elected Harbor Commission President: Port of Long Beach

C. Robert Langslet, a long-time leader in the Southland building industry has been elected President of the Long Beach Harbor Commission for fiscal 1983-84, succeeding attorney Richard G. Wilson.

James H. Gray, banker and automotive dealer, has been named Vice President, with attorney Louise DuVal acting

as Board Secretary for the coming year.

Largest World Trade Center in West proposed by Long Beach



A development opportunity for the 1.4 million square foot Long Beach World Trade Center, which will be the largest in the West, has just been announced by the Port of Long Beach, now the busiest of all Pacific Coast harbors.

Office towers of 30 and 25 stories will anchor the World Trade Center which will also include a lowrise complex. The facility is to be built on 6.5 city blocks fronting Ocean Boulevard between the Long Beach Civic Center and the Long Beach Freeway. Long Beach is one of the few West Coast cities with a downtown shoreline.

The Center will provide prime office space, general retail and restaurant opportunities, financial, communications and research services, exhibit and conference areas, as well as cultural and educational facilities. The Center will also house a world trade club atop the 30 story tower, which will provide international business and government leaders a convenient and scenic setting, overlooking the Port of Long Beach and the adjacent Los Angeles Harbor.

Situated in the heart of one of the most prosperous regions of the United States, the proposed international trade facility will not only serve the Long Beach-Los Angeles Port complex but also expanding business and maritime commerce interests throughout the entire Pacific Rim. The World Trade Center is being developed to attract international and maritime oriented, financial, trade and service tenants.

According to Lee Hill, Project Director for the Center, the Port is seeking developers who are international leaders in developing and operating prestigious projects. "The key to developing a successful World Trade Center is the selection of an outstanding and committed development and management team," stresses Hill.

The property will be available for construction in 1984. Development proposals are due in September and a developer is expected to be selected by the end of 1983. Lease commitments are not expected to be finalized until a developer has been selected. However, prospective tenants and interested parties may obtain advance information and communicate their preleasing interest and needs to the Port or to Cushman and Wakefield.

Developers who desire more information on the World Trade Center can contact the Planning Division of the Port

of Long Beach, P.O. Box 570, Long Beach, California, 90801.

Long Beach Harbor takes container cargo lead

Long Beach Harbor has wrested the West Coast containerized cargo crown from the Port of Oakland with a record-smashing 12,308,381 metric revenue tons of goods moved through Long Beach in containers during calendar year 1982. This makes Long Beach the No.2 container port nationally, second only to New York/New Jersey and No.6 in the world.

It was nearly 25 years ago that the Port of Long Beach launched an all-out effort to create the finest container complex in the Pacific. The first custom terminal was built for Sea-Land, the world's first container line, with converted breakbulk vessels establishing regular calls in 1962.

In the two decades that followed, six more container terminals have been added, until nearly 450 acres is now devoted to containerization. Today a total of 19 gantry cranes of 40 ton capacity serve Sea-Land, U.S. Lines, Maersk Line, Pacific Container Terminal, International Transportation Service, Long Beach Container Terminal and California United Terminals.

During 1982 Long Beach also topped the 15 million ton mark for general cargo handled for the first time ever for a West Coast Port. Year-end total was 15,010,221 metric revenue tons. Dry bulk movement hit 7,695,161 tons for yet another record, while petroleum tonnage held steady at 24,839,540 tons.

A total of 4,455 cargo vessels called at the Port of Long Beach last year, discharging and loading 49,007,140 metric tons in all.

Several new cargo handling facilities recently completed have contributed to Long Beach's uninterrupted growth over the last quarter century. Metropolitan's dry bulk export terminal on Pier G has had its throughput doubled by construction of a second shiploader and deepening of water alongside to accommodate ever larger bulk carriers. A similar expansion was completed last year at the Agrex grain export elevator on Pier A.

Relocation of Toyota and Pasha automobile facilities to new twin terminals in the inner harbor this winter has made another 90 acres on Pier J available for container handling. This additional land is presently being incorporated into expansions for the ITS, Long Beach and Pacific Container Terminals.

Newest star in the Long Beach crown is the ARCO crude petroleum terminal on Pier E, Berth 121, on the former site of Howard Hughes' Spruce Goose hanger. Dedicated May 5, this brand new facility has 76 feet of water alongside, with present capacity for 182,000 ton tankers and potential for 265,000 ton supertankers upon completion of planned dredging of the main channel below its present 60 foot depth.

Other major projects being planned are an Intermodal Container Transfer Facility to be built together with neighboring Port of Los Angeles, a coal export terminal on the north side of Cerritos Channel in the inner harbor and the Long Beach World Trade Center covering six square

blocks in downtown Long Beach.

Harbor Commission President Richard G. Wilson, in announcing the new container records, noted that the recent slowdown in international commerce appears to be over and that further growth in most areas can be expected in the Pacific in the years ahead.

Port of Los Angeles announces "no tariff/rate increase"

The Port of Los Angeles has announced that for the second consecutive year it will "hold the line" on wharfage rates and will not implement a plan to place all general cargo on a "weight or measurement basis."

In making the announcement, Mrs. Gene Kaplan, President of the Los Angeles Board of Harbor Commissioners, said that a series of meetings had been held with steamship lines, terminal operators, import and export representatives who had detailed to the commission and the port staff the extremely critical situation in which the industry finds itself. Port representatives also participated in freight tariff discussions at recent conventions of the Western Cotton Shippers Association and the Pacific Coast Shippers Advisory Board. As a result of data provided by these important segments of the industry, the Harbor Department concluded a tariff change at this time would not be in the best interest of the regional and national economy.

"The goal of our port marketing program is to provide the finest possible port facilities and services at the lowest reasonable cost," Mrs. Kaplan said.

"We see some very positive indications of improvement in business conditions in general and want to do our part in assuring that productivity, sales volume and employment will have an opportunity to fully recover from the very serious recession that has bothered much of the world for the past two years," she added.

Mrs. Kaplan said no increase in the tariff/rate structure for the port would be made "at least until Jan. 1, 1984," at which time the matter will again be reviewed.

During the interim, she said, "our marketing staff will be continuously in contact with our shipping public to ascertain exactly how we can provide additional incentives for the vital export programs which are such an important part of our national economic health."

Port of Los Angeles opposes uniform national "user" fees

(The transcript of testimony given by Port of Los Angeles Executive Director Dr. E.L. PERRY before the Senate Environment and Public Works Subcommittee on Water Resources in Washington, D.C., June 21, 1983)

Mr. Chairman, my name is Ernest L. Perry. I am Executive Director of the Port of Los Angeles. I am here as a member of this panel representing the Los Angeles Board of Harbor Commissioners. My remarks also are consistent with City of Los Angeles policy as determined by the Los Angeles City Council.

I appreciate the opportunity to present the views of the Harbor Commission and the Los Angeles Harbor Department regarding the need for new navigation improvement projects and cost recovery proposals for maintenance and

improvement.

I will not dwell on the importance of ports to our national defense or our economy. I believe Mr. Shore and Mr. Abernathy did an excellent job of covering those subjects.

As stated by Mr. Abernathy, the Port of Los Angeles is a member of the Port Coalition that he is representing at your hearing today. I am generally in support of his position as presented. However, I believe there are a few other points that should be made which are not included in his consensus statement.

Regarding the highly controversial issue of the new buzz word, "user fees," perhaps I should begin by stating very clearly and as emphatically as possible that the Port of Los Angeles is unalterably opposed to any uniform national user fee system in any shape or form.

We consider such a fee nothing more than a tax, and the maritime industry, now struggling to recover from the prolonged recession, simply cannot absorb it. For instance, the Port of Los Angeles has not raised its wharfage rates for the past two years. We were considering a raise of only 10 cents per metric ton a few months ago. However, after lengthy discussions on the critical state of the industry with steamship lines, terminal operators, importers and exporters, we decided to forego the raise in rates at least until the end of the year. Believe me, they convinced us or we would have taken the increase.

Mr. Chairman, in your letter to Mr. Shore, you asked port representatives to address certain issues in this hearing. One was the relative merits of recovering deep-draft construction and maintenance costs through an ad valorem tax (and I note you used the word "tax") compared with a tonnage fee.

The ad valorem tax would very clearly discriminate against ports which handle high value cargo and would be especially costly to container carriers — who, I'm sure, will protest vehemently against such treatment. The thought of extracting ad valorem taxes from shippers who carry expensive cargoes and using those monies for others who do not violate every principle of the American free enterprise system.

In plain language, the bottom line to such a uniform user fee would be that users of the larger, busier and more successful ports would foot the major share of the bill and subsidize all other shippers through other ports. On every level, the idea of a uniform user fee is discriminatory against some ports to the benefit of others.

Mr. Chairman, another subject you asked us to consider was "the ability of our nation to obtain priority development of one or two 55-foot ports at an early time under the terms of S865 or S970, or alternate approaches."

Right now, one of our biggest and most important projects — the deepening of Los Angeles Harbor entrance channel to minus 65 feet — remains on hold until the necessary permits are issued. The Los Angeles Harbor Department is prepared to spend \$100 million on this project, and is eager to go. Now all we need are the permits. We are not asking financial support from anyone and do not expect to receive any. We are, however, anticipating delays on permits and need the kind of help referred to by Mr. Abernathy.

Mr. Chairman, Gentlemen, the Port of Los Angeles receives no financial support from the City or State, no tax

subsidy of any kind. We either earn the money we need through revenues or we do without. How then can we fund such a project as our entrance channel deepening?

Rates and fees charged by ports vary greatly from one port to the next depending on tonnage, facilities, location, port administration and many other local factors. As an example, the wharfage rate in Los Angeles is \$3.90 per metric ton. The rate in Gulf ports is approximately \$1.25 per metric ton, and East Coast ports range from \$1.45 to \$1.65 per metric ton. Wharfage rates in Los Angeles are higher because we have set a reasonable return on the facilities we have built, and therefore we are able to pay for and do our own dredging and landside development. I must add that other California ports have rates generally comparable to Los Angeles rates.

With such a wide spread of port charges, it isn't difficult to see why the Port of Los Angeles is so opposed to a uniform national user fee concept. We believe that ports should be authorized to recover, on a port by port basis, from whatever source, monies needed for operation, maintenance and capital improvement.

There are other strange aspects to this whole situation, Mr. Chairman. The ports are not the ones who would be paying this proposed user fee. The steamship lines and shippers would. Yet, we port managers are here to express our views and would be expected to negotiate fees with someone else's money. Steamship lines and shippers are the people your committee should also be hearing from. I'm sure they would offer some very strong and significant comments on adding a new tax to their current high operating expenses.

One of the more unusual aspects of all referred to in this and other legislation is the use of minus 45 feet as a depth standard for our nation's ports. Mr. Chairman, I know how that figure was arrived at, and I can assure you, it is purely an arbitrary figure with no official validity, endorsement or approval by any maritime body. It is based on limited facts and no study whatever.

A group of port executives happened to bring up the subject of a standard depth while attending a meeting on other matters. Someone suggested 35 feet, another 50 feet. One of the random suggestions was 45 feet. A number of ports — especially those whose waters were not that deep — were understandably eager to accept minus 45 feet as a benchmark figure which might determine, among other things, who would pay for whose improvements.

The next step was legislation to make that dream a reality, initiated by those ports and drafted and introduced by their elected representatives. It provided for the funding of improvements and maintenance at ports less than 45 feet deep from a general fund created by a national user fee. Thus, this random figure of minus 45 feet crept into proposed maritime legislation and has come to be regarded as a standard of our port system. There is no reason whatever to consider it a standard for anything.

If you were to ask various steamship lines as to the appropriateness of 35 feet or 45 feet or 65 feet, I suggest, Mr. Chairman, you would get various opinions depending on the drafts of the ships in their fleets.

I personally have no quarrel with the proposal, but it will have a tremendous impact on future channel maintenance costs if such an arbitrary standard is established

without economic justification. Such an arbitrary standard certainly impacts upon your third question concerning "an analysis of whether the Federal Government will be able to keep pace with inland and coastal navigation needs without major changes in existing cost sharing."

I am reasonably sure that no one at this table has that type of analysis for you today. And I am also sure that the shipping industry, which in my opinion is every bit as involved in this issue as ports, has not really tried to make such an analysis. We have all been too busy trying to figure out how to get someone else to "foot the bill."

Mr. Chairman, we can understand the imposition of a user fee by individual ports as a method of financing their own dredging and maintenance projects. We truly sympathize with those ports who feel that they cannot finance such work from their own incomes. By the same token, we do not feel that the Port of Los Angeles or shippers using our port — or any other port which has structured its financial base in order to be able to pay its own way — should be obligated to finance work at other ports, some of which are direct competitors.

In all truth, I really do not have an answer that would satisfy all concerned parties, nor, I believe, does anyone else. But one thing is for certain — a uniform national user fee is not the answer.

Perhaps a part of the solution lies in the annual income derived from U.S. Customs operations, and it is encouraging to hear that many legislators support that concept. Recent figures on Customs collections at ports indicate a figure of approximately \$6.5 billion during calendar year 1982. If a portion of that income went back to the source, all American ports — and subsequently the nation as a whole — would benefit many times over from a better, more efficient and healthier national port system.

Mr. Chairman, I'm afraid that my testimony today may appear very much on the negative side. I hope not, because I am not by nature a negative person. If I were, I would not have recommended that our Los Angeles Board of Harbor Commissioners authorize me to set up a capital development program calling for expenditures well in excess of a half billion dollars over the next five years. We are into that program with over 110 million dollars worth of work under contract. We will move on the balance if we can obtain permits in a timely fashion.

Thank you, Mr. Chairman, for this opportunity to address your distinguished committee.

20 years of containerization in Port of Baltimore

Baltimore's success as the second largest container port on the East Coast is linked directly to the Maryland Port Administration's development of container handling facilities — primarily at the Dundalk Marine Terminal — during the past 20 years. As a result of the MPA's aggressive development, Baltimore today is known worldwide as the gateway port to the vast American midwest market regions, serving thousands of exporters and importers who ship cargo to and from this area.

The first direct containership service to the port began on April 9, 1963 with the arrival of the S.S. Mobile at Pier 10, Canton Marine Terminal, the first of the city's

waterfront facilities to be especially equipped for containerized freight. The Mobile and her sistership, New Orleans, operated in a Baltimore-Puerto Rico container run for Sea-Land Service, Inc., the shipping company that pioneered this new method of shipping cargo inside steel rectangular boxes. By 1965, the operation had proved so successful that Sea-Land and the Canton Company began building Baltimore's first truly specialized container terminal. Opened two years later, Sea-Land still operates from the 29.5-acre terminal, moving over 30,000 containers through the port yearly.

The then Maryland Port Authority started development of a public container terminal with room for expansion at Baltimore's premier port facility at Dundalk Marine Terminal in 1967.

Two of the existing berths at Dundalk were adapted for container handling by the end of 1967, with several cranes fitted with special equipment to life containers. That year, the terminal's first in container handling, Dundalk registered 1,726 boxes or 24,164 tons of containerized freight.

In late 1969 Dundalk's first specialized container crane was placed into operation. Two additional container cranes were added by 1971, and four new container cranes with nearly 24 acres of paved container backup space were added at berths 11 and 12 by 1973. During the period 1967-1976 Dundalk registered 985,061 containers and 11,939,119 tons of containerized freight. The terminal handled its one-millionth container on Wednesday, January 26, 1977.

The 550-acre Dundalk Marine Terminal is today Baltimore's largest container cargo handling facility. Berth 13, a container berth supported by two 40-ton-capacity container cranes, was dedicated last year, giving the terminal a total of seven separate container berths and 10 container cranes. Berth 13 is expected to add 750,000 tons annually to the port's container cargo capacity.

The port of Baltimore handled 4.3 million tons of container cargo in 1982. Nearly 3 million tons of that cargo was handled by Dundalk. This volume was an 11 percent increase in container traffic handled by the terminal in 1981.

Both the oldest and newest marine terminals in the port are also capable of handling container cargo. At North Locust Point Marine Terminal, two 75-ton gantry cranes are available. North Locust Point, formerly a railroad facility, is the port's oldest cargo handling facility. The terminal, operated by the MPA, handled 188,370 tons of container cargo in 1982.

World Trade Week, 1983: New York-New Jersey Region Inc.

World Trade Week was observed in the New York-New Jersey metropolitan region with five trade-related events, beginning Wednesday, May 18, and extending through Tuesday, May 24, Joseph A. Healey, Chairman of World Trade Week Committee for the region and President of the New York Chamber of Commerce and Industry, announced today.

In a Proclamation commemorating World Trade Week, President Ronald Reagan urged American business to focus its efforts on exporting goods and services produced in

the United States, pointing out that only 10 percent of American firms export their products and that only 7 percent of the U.S. Gross National Product goes to foreign markets. "As the world's largest trading nation," the President wrote, "the United States has much to gain from the continued expansion of world trade and much to lose if it is diminished."

**World Trade Week, 1983
By the President of the United States of America
A Proclamation**

The United States is firmly linked with other nations in the global economy by mutually beneficial international trade. Exports now account for more than 16 percent of the total value of all goods produced in this country. Two of every five acres of farmland produce for export, and one of every eight jobs in manufacturing depends on overseas trade. Indeed, four of every five new manufacturing jobs are export-related.

As the world's largest trading Nation, the United States has much to gain from the continued expansion of world trade and much to lose if it is diminished. As a country that has been built on economic freedom, America must be an unrelenting advocate of free trade.

As an integral part of the marketplace, the free flow of goods and services across international borders serves to raise the living standards and promote the well-being of people throughout the global. It inspires private initiative and the entrepreneurial spirit which leads to more open markets, greater freedom, and serves as a boon to human progress. In an interdependent world made smaller by modern communications, free trade is even more essential for the continued economic growth and advancement of both industrialized and developing nations. America must not be tempted to turn to protectionism, but lead the way toward freer trade and more open markets where our producers and trading partners can compete on a fair and equal basis.

Despite the high volume of our international trade, we still are far from matching the international sales efforts of our leading competitors. Only ten percent of our firms export, and only seven percent of our gross national product finds its way into foreign markets—less than half the percentage of our major trading partners.

In this increasingly interdependent world, American business must focus more of its efforts on exporting our goods and services. A promising new tool is now available to increase export participation: the Export Trading Company Act of 1982. This law will help American businesses, particularly small and medium-sized companies, to organize themselves for stronger export efforts with considerably less hindrance by government regulation.

NOW, THEREFORE, I, RONALD REAGAN, President of the United States of America, do hereby proclaim the week beginning May 22, 1983, as World Trade Week, and I invite the people of the United States to join in appropriate observances to affirm the enormous potential international trade has for creating jobs and stimulating economic activity in this country, as well as for generating prosperity the world over.

IN WITNESS WHEREOF, I have hereunto set my hand this 7th day of April, in the year of our Lord nineteen hundred and eighty-three, and of the Independence of the

United States of America the two hundred and seventh.

Port of Oakland elects President

Patricia Pineda, an attorney and prominent member of Oakland's Hispanic Community, has been elected President of Oakland's Board of Port Commissioners.

She was the first woman to be appointed to the Port Commission, when she was nominated by Mayor Lionel J. Wilson two years ago, and is the first woman to chair a major American Port Commission.

She succeeds Herbert Eng, whose one year term as President expired on July 19.

In a statement following her election as Board President, Ms. Pineda said: "The Port's progress over the years was highlighted by a record year of growth in 1982. Another challenging year lies ahead for Oakland in the face of growing world competition.

"We plan to continue development and expansion in our three main areas of operation — marine, airport and commercial properties."

"The objective is not only to maintain the Port's competitive position but also to foster more business and jobs for the people of Oakland."

"The task ahead will require the full efforts of both the Port Commission and Port staff and I look forward to a year of great achievement."

The Board also elected H. Wayne Goodroe, an attorney, as first vice president, and G. William Hunter, an attorney, as second vice president.

Officers of the Board serve one year terms. Commission members are nominated by the Mayor and their nominations are confirmed by the City Council. They serve four-year terms without pay.

Port of Portland studies export trading opportunity

With an eye toward creating jobs and promoting Oregon's international trade, the Port of Portland is actively investigating the possibility of forming an export trading company.

The wave of interest in trading companies began last year in October, when President Reagan signed the Export Trading Act of 1982. Purpose of the act is to help increase exports by small- and medium-sized businesses, that until now, have not had the resources of knowledge to engage in international trade.

Because of the opportunities to enhance the local economy that a trading company could stimulate, the Port has been working to develop a clear understanding of the role it might play. Although the act specifically mentions involvement by port authorities, it does not explain in detail how they should participate.

To clarify the matter, the Port retained Price-Waterhouse to explore the many ramifications of the Port forming an export trading company.

Their study reveals that a properly structured trading company can be compatible with the Port's business and public responsibilities.

The report found the Port has considerable experience with a number of activities which would contribute to a successful trading company, including coordination of

intermodal transportation, negotiating freight rates and a familiarity with trade services.

Port Deputy Executive Director I. James Church says the Port will continue to move ahead with the project now. (*portside*)

Sleeping giant: South Carolina Ports



When this giant air separation plant gets on its feet (all ten of them) it will stand 106 feet high. The 104 ton unit rests on one special rail car and overhangs another car at each end. The million dollar unit came in at the Port of Charleston on the Happy Rider destined for Airco Industrial Gases located in Aiken. There it will be used to cool air to minus 300° Fahrenheit to liquify and separate out oxygen and nitrogen. A second smaller unit was also shipped from England with its big brother; it will be used only for nitrogen separation. The larger unit was 20 ft. wide and 15'7" deep but railroad clearances were no problem out of Charleston. Norfolk-Southern Railroad moved the boxes.

Recipient of cash award: South Carolina Ports

I. Braxton Kyzer has received a substantial cash award for meritorious service with the U.S. Army Corps of Engineers, Charleston district. The check for \$9,921 was among the largest ever given in the district, said LTC Bernard E. Stalmann, district engineer.

Mr. Kyzer was recognized for his outstanding program of dredged material disposal area management in Charleston Harbor. The award cited innovative, continuous and extraordinary effort in the dewatering of the dredged materials. The results have been increased usage of disposal areas and a savings to the government of \$1,344,200.

These are among the comments made in the nomination of Mr. Kyzer for the Special Act or Service Award:

Beginning in 1975, Mr. Kyzer has been involved in a continuous and extraordinary effort to upgrade the management of dredged material disposal areas utilized in the maintenance of federally authorized navigation projects. The focus of this effort was in three primary areas: (1) upgrading the structural integrity of disposal area dikes, (2) development and implementation of field techniques for dewatering disposal areas to regain volume, and (3) abatement of the vector problem associated with dredged material disposal areas.

Prior to 1975, disposal area diking, except in special cases, had been made a collateral responsibility of the dredging contractor. The procedure was rife with problems. The problems were manifested in dike failures, contractor claims, insufficient materials, weak dike foundations created by the practice of stepping dikes inward, during raising, over previous borrow ditches, shortening of disposal area life, vector problems, and the like.

Through Mr. Kyzer's tenacious effort and determination and district support of his undertakings, a diking program has been established in the Charleston district that has resulted in a very significant reduction in the foregoing problems, and the virtual elimination of some of them. Most notable, perhaps, has been the increased capacity and prolonged life, with concomitant reduced costs, of existing disposal areas. This has been achieved principally through the use of low ground-pressure equipment to remove a shallow lift of drier material from the interior of the areas to the dike site and the resulting construction of stable dike foundations, berms, and dikes. (The flexibility afforded by equipment rental contracts has proven critical to the success of his operation.) Most important also to the success of this effort was the dewatering of dredged materials.

Mr. Kyzer has established a very effective program of dewatering of disposal areas in the Charleston District. This has involved subdivision of disposal areas, an ingenious network of surface drains, and the use of underdrains and berm raising.

Perhaps one of Mr. Kyzer's most significant contributions, which on the surface appears elementary, is that of raising the interior berm. The interior berm serves as a work platform for a dragline on mats. He proved that by raising the interior berm 1 ½' to 2' above the elevation of the interior of the disposal area, it resulted in a new lift of dredged material drying rather rapidly. In some instances, two months after dredging was completed, equipment was mobilized to a site to begin work. Previously there was a long wait before the berm dried sufficiently to support a dragline on mats. In Mr. Kyzer's words, this technique allowed us to "buy time" for dewatering between the dredging cycles.

Mr. Kyzer's interest and dedication to resolution of problems associated with dredging and disposal area management is further exemplified by 20 presentations and papers to federal, state and local governmental and institutional organizations in the year 1979, 1980 and 1981.

Estimated savings in cost resulting from the foregoing described effort ... are based on increased capacity resulting from management of disposal areas and cost of pumping dredged material to alternate areas in the absence of increased capacity. (*South Carolina Port News*)

Port of Stockton receives additional funds for channel deepening

Washington, D.C. Congressman Richard Lehman (D-Sanger) recently announced that funds for water projects, including \$11 million for the Port of Stockton dredging project, were approved by the House Appropriations Subcommittee on Energy and Water Development.

The report released by the subcommittee approved over \$14.6 billion for the U.S. Army Corps of Engineers,

Department of Energy and Department of Interior for fiscal year 1984. This figure reflects an increase of \$261 million more than the Administration request and an increase of \$165 million over the 1983 budget.

The Port of Stockton will receive \$3 million more than was initially requested for their Corps of Engineers port deepening and dredging project. The additional funds will allow the project to be completed at an earlier date. The project is presently ahead of schedule. Port Director Alex Krygsman testified before the subcommittee and suggested the additional funds to complete the dredging project well ahead of schedule.

"This is the first step in securing funds for some of these vital water projects in the district," Lehman noted. He added, "the support expressed by the local water interests and the support we had on the appropriations subcommittee were instrumental in securing the funds." (*Stockton's Port Soundings*)

European centre for shipment of chalk: Port of Antwerp

In specialist literature chalk is described as a soft, porous limestone which flakes easily.

Chalk has very many industrial uses. It is thus used in the manufacture of the following products: various types of rubber and plastic, cattle fodder, lime fertilizers, insecticides, ceramics, wall paper and other sorts of paper, tiles, flooring materials, water colours, paint, pigments, polishes, writing chalk, a binder for acids. Chalk is a typical example of a product for which new uses have been found as the result of industrial research.

The physical and commercial characteristics of chalk are not without consequences for port handling operations, especially with regard to packing and the mode of transport, which sometimes is effected in containers.

The port of Antwerp's maritime shipments of chalk amount to some 75,000 tons per annum, or significantly more than the combined total of all the other range ports.

Over the entire period 1970-1981 the average composition of the shipments of chalk via Antwerp was 39% Belgian exports and 61% transit traffic. However, the absolute and relative share of Belgian chalk exports in these figures grew considerably. This increase was a logical result of a change in the pattern of exports of this sector of Belgian industry.

The transit traffic in Antwerp consists exclusively of French chalk. The basic level of this transit traffic over the years continued to fluctuate round the 50,000 t mark. Approximately 85% of this traffic arrived in Antwerp by rail and the remaining 15% by road.

The Port's integration into the region's economic life: Port of Bordeaux, Le Verdon

A port's existence and its development, are first conditioned by the region in which it is born. For Bordeaux, a land, sea and river crossroads, located at the head of an estuary, penetrating deep into the heart of the land. It «imposed» the creation of a port. The dynamism of the port's own life, then gave it its role in the economic deve-

lopment of the region. This interdependence and interaction are typical of relationships between the economic life of the port and that of the region. Thus slowly but surely the various functions of the port came into being, whether transit, industrial or service activities.

Commercial aspect of port activity

Following the evolution of maritime traffic as it does regional economic life, the port's evolution has a double movement, the relocation of its facilities and their adaptation to suit ever changing needs.

For a long time confused with the Left Bank Quays, as they are known today, the Port of Bordeaux expanded in the same way as all major estuary ports. First came the enclosed docks, then the quays at Queyries, Bassens, then Ambes, Pauillac and Blaye and finally, the last jump, to the mouth of the estuary, Le Verdon.

This movement reflects the economic life of a very varied region, where industry and agriculture have found a place side by side. The port facilities therefore have to meet the needs of this diversity, but at the same time, in return, create new activities and needs.

Le Verdon

Brought into service in 1976, Le Verdon is the perfect example of a facility which was desired by the whole port community; it is the result of a regional will. It typifies collaboration, concertation and a preoccupation to preserve the future.

It is a question here, in fact, of the absolute necessity of modifying the port to suit the needs of the new generation of fast turn-round vessels; there was no question for them of steaming up the estuary. Either we lost their trade and saw the Port of Bordeaux's range of regular lines greatly reduced or built a new outer port to cater for their demanding operational requirements.

And the terminal has fulfilled this function perfectly. Open 24 hours a day, 7 days a week and 365 days a year, there are no problems from tide or locks. The quality of its handling equipment and the competence of its labour force, enable throughput rates there which are comparable to those of the giant terminals of Northern Europe.

A reliable and competitive port, a true seaport, it is one of the two focal points, together with Bassens, on which the Port of Bordeaux Authority has centred its activity.

Collaboration of the port community

Before turning to the services, to the men which port activity gathers together, it is essential to look at the industrial aspect which accompanies port activity.

At the end of the last century, coal and other industrial bulks led to the port industry boom. It was at this stage that port began to expand beyond the commercial quay stage to become industrial estate developer. And thus, around the port zones, a web of industry was spun, which became a generator of the regional economy and creator of employment.

The industrial zones from a coherent whole of specialized estates each meeting specific needs and aims, spread out along the 100 kms of the Garonne and Gironde between Bordeaux and the mouth. The investment involved in the overall economic development of the estuary was, of course, supported not only by the Government and the

port, but also by all the local and regional communities. This shows how much importance has been given to the port in the economic development and the position which has been made for it.

To complete this integration of the port into the Aquitaine region, efforts are still being made, both to promote and conserve the existing industrial web and to attract major industry to the various port sites, especially at Le Verdon where the port has a financial reserve on 3 000 hectares to create an industrial estate which could become a generator for the regional economy.

Port community

Beyond the port facilities and the industrial implantations, exist the men which make it all work, the operators who run it. Port activity requires, in addition to the staff of the port authority itself, the work of the various port services, pilotage, towage, line handlers, whose activity is linked to the ship, stevedoring companies, dock workers, as well as brokers, ships' agents, customs and safety services. All of them serve the ship. For the port, so that a ship's call can take place under the best possible conditions, and that the port remains competitive, it relies on the motivation of all these people.

Thus port activity, its reliability and competitiveness depend not only on both the facilities the port authority installs and regional economy, i.e. the shippers, but also and to a great extent, on the efforts made by all the different port service companies, to reduce all costs and increase the port's attraction to carriers. These companies and services, alone, already have an influence on overall regional economy since around 4 000 jobs are involved.

Port related services

Other than the direct services to the ship and her cargo, the port also attracts a whole series of related services. For the ship these involve ship building, naval repairs and although of less economic impact, ship chandlers and equipment suppliers. For the cargo, overland hauliers, packing and container firms are all concerned. Next, for only part of their activities which are linked to the port, come banks, insurance companies and sanitary and veterinary services. Thus it can be seen that the port's integration occurs at several levels.

Where traffic is concerned, the Port Authority's action, supported by that of the Maritime Federation and the port community as a whole, is to improve the commercial viability for the regular line services, by making the port even more reliable and competitive. Inevitably, this has and will have a major impact on the future of regional economic expansion, since well over 30 000 jobs are involved.

Finally, at the industrial level, the Port Authority's action, is supported and linked to those of the local and regional communities, with whom it has strived for many years to maintain and develop industrial activity on the port estates and to attract other major industries to them.

(Gazette du Port Autonome de Bordeaux)

Big success for new port study courses: Port of Le Havre

IPER, the Port Study Centre at Le Havre, is continually

widening the scope of its activities and has already made several innovations this year.

In March it held its first in-company course for a large firm, the Compagnie d'Affrètement et de Transport (CAT).

During the first few months of the year a series of three lectures in English met with great success, the subjects being "The Organization of a Container Service", by Mr. Butcher of OOCL, "Managing a Container Terminal" by Mr. Hovey of Solent Container Services, and "Financing a Shipping Fleet" by Mr. Hackforth Jones, Vice President of City Bank.

The very well attended symposium on lay-days held on November 18th in collaboration with the International Transport Law Institute was followed by a second on April 21st with the additional help of the Port Employers' Association. The theme of "What Future for Containers" attracted 43 people, the main purpose of the day being to examine the emergence of a new function in the field of international transport, that of the intermodal carrier who guarantees point-to-point transport, right the way through from consignor to consignee. He quotes a non-revisable price for the entire transaction and agrees to make penalty payments if it is not completed within a stated time.

An IPER-CNUCED course on port finance, held between May 30th and June 10th, brought together a large number of people from both France and overseas.

At the present time entires are being accepted for the 1983/84 session leading to the "Certificat d'Etudes Supérieures du Transport International".

IPER — 1, Rue Emile-Zola — 76090 Le Havre Cedex — Tél. (35) 42.09.23

Telex CHAMCOM 190091 F

1982 a record year for ro-ro traffic: Port of Le Havre

Our general cargo trade in 1982 amounted to 8,282,571 tonnes, with containers accounting for 5,232,144 t, or 63%, ro-ro for 2,041,226 t (25%) and conventional packaging for 1,008,201 t. The drop in the containerised share was due to the simple fact that the 1981 figures, which are not really comparable, were swollen by the transshipment of containers bound to or from Britain.

Conventional traffic seems to be running at a fairly stable level, but the ro-ro figures are well worth noting, having never before risen so high. They were over 200,000 t up on the previous year.

With 19 specialist berths, Le Havre is particularly well equipped for this type of traffic.

71% West-German overseas-timber imports through Bremen

71.2% of the timber imports through West-German ports in 1982 moved over Bremen (1981: 70%). Quantatively Bremen timber handling declined from 625,000 tons in 1981, by 60,000 tons, to 565,000 tons in 1982 — in value from DM 698 to DM 640 millions. The first 1983 quarter again evinced an increasing tendency. Bremen timber traders' turnover improved slightly.

Despite cargo drops Hamburg Port improves its position within West German import/export cargo handling as a whole

Like everywhere else West German foreign trade was hit last year by the international trading recession brought about by overcapacities in the industrial nations, indebtedness among the developing countries and a reluctance to import among the oil and raw materials producing countries. These restraints were apparent in the statistics for West German imports and exports via the Port of Hamburg in 1982.

Exports were particularly affected. In 1981, despite an economic slowdown exports showed a considerable growth rate, but in the first half of last year there was a sharp drop that had a decisive influence on West Germany's economic development.

Last year imports and exports via the Port of Hamburg were 40.2 million tonnes, 1.5 per cent less than in the previous year. There was a drop of 7.9 per cent to 7.4 million tonnes for exports but a slight increase of 0.6 per cent to 32.8 million tonnes for imports. Within this loss, however, the port was able to improve its market share position. Hamburg Port's share of West Germany's overseas trade rose 16.3 per cent in 1980, to 17.2 per cent in the following year and 18 per cent last year.

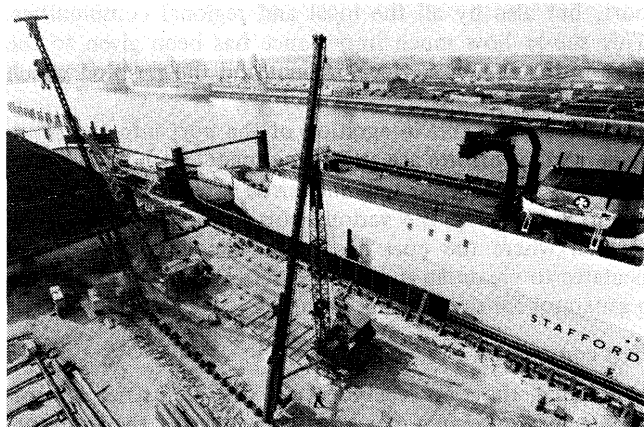
"The improvement in market share was not much of a consolation for the loss of volume in various cargo groups, but it was an indication of the strength of the Port in the market. This market position was achieved despite intensified competition and without doubt creates a good springing off position for the Port, when the economic situation hopefully improves," Helmut F.H. Hansen, Executive Director of Port Commerce, Port of Hamburg, The Representative said.

Hamburg's Holzmüller Terminal invests for the future

Everything is going according to plan for the installation of a new container bridge at the Holzmüller Terminal, a private undertaking within the Port of Hamburg, in the middle of August. Piles have had to be driven in for a new quay wall and crane track laid but executives from Holzmüller and port officials are optimistic that all will be ready in good time.

Modern technological developments in the past decade in the transport industry have very much altered the Port of Hamburg's profile. The equipment that has been developed for modern transport systems has altered the appearance of the berths. Berths that once specialised in a specific product — in the case of Holzmüller it was timber — are now multi-purpose facilities, which still handle conventional cargo but also process ro/ro and containerised merchandise.

Containers, of course, are becoming more and more important all the time at the Holzmüller Terminal. Shipping companies, that until recently have concentrated more or less on ro/ro vessels, now give greater emphasis to ro/ro-lo/lo tonnage and freighters carrying wheeled cargo and, of



course, containers. In order to offer customers as efficient a service as possible Holzmüller has invested something like DM 16 million in improving the terminal's superstructure. This investment includes the new container bridge, crane track, flood protection facilities, the ro/ro ramp that is already in full operation, the purchase of additional tractors and making the terminal area serviceable. In addition to these costs the City of Hamburg has financed the piling necessary for the new quay wall as well as the quay wall totalling DM 18 million — although loans from the private sector had to be made for this temporarily because there was no money in the public 'kitty'.

The terminal will be extended 60 metres with an additional land area of 22,000 square metres — the total area available in the Holzmüller Terminal is 200,000 square metres of which about a quarter is covered space. The additional space will be used in the main for handling boxes or as an intermediary storage area.

The Shannon Estuary-Ireland — Proposed access for ships of 400,000 dwt: Limerick Harbour Commissioners

As part of a major international marketing campaign by Limerick Harbour, an important study by an eminent Dutch Port Consultant, has concluded that a £5 million dredging operation at the mouth of the river Shannon would allow access to ships of 400,000 tonnes, making it one of the top six deep water harbours in Europe.

The report drawn up by Ingenieurshureau Ir., L.W. Lievense B.V., Breda, Netherlands, for Limerick Harbour Commissioners also concludes that the area to be dredged would pose no difficulties as the bottom of the Shannon entrance is stable and it consists of fine to medium sand with traces of gravel.

A vital conclusion of the study was that maintenance dredging might be required once every 5 years and the estimated cost of each operation would be £300,000.

The report was presented to the monthly meeting of the Harbour Commissioners on Monday April 11th, at which the consultant outlined his conclusions.

The Commissioners will consider acting on the report in the light of enquiries and commitment from potential industrialists interested in setting up in deep water loca-

tions.

The Dutch consultants have wide international experience on coastal engineering studies including harbour design, navigational requirement, dredging of navigation channels, breakwaters, jetties and quay walls.

They carried out projects in the Netherlands, Belgium, France, Ivory Coast, South Africa, Israel, India and Australia.

The proposed approach course through the Shannon entrance to be dredged would as far as possible follow a straight line reducing the difficulties encountered in navigating large vessels in confined waters.

At present the Shannon could carry vessels of 170,000 tonnes to 200,000 tonnes and with the development of the Estuary, over the last 10 years, particularly with the E.S.B. decision to proceed with the coal burning power station at Moneypoint, the Aughinish Alumina project and the proposed oil refineries at Tarbert and Ballylongford by Aran Energy Ltd., and Petrola International Ltd., the Limerick Harbour Commissioners are now engaging on a worldwide marketing of the Estuary and its potential.

They will be seeking the expert assistance of the IDA and Shannon Development in this regard.

Launching the report today in Limerick, the Chairman of Limerick Harbour Commissioners Mr. George E. Russell said that the purpose of having the study done was to try and attract further major maritime enterprise to the Estuary and today potential investors wanted to know well in advance what type of facilities were or could be made available.

He said that to date the normal policy of the Commissioners had been to invest capital in cases where a forward commitment had been made in respect of a major industrial project, for example such as an oil refinery.

He declared: "What we have done is to collect and process pertinent information for the benefit of potential investors and this scientifically based report has done this and will also make a most important contribution to future planning and promotion".

He was confident that if a major project was definitely earmarked for the Estuary, the port authority would get the necessary capital from Government of E.E.C. funds to carry out the project. He pointed out that if a heavy maritime project necessitated the use of vessels of over 200,000 tonnes, dredging of the Estuary for vessels of 400,000 tonnes would take from 9 to 12 months.

Mr. Russell was optimistic about the prospects of Limerick port, and he pointed out that trade in the port this year would be 1½ million tonnes, in 1985 it would be 4 million tonnes and in 1990 8 million tonnes. By 1990 the number of jobs generated by Estuarial activity could be in the region of 2,500.

He said: "No other port in the country can forecast this type of increased activity and we are looking at hard facts as large projects are already a reality in the Estuary".

Referring to the recently published Telesis Report, in which the Shannon Estuary was described as a natural resource which could be maximised in the national interest, Mr. Russell said that a Government commitment to the report recommendation by designating the Shannon as a prime centre for maritime industry would give considerable additional thrust to international marketing efforts.

He added that the Government could demonstrate its

intent by examining critically current plans for the Shannon and if satisfied adopting them as part of any national development plan.

He also suggested that Government could review in consultation with local interests, existing administrative and organisational structures for the Estuary with a view to their improvement by setting up a broadly-based unified harbour authority representative of all interests local and commercial in the adjoining counties, which would give the necessary political impetus to the continued orderly development of the resource.

Top modern Traffic Control Centre taken in use at Port of Gothenburg

A new Traffic Control Centre was recently inaugurated at the Port of Gothenburg by the Governor of Gotenborgs och Bohus Län, Mr. Åke Norling, in the presence of a large number of representatives for shipping.

The taking in use of this centre has, in combination with the recently fulfilled widening and deepening of the Böttö fairway leading to the entrance to the Port, made the approach to the Port easier and safer. Some 30,000 ships are yearly passing the fairways to and from the Port and the traffic can accordingly sometimes be fairly intense.

The area which the centre controls stretches six nautical miles out from the Vinga Island and finishes at the mouth of the Lärjeån upstreams the Göta River. There are three radar stations - at Vinga, Vasskären and Käringberget - covering the area and delivering traffic data to the centre.

The centre is located at the top of a building centrally placed in the Port, close to the Älvsborg bridge. The building is also the premises for the Gothenburg pilot station and the harbour operational planning office of the Port.

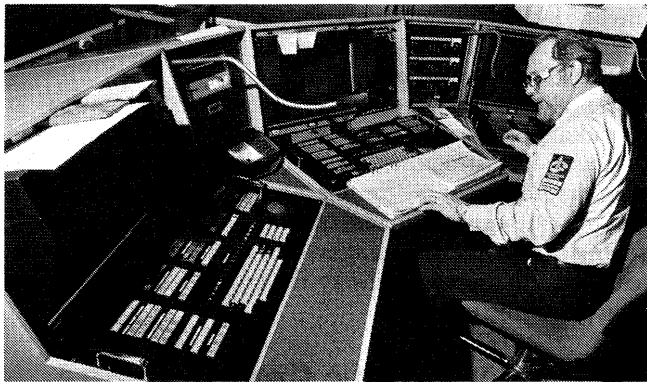
The plan for the centre was worked out by a group of representatives of the Port and of the National Swedish Administration of Shipping and Navigation. A consultant company, Teleplan, then prepared the technical specification between specialist companies in this field the order for the centre was signed with the Norwegian company Norcontrol.

The centre has got the most modern technical equipment available giving the traffic leader a superior view of all ships moving in the area.

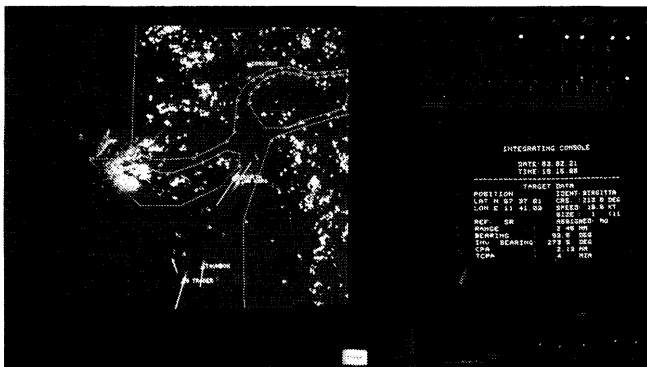
The radar video derived from each of the three radar sensors is compressed by a factor of four and sent as an analogue signal with digital values via a 10 GHz microwave link. The signals from both the Vinga and Vasskären sites are transmitted via active repeaters placed on the south support pylon of the Älvsborg bridge at a height of 90 metres above sea level to the Traffic Control Centre.

The link path from these two sites is predominantly across water and provision for space diversity has been to counteract the possibility of specular effect. The third radar sensor at Käringberget has direct line of sight to the Traffic Control Centre.

The integrated display system provides three interlocked consoles showing radar video from each of the radar sites on digital scan converters, a fourth console displaying a composite traffic picture derived from the three radars and raw video from one of the three radar sites and on a digital scan converter. A fifth slave monitor capable of displaying



The traffic officer of the Port of Gothenburg Traffic Control Centre has four tv-type, daylight display radar screens at his disposal. Three of these show pictures from each of the three radar stations in the system, while the fourth one is used with any of the radar stations when special situations occur, like emergencies.



This is the type of presentation available to the Gothenburg Traffic Control Centre officer. To the left, the tv-type radar display, in colour and with synthetic information superimposed (e.g. fairway limits). Each vessel has its name electronically attached to it, and vectors show each vessel's course and speed (the longer the vector, the higher the speed).

To the right is a presentation ordered from the centre's computer memory and with actual information added, like the vessel's speed and position.

* * *

the picture from any of the other four displays in remotely sited for the use of the Senior Pilot.

The use of digital scan converters, high resolution colour monitors and microprocessors mean: that:

- The screen can be viewed in full daylight conditions so eliminating the problem of eye strain associated with conventional PPI's.
- Colour graphics can be introduced to ease the problem of radar video interpretation and the need to cross reference with charts.
- The microprocessor produce the graphics and other functions such as tracking and ETA calculations to remove labourious time consuming computations from the opera-

tor. This enables him to concentrate on the interpretation of the visually indicated traffic situation.

The traffic leaders are all experienced ship masters and have earlier served as pilots in the Gothenburg district.

The intention for the traffic leader is of course not to give orders to the ships manoeuvring in the area but to furnish the responsible officer on board with information on for example other ships moving within the traffic area and to give advice in the interest of safety.

The port of Gothenburg has issued a "Master's Guide to Gothenburg Port Entry" which is sent free of charge on request to: Port of Gothenburg, Information Department, Box 2553, S-403 17 Gothenburg, Sweden.

Port of Southampton wins new container venture

Associated British Ports have signed an agreement with the Tung Group of Hong Kong creating a new joint venture company at Southampton.

The new company is called Mayflower Container Terminal Limited, and from 1 August 1983 it will take over the management, marketing and operation of one of the port's two container terminals.

Under the agreement the Tung Group are to invest some £4m in new equipment for the landside handling of containers, while ABP are to provide quays, shipside cranes and labour.

Welcoming the development, Mr. Dennis Noddings, ABP's Port Director at Southampton, said: "I am delighted that the Tung Group have chosen Southampton for their new UK container venture. Their injection of new capital at 201/202 berths will provide an excellent basis for further increases of volume through the container port".

The Terminal Manager will be Philip Durell, 34, who was previously Terminal Planning Manager at the Tung Group's Walton Terminal, Felixtowe. A new management team is being recruited to work under Mr. Durell.

Commenting on the new venture, Mr. Durell said: "We aim to provide a highly professional common-user container terminal in what is certainly one of the best natural ports in Europe. Mayflower should attract both deep-sea and short-sea operators by offering a first-class service at realistic rates".

Mayflower is located at berths 201/202. The terminal has 575 metres (1900 feet) of quay, with a minimum depth alongside of 12 metres (40 feet) on 202 berth and a minimum of 10 metres (33½ feet) on 201.

There are three quayside cranes on site and currently the container park is equipped with straddle carriers. These straddles will be phased out and replaced by a rubber tyred park gantry crane system. New prime movers, trailers and ancillary hardware are also to be ordered and this new equipment represents the major portion of the £4m which the Tung Group will immediately be injecting into Mayflower. Discussions have taken place with all sections of the Southampton workforce and agreement has been reached on the role of the new company and the new working procedures that will be progressively introduced with the commissioning of new equipment.

Welsh/Irish Ferries New European Link: Associated British Ports

Welsh/Irish Ferries have announced a link-up with French operators Schiaffino Freight Ferries aimed at cutting freighting costs between Europe and Ireland.

Details of the scheme were given to customers and hauliers currently using the 3 times weekly Berry/Cork service when they met at the ABP port of Barry on Thursday 16th June for an update on the progress of the new service. Under the scheme hauliers could benefit by up to 20% off ferry charges by a through booking arrangement on the French company's twice daily Dover/Ostend service. Savings in driving time and fuel costs are additional advantages compared with some other routes.

A Welsh/Irish Ferries spokesman said the level of trade on their Barry/Cork service had shown a steady improvement since its inauguration in March and they were confident of increased business as a result of their new links with Europe.

£1½ million scheme at Immingham ro/ro terminal: Associated British Ports

The scheme involves the extension of the terminal area by 2.1 hectares providing a new container park with appropriate security fencing and drainage. The total cost of the works will amount to \$550,000.

Traffic through Immingham's common user roll-on/roll-off terminal has increased by some 36% since it was opened in 1980. The new scheme is designed to ensure that Immingham can meet this increasing demand.

Speaking about the new scheme, the Docks Manager, Mr. John Hughes, said: "Immingham is one of ABP's most successful ports and with this new scheme, we are building on that success. It will enable us to improve the quality of our service to customers".

Floating incinerator: Port of Melbourne

One of the many problems resulting from the high technology plastic age in which we live is the safe disposal of the toxic by-products and residual wastes of the complex manufacturing processes employed.

A positive step in disposing of 1700 tonnes of liquid hydrocarbon wastes, which had been stored at Coode Island for up to seven years, was taken in December last year when the Dutch-owned incinerator ship Vulcanus berthed in Melbourne.

Named after Vulcan, the mythical god of fire, the ship, with the two large furnace chimneys at the stern showing signs of blistering and her hull painted a conspicuous warning yellow, presented a unique sight.

The wastes, a by-product of PVC manufacture, were incinerated at sea approximately 200 miles off the coast. The wastes were burnt in the two furnaces which were heated to 1200 degrees centigrade. The liquid waste is injected into the flames and burnt continuously for three

days.

Chemical by-products of the incineration are carbon dioxide, water and hydrogen chloride, which together from hydrochloric acid. A 99.9 per cent destruction rate is achieved and the residues are not harmful to the environment.

Over the past decade the ship has successfully destroyed by complete combustion about 350,000 tonnes of material similar to that loaded in Melbourne.

While in Australian waters Vulcanus loaded toxic wastes stored in Sydney, Melbourne and Brisbane. (*Quarterly*)

Bucket wheel unloaders for China Light and Power: Ports of New South Wales

Babcock Moxey Australia Ltd, a subsidiary of Babcock Moxey Ltd, JK, has announced that the parent company has won an order to supply two continuous bucket wheel ship unloaders to the Castle Peak complex, under the operation of China Light and Power, at Hong Kong.

The order forms part of the multi-million dollar development of four 660 MW coal-fired electricity generating units for the Castle Peak station.

China Light and Power supplies electricity to Kowloon and the New Territories, and some 50 MW to the People's Republic of China.

Babcock Moxey Australia Ltd. is involved in major works in New South Wales and other States.

They won at \$3.2 million contract to design and construct coal handling plant at the State Electricity Commission's Eraring Power Station on the central coast. The first stage of the project is now being commissioned, and work is proceeding on the second stage.

They are also well advanced on the construction of an auxiliary fuel plant costing \$12 million at the Loy Yang Power Station in the Latrobe Valley in Victoria.

In Queensland at Hay Point, they have won a \$17 million contract to build stackers and reclaimers for a major new planned port facility near Mackay, adjacent to the Utah port development. This project began early in 1981 and is scheduled to commence commissioning in mid-1983.

The bucket wheel unloader mentioned above performs the opposite function to that of the bucket wheel reclaimer and ship loader which recently commenced operation at Port Kembla. Whereas the reclaimer gathers coal from a stacking yard for transfer to ships at the loading berth, the Babcock Moxey Ltd bucket wheel unloader reverses the procedure and removes the coal from the ship's hold at its point of delivery.

New Systems

For many years, companies around the world involved in the bulk handling of industrial products have sought to provide systems of ship unloading suitable for the extremely large ships and high speed operation of major terminals world-wide. Babcock-Moxey Limited of Gloucester, a member of the Babcock international Group of Companies, has developed a ship unloader suitable for unloading coal, iron ore and similar materials from the largest bulk ships in operation or envisaged to meet this

criteria.

The continuous ship unloader to be supplied to China Light and Power consist of a jetty-mounted crane-type portal carrying a 216° slewing boom which reaches from the jetty to maximum outreach of 45.3 metres. Carried on the boom end is an elevator section to which is affixed the bucket wheel reclaiming device.

Each machine is designed to unload at a maximum rate of 1,100 tonnes per hour (coal).

The unloaders have been designed to unload heavy bulk material such as iron ore at a rated capacity of 2,000 cubic metres per hour, and lighter bulk materials such as coal, grain and bauxite at 3,000 cmph. Actual tonnage rates are proportional to material density.

The cell-less bucket wheel is driven by a powerful hydraulic motor. It digs the material at a selected speed, to ensure even discharge of the resultant load.

The feeder conveyor receives the material via a grid which is installed to screen out unwanted foreign matter.

The conveyor is driven by an enclosed motorised head drum. The material carried on the belt is discharged directly into the bucket elevator.

The bucket elevator lifts the material up the underside of the elevator structure. This ensures that the mass supported on the end of the boom does not cause high torsion in the boom structure when the elevator is rotated about its slewing ring.

The continuous ship unloaders designed by Babcock Moxey Ltd have a wide range of movements during operation. These include a slewing motion about the bucket elevator arm; a slewing motion about the portal; a luffing motion; and a long travel motion.

Wide, horizontal turning movements of the machine can take place about the slewing rings. The combination of slewing motions permit great manoeuvrability of the bucket wheel, and easy access to the material to be unloaded.

The upward and downward luffing movement allows the machine to dig at different levels within the ship's hold.

The single boom conveyor receives material direct from the head chute and conveys it to the main pivot yoke chute. The material is retained throughout all boom operating angles by means of a blanket conveyor system which traps the material efficiently in the troughing belt.

An independently drive scraper chain conveyor, beneath the head end of the boom conveyor, will collect all scrapings and discharge them into the head chute, minimising spillage.

A conventional system of chutes, buffer hopper, feeder and, when necessary, portal conveyors, lowers the material to jetty level, from where it can feed out or more jetty transport system.

Advantages

The continuous ship unloader allows the terminal operator to achieve the following advantages over existing systems:—

- Faster unloading and turn-round of ships with significant savings in berth occupancy and demurrage costs.
- Reduced jetty loading due to the overall machine size being reduced and load surging through the machine being minimised.
- Reduction of dust and spillage due to almost complete enclosure of the conveying system.

- Significant noise reduction over any other currently used unloading system.
- Elimination of ship damage which is possible when using less advanced unloading techniques.
- Considerable improvement in operator costs both on the continuous ship unloader and in the ship's holds.

Mr. David Doggett, managing director of Babcock Moxey Australia Ltd, whose offices are situated in Babcock House, North Sydney, said that the first of the two new bucket wheel unloaders ordered for China Light and Power was contractually required to be operational by the end of 1984.

As far as dry bulk carrier discharge technology is concerned, the concept of potentially high capacity continuous ship unloaders, particularly for coal, is certain to receive greater impetus following the announcement of Babcock-Moxey's new contract, Mr. Doggett said.

SOROS Associates wins Excellence Award for Australian coal port



The Port Kembla coal port, engineered by Soros Associates (an Associate Member of IAPH), has been chosen for a National Honor Award in the 1983 Engineering Excellence competition of the American Consulting Engineering Council.

The only possible site for a new coal port was situated adjacent to the public beach and golf course of a residential town.

To satisfy the community, permits were conditioned on unprecedented standards of environmental protection. To satisfy the coal industry, low per ton capital costs were essential.

The task was to create a 16 million ton per year coal port that would operate so economically it would compensate for the cost of superior environmental protection. To fulfill these demands, Soros Associates developed a whole series of advances in the state of the art of environmental controls and coal handling technology.

Coal trains arrive and leave the port within 1 hour, passing through the highest capacity in-motion unloading

system to date.

To eliminate truck traffic at night, an unprecedented 200,000 coal trucks a year are unloaded in daylight hours. This is accomplished through a 3 lane highway on top of a covered storage, where 9 trucks can dump coal at the same time. After dumping, trucks are thoroughly washed, to prevent spilling coal on the public roads. Extensive landscaping of 10,000 trees and 60,000 shrubs provide a visual and noise shield.

The 880,000 ton coal yard holds 16 types of coal. All coal is treated with a chemical that binds dust and forms a surface crust. To be effective, the crust has to be kept wet and undisturbed. At Port Kembla, a solution was found to meet both of these requirements. Conventional stockpile spraying was improved by a pioneering computer controlled spray system, which automatically adjusts to changes in wind speed and direction. The need for bulldozers, that would break the crust and stir up dust as they move on the coal piles, has been eliminated because all coal is reclaimed by a 6,600 ton per hour bucketwheel, the largest for coal to date. A second bucketwheel provides complete back-up.

Shiploading performance is boosted by the first twin travelling shiploaders that can switch the loading from one hold of ship to another, without stopping. The shiploaders are also the first with dust removal by washdown in slurry form.

The system is designed so that it can operate, even if any major machine is out of service.

The project was permitted, designed, built and started-up in 35 months, at a cost of \$121 million, including dredging. It was completed 1 month ahead of schedule, and \$18 million below budget. The capital cost of \$7.56 per metric ton of annual capacity is among the lowest in the world.

New heavy-duty berth at Auckland

The Auckland Harbour Board, operator of the Port of Auckland, New Zealand's major general cargo port, has shown considerable confidence in the immediate future of its operations by making a commitment to raise \$37.35 million for new capital works.

The main project is the second stage of the redevelopment of the Kings-Bledisloe Terminal. Stage 1 provided in 1976 the Bledisloe Roll-on, Roll-off Terminal, built alongside the country's first reinforced concrete wharf, 75-year-old Kings Wharf.

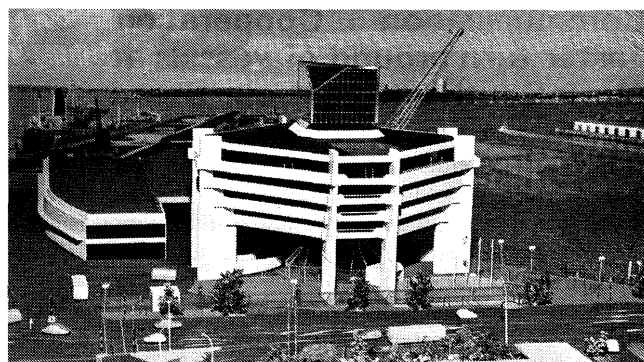
Stage II will replace the old wharf, now well on the way to demolition, with a new heavy-duty general purpose berth, designed for later adaptation as a facility for self-sustaining Ro-Ro, Lo-Lo, unit load and container ships. The Board will raise loan finance of \$23.15 million for the project, scheduled for completion near the end of 1985.

The other part of the Board's commitment is the construction of a new office building within the port, at the base of Princes Wharf. The Board will raise \$14.2 million for the building, associated work and the redevelopment of the surrounding waterfront area. Completion date is anticipated to be December, 1985.

Auckland Harbour Board General Manager, Mr. R.T. Lorimer, says the port is experiencing increasing demand



Kings Wharf during demolition which began in 1982.



A model of the Auckland Harbour Board's planned new office building.

* * *

for facilities to handle cargo in heavy units from a variety of ship types.

About 70 per cent of Auckland cargo throughput is handled by Fergusson Container Terminal, Bledisloe Terminal and other specialised facilities. Conventional wharves handle the remainder. Jellicoe Wharf is accounting for more than 50 per cent of the port's conventional cargo and is the port's only conventional wharf with the capacity to cope with the full range of modern cargo-handling techniques. As a result, Jellicoe's four berths are in constant demand. Berth occupancy and cargo storage in 1981-82 were high.

The Board's forecasts show no lessening of demand for heavy-duty berths and it is expected that by the time the new wharf is completed, throughput of cargo requiring heavy-duty facilities will have increased by half a million tonnes.

The new wharf will be of reinforced concrete, 285 metres long by 23 metres wide, with a 2.8 hectare reclamation. Facilities will include a wharf-side railway.

The berth will have a depth of 12.3 metres below chart datum, with 10.5 metres in the approaches. The tidal range averaging 3 metres will allow the berth to be worked by ships with a draft of up to 12 metres.

The new office building will give the Board a home of its own for the first time since its original premises, built in 1885, were demolished in 1969 to make way for redevelopment of the portside area of Auckland City on land owned by the Board. From then until 1973 the Board worked in temporary premises before leasing four floors of a high rise office block in the portside redevelopment.

The proposed building is of striking design, with four floors supported on four sets of 11 metre high columns. The project includes the development of a public waterfront plaza surrounding the building and the enhancement for public use of the nearby port/city interface.

Despite the worldwide trade downturn, the Auckland Harbour Board's year to 30 September 1982 saw a record of 6.36 million tonnes of cargo through the ports of Auckland and Onehunga — just 25,000 tonnes ahead of the previous record set in 1973-74.

Half-year indications for the current year are for a cargo throughput of 8.06 per cent less than last year.

Communication + Cooperation = Faster turn around of vessels at Bluff: Southland Harbour Board

In recent months closer communication and co-operation between Stevedores, Shipping Companies, Harbour Board Employees Union, Waterside Workers union and the Harbour Board has led to the speeding up of cargo operations at the Port of Bluff.

This has been especially evident when a specialized vessel such as RoRo, Quarter Ramp, Gearbulk or multi purpose vessels visit the Port. Interested parties get together around the table to iron out any problems associated with a particular vessel before she arrives thus avoiding any expensive delays whilst the ship is in Port working cargo.

When the *Piotr Masherov*, a Russian Quarter Ramp vessel, loaded 7,761 bales of wool recently, she reached a loading rate of 1,200 bales per hour which is a record for the Port.

The *Eagle Arrow*, a Gearbulk vessel, discharged 3,000 tonnes of paper pulp in two days and another Gear bulk vessel, the *Aldebaran*, loaded 2,361 tonnes sawn timber and 1,434 tonnes logs in four shifts.

The *Nedlloyd Marseilles*, a multi purpose vessel, loaded 1,020 tonnes billets aluminium, loading at No. 8 berth where a higher than normal loading rate was achieved.

A recent loading of meat via the allweather meatloaders onto the *Professor Popov* received favourable attention from Amalgamated Marketing Ltd. This vessel increased her loading rate by 4.35 tonnes per gang hour from the Port average rate.

The efficient use of the Harbour Board Cold stores for pre-receiving this cargo shows the potential for this type of loading where the Cold Stores are available for holding the cargo prior to shipment.

Union Company trans Tasman shipments handled at the Roll on Roll off berth have continued efficiently enabling these vessels to maintain their tight schedule and attract continued use of the Port by trans Tasman shippers.

This trend towards communication and co-operation between all parties on the waterfront should continue to

increase our throughput at the Port of Bluff to the benefit of the Port, region and country as a whole. (*The Bluff Port Sider*)

Winning design brings public to waterfront: Wellington Harbour

Encouraging a range of community activities on to the waterfront whilst retaining essential port functions is the basis of the winning entry in the Public Awareness section of the Wellington Civic Trust's Harbour City Competition.

The proposal put forward by Palmerston North architectural graduate Richard Carver, for which he won \$1,000 was described by the judges as "impressive."

They praised it for its realism and appropriate restraint. "It has no grandiose conceptions nor tourist aimed gimmicks but depicts broad interweaving of normal city life with the presence of the harbour."

Mr. Carver who has visited waterfront redevelopments overseas, included a comparison of such projects in the introduction to his proposal, but stressed that any development must be in response to the unique character of Wellington Harbour and not simply copied from elsewhere.

He said the main emphasis of his entry was to show ways in which the waterfront could be opened for public use.

He suggests converting a series of warehouses into a marketplace which with the addition of outside stalls would provide a facility for year round use. Plenty of landscaped "people spaces" of different scales are designed to encourage the public to enjoy their harbour. Relocation of the cast iron fences to divide this space from that required for port use is another idea for the re-utilization of a desirable feature of the existing wharves.

The use of the city's beloved old trams to form an internal transport system is one of Mr. Carver's most innovative suggestions and one which reinforces his belief that development must build on the historical character of Wellington.

In his proposal, sheds — opened up and with mezzanines added to capitalize on the magnificent views they offer — would become galleries, playhouses or restaurants. A marina and aquarium he feels are obvious facilities for the area.

Mr. Carver believes linking the Town Hall to the water-side is a priority for any redevelopment and he suggests the creation of an artificial bay around the Town Hall, completed by a pedestrian promenade.

Few of Mr. Carver's suggestions demand drastic transformations and where appropriate he has built on the current use of a building. The Overseas Passenger Terminal should be used for conferences he says and could perhaps incorporate a restaurant — ideally where it just out over the water — and a display about New Zealand for tourists.

All aspects of community life have been considered with provision for high density housing, sports facilities and car parking.

Judges said Mr. Carver dealt with all issues the Civic Trust felt were relevant to the consideration of alternatives, among the most important of which are the continuing use of the harbour by vessels from container ships to fishing trawlers, the place of historical buildings, the climate and tides, access, the activities wanted by citizens, the separa-

tion of pedestrian and motor traffic, the provision of open spaces (in contrast to the high density building of the inner city), variety and versatility and the need for planning to take into account future developments. (*BEACON*)

Mina Qaboos profits up

The retained profit of the Mina Qaboos Ports Services Corporation Ltd. for 1982 was \$1.8 million compared with \$1.4 million at the end of the previous year, the corporation's annual general meeting was told. PSC's ex-officio chairman Communications Minister Salim bin Nasser Al Busaidi said that current assets were \$27 million in 1981.

During the year there was a 46 per cent increase in container traffic — 21,825 TEUs were handled as against 14,925 in 1981.

The Minister said that a feasibility study had been undertaken for future expansion of port facilities. The turnaround of vessels would become decidedly faster than at present and storage facilities would be better when improvements were completed in three years. Currently the port was experiencing a shortage of space for cargo handling and storage. (*Gulf News*)

Container traffic statistics of Indian Ports

1975-76 to 1979-80

Name of Port	1975-76	1976-77	1977-78 TEUs (Tonnes)	1978-79	1979-80
Calcutta	32 (320)	596 (5960)	612 (6120)	558 (5580)	2048 (20480) (prov)
Haldia	—	—	100 (1000)	1318 (13180)	2430 (24300)
Bombay	5991 (44784)	5472 (65145)	13595 (109142)	38880 (361812)	77832 (857392)
Madras	184 (1840)	262 (2620)	482 (4820)	1227 (12270)	4433 (44330)
Cochin	3538 (27364)	2975 (30425)	2198 (29351)	2446 (34800)	8063 (116400)
Tuticorin	Nil	Nil	Nil	Nil	134 (1340)
Total (TEUs)	9745	9305	16987	44429	94940

Note: The traffic in respect of Bombay and Cochin are actuals, whereas the actual traffic in TEUs (20 ft. equivalent units) of the rest of the ports has been converted by adopting 1 TEU = 10 tonnes.

(Source: Estimates Committee (1981-82) of the Parliament, 32nd Report on the Ministry of Shipping & Transport — Shipping, Major Ports). (*Indian Shipping*)

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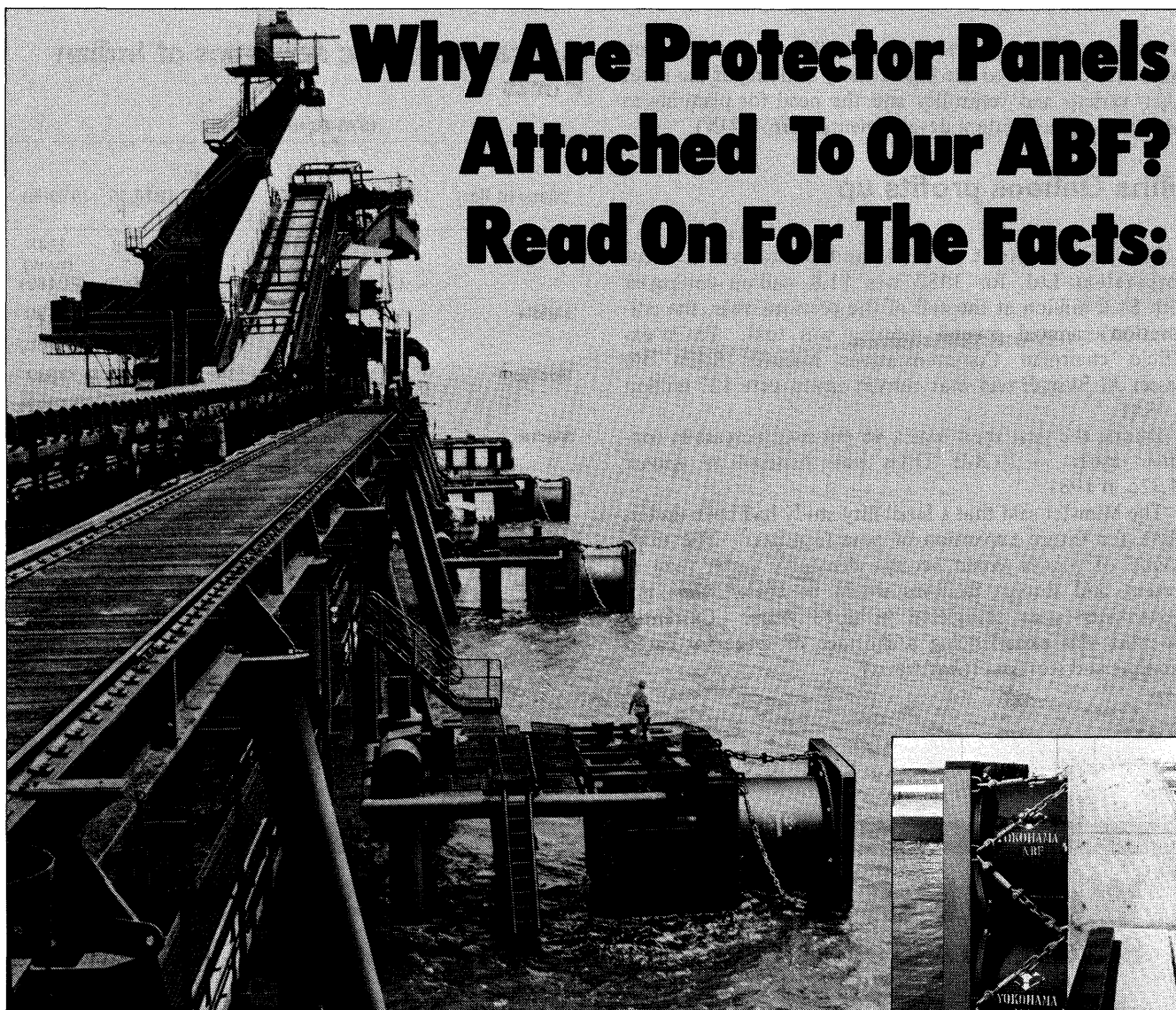
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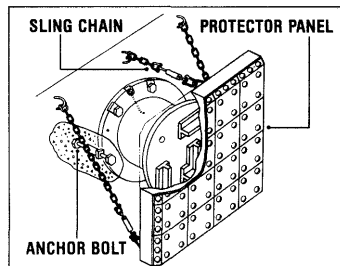
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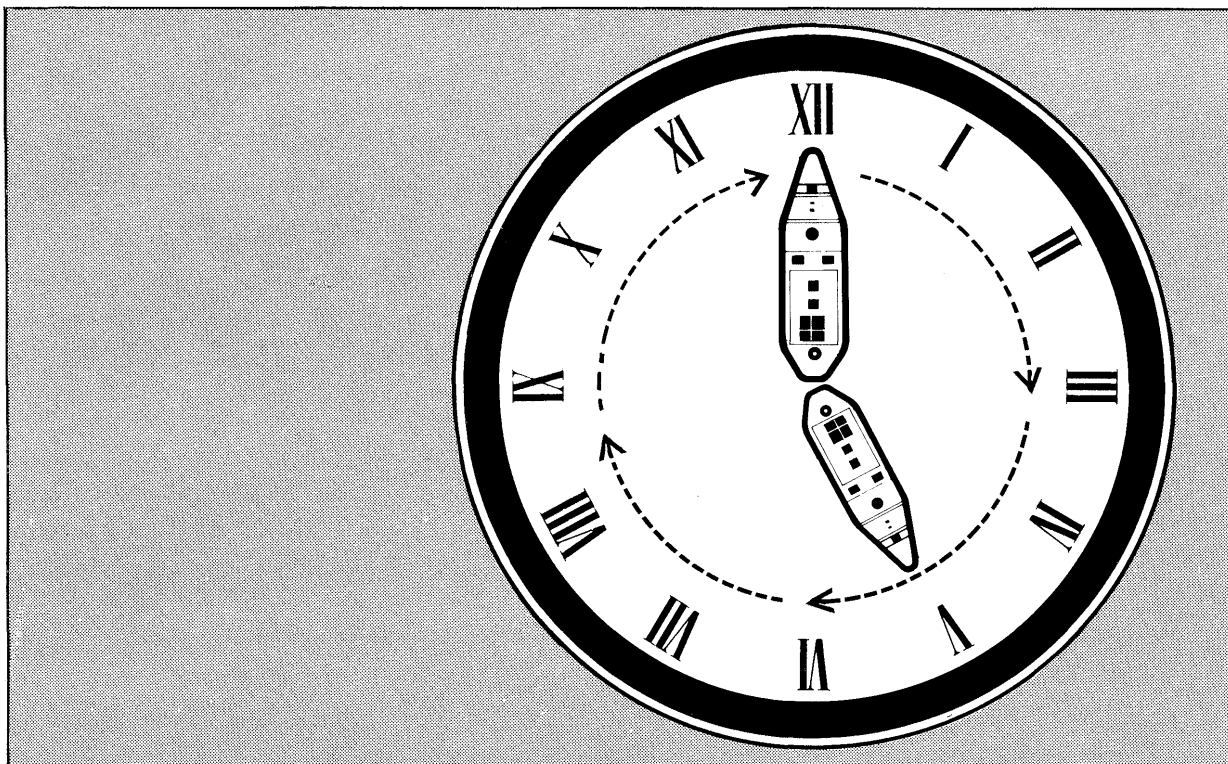
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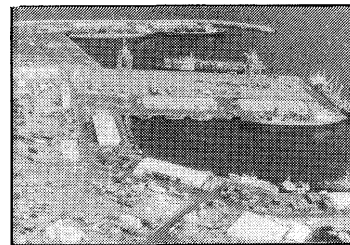
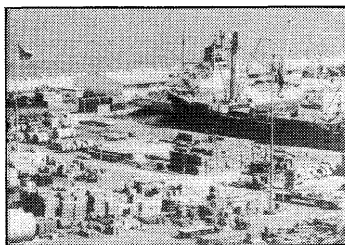
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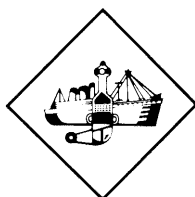


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