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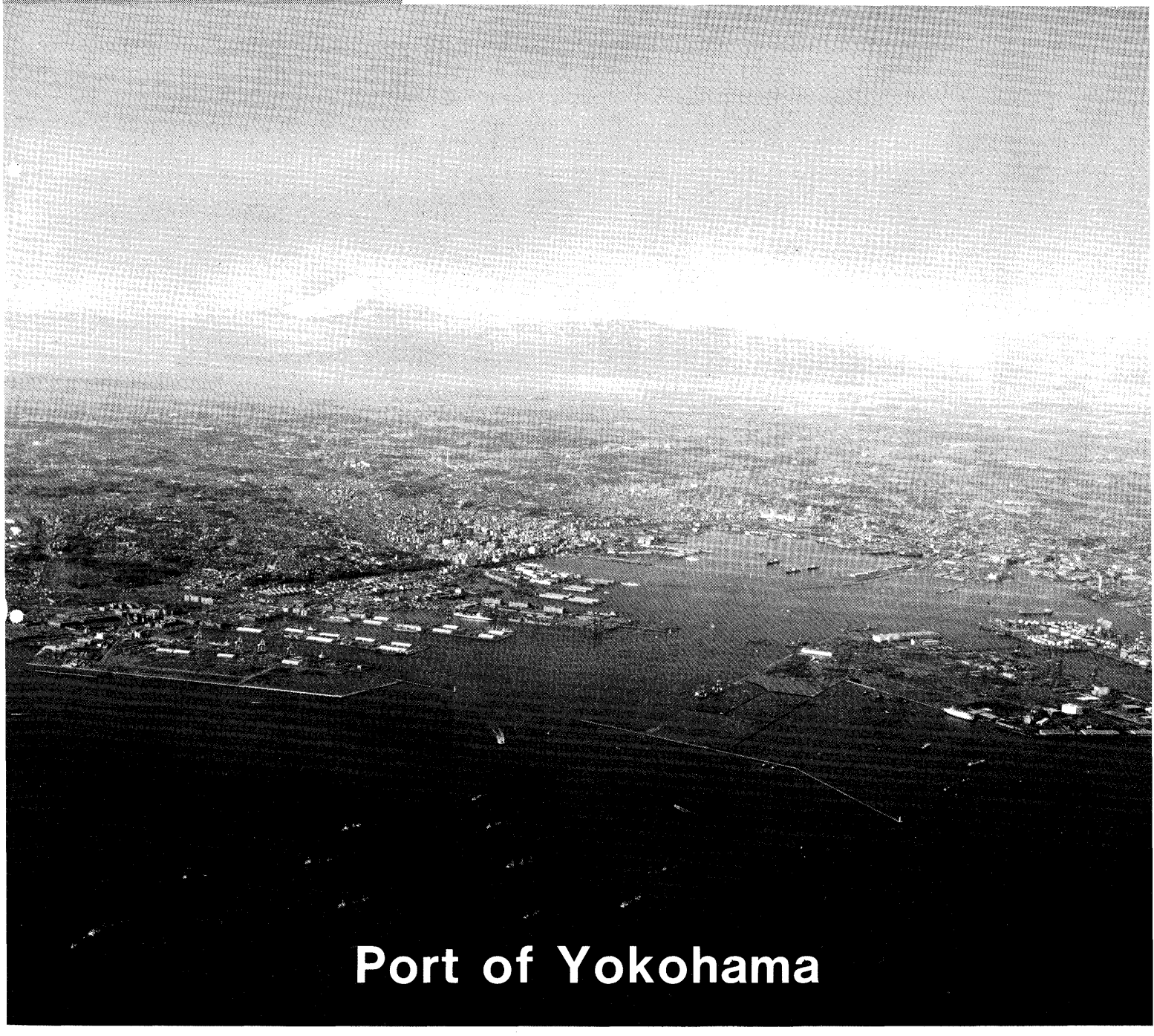
PORTS and HARBORS

September, 1984 Vol. 29, No. 9



Port of Yokohama

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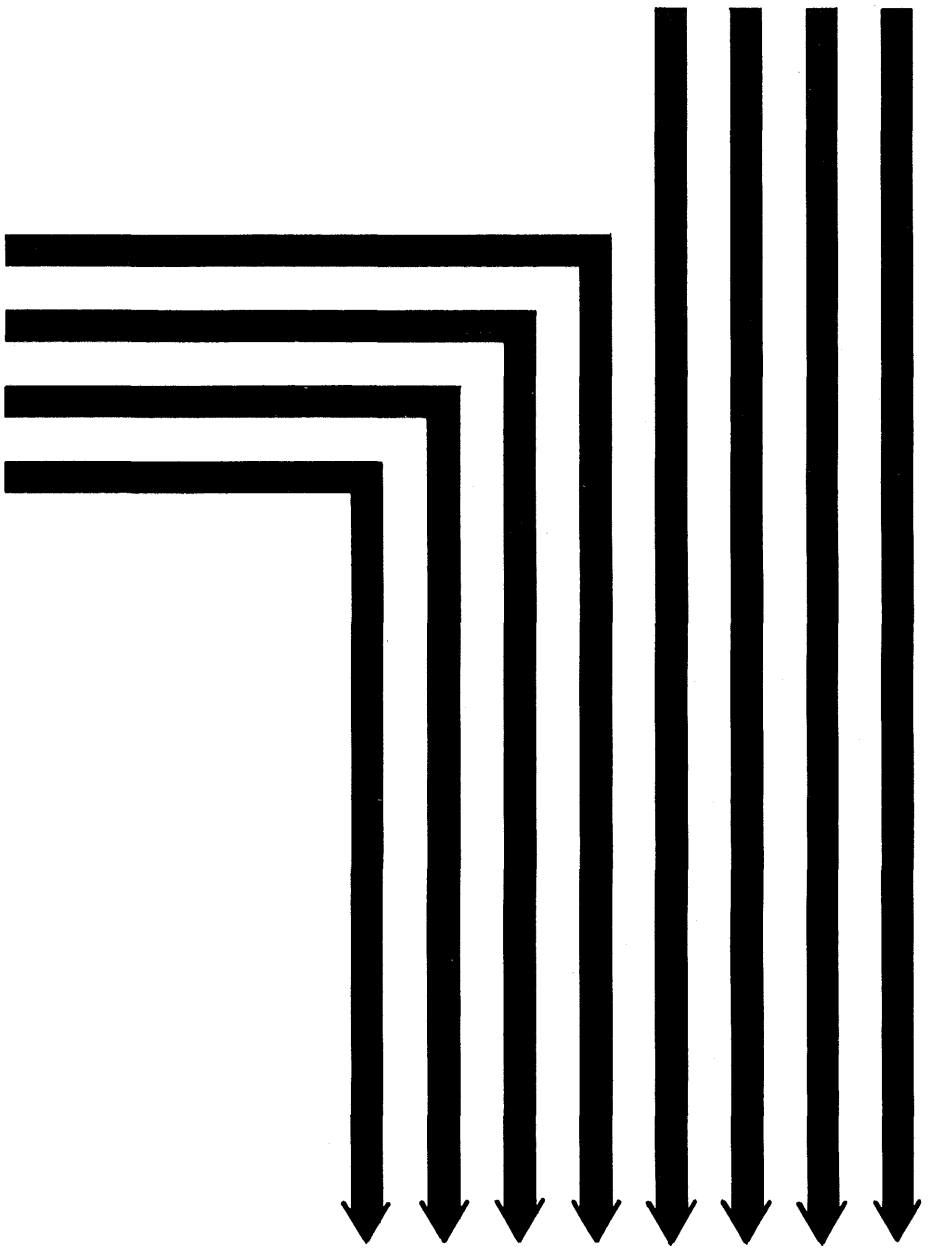

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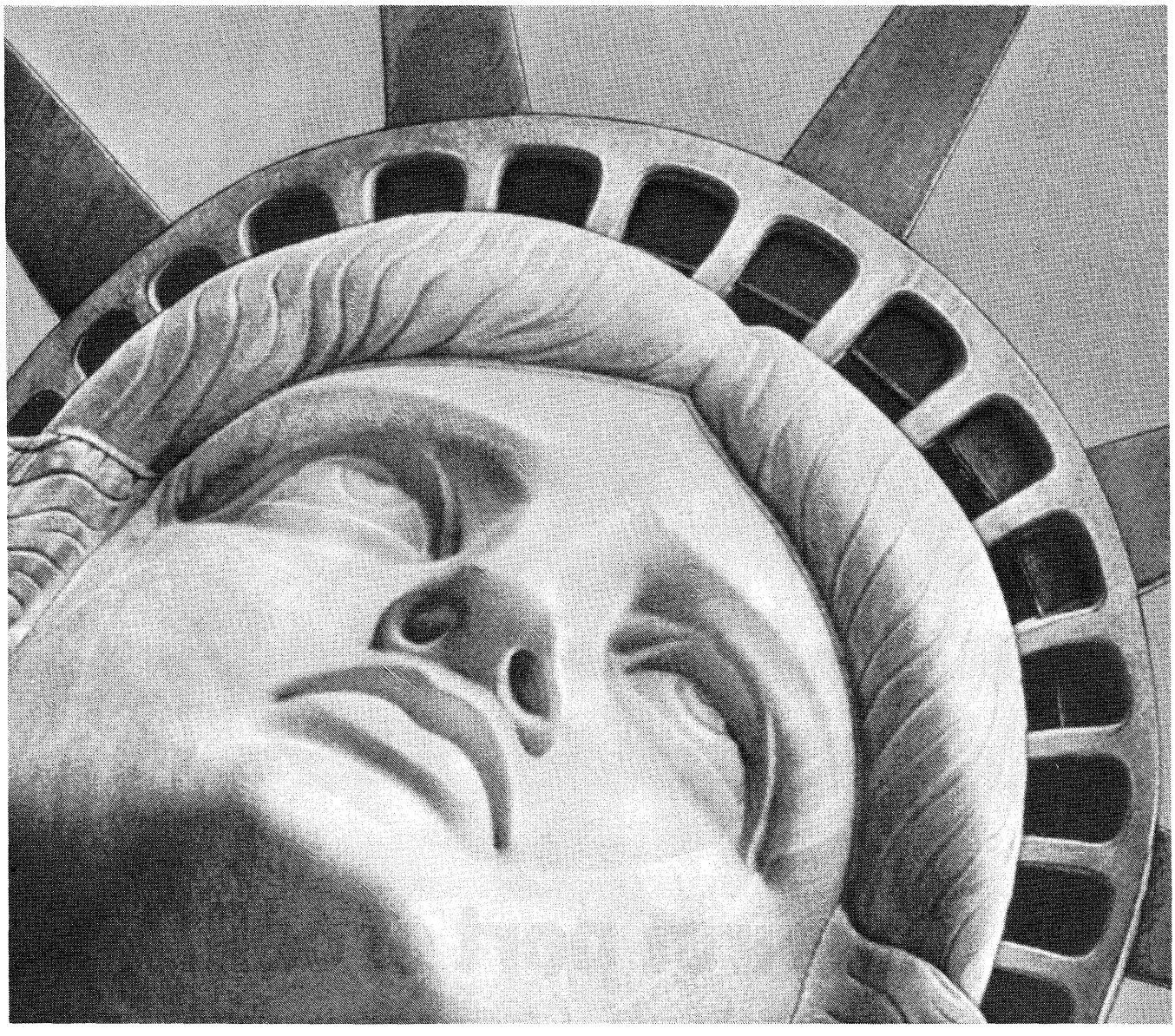

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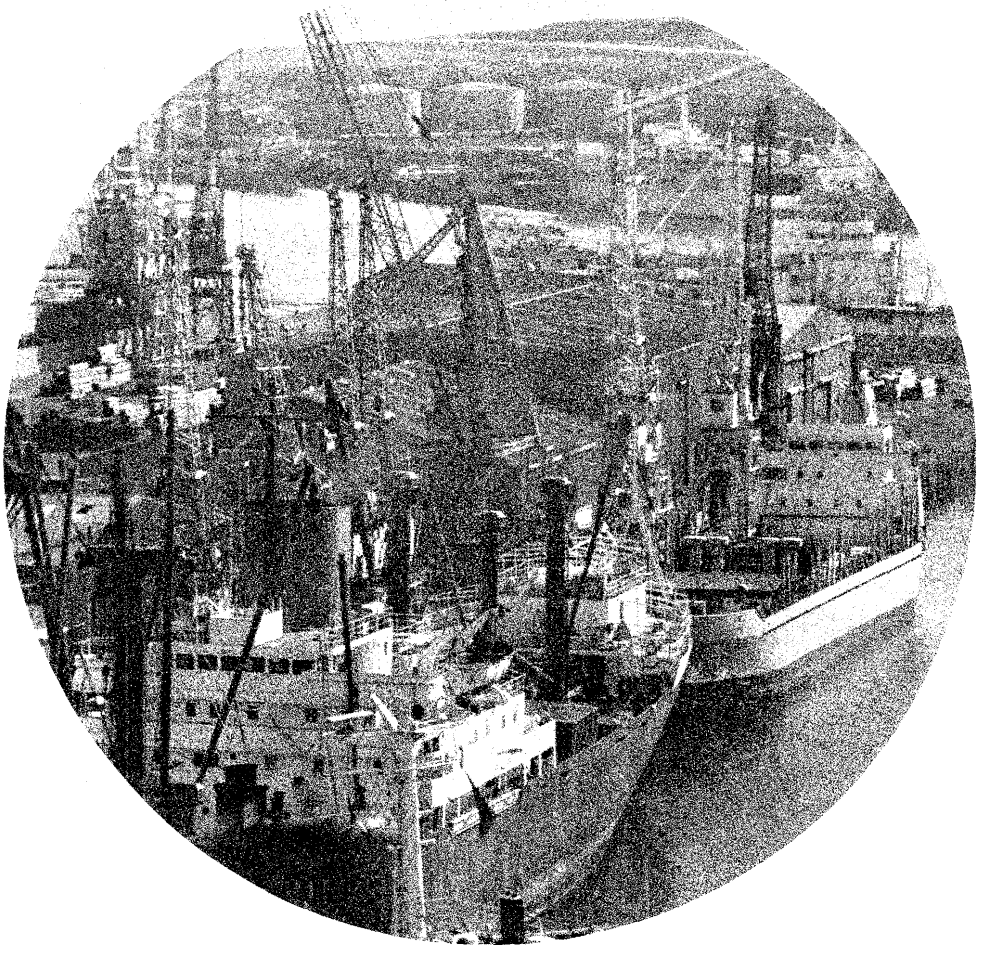

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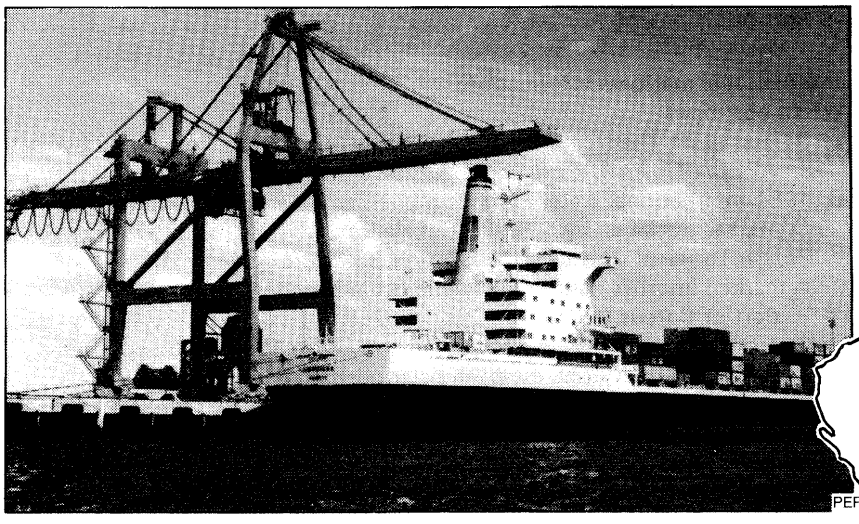

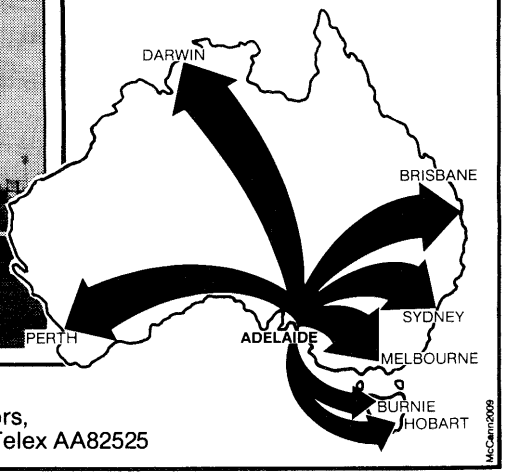

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IAPH announcements and news

Mr. J. Rommerskirchen appointed as Conference Chairman

At the meeting by correspondence of the Board of Directors held on July 20, 1984, Mr. Joerg Rommerskirchen, Head, Office for Ports, Shipping and Transport, Free and Hanseatic City of Hamburg, the Host of the 14th biennial Conference of IAPH, was officially appointed as the Conference Chairman. Mr. Rommerskirchen says in his recent communication to the Head Office that the preparations for the Hamburg Conference as well as the Portex '85, which is scheduled to take place simultaneously with the IAPH Conference, are well under way and that the Conference Brochure and invitation will be dispatched to all members of IAPH and potential participants in due course.

Registration Fees for the Hamburg Conference

At the meeting by correspondence of the Board of Directors held on July 20, 1984, the registration fees for the 14th Conference to be held in Hamburg from 4 to 11 May, 1985, per delegate, were decided as follows.

Registration Fees:

Membership Status	DM	(Ref in US$)
Regular	1,450	(535)
Honorary	1,450	(535)
Honorary Retired	600	(222)
Founder Honorary	600	(222)
Associate (A – D)	1,900	(702)
Associate (E)	1,450	(535)
Life Supporting	1,450	(535)
Temporary	1,450	(535)
Non-Member	2,500	(923)

*: Exchange rate as of Jun. 14, 1984
(US$1 = DM 2.7091: for reference only)

IAPH to take part in "Protection of the North Sea Conference" Bremen, Oct. 31/Nov. 1, 1984

According to a recent communication from Mr. A.J. Smith, IAPH Liaison Officer with IMO, IAPH has been invited to contribute to the preparation of the Ministerial Conference. It is expected that a detailed report on the developing situation will be provided to IAPH members in due course.

CCC's 63/64 sessions in Seoul: Observed by IAPH delegates

Attended by the delegates representing 71 countries and 12 intergovernmental and international organizations, the CCC's 63/64 sessions were convened from 21 to 25, May, 1984, at Sheraton Walker Hill Hotel, Seoul, under the hostship of the Korean Ministry of Finance.

In accepting the honorary chairmanship of the Sessions, Mr. Mahn-Je Kim, Minister of Finance, pointed out that since the establishment of the CCC in 1952, the world saw a rapid expansion of trade which had greatly benefitted all its participants and that the work of the CCC, indeed, in acting as a clearing house for information and arbitrating related disputes forstered a spirit of cooperation which contributed much to the progress.

IAPH was represented by Mr. O, Jung-Keun, Assistant Director, Port Planning Division, Port and Harbour Bureau, KMPA.

ESCAP-IRU Meeting on Road Transport, Bangkok, November 20–23, 1984

Dr. G. Ziffer, President, and Mr. P. Groennedijk, Secretary-General, of International Road Union (IRU: P.O. Box 44, 1211 Geneva 20, Switzerland/Telex: 27107), in their communication to the head office dated June 18, 1984, invited IAPH to take part in the ESCAP – IRU meeting on national and international road transport which were intended to discuss such items as follows:–

- Road transport and the future
- Government responsibility for road transport productivity: infrastructures, fuels and vehicles
- Cooperation in the road transport industry and the role of the Associations
- Finance and commercial management in road transport
- Personnel training and fleet management

In view of the growing importance of road transport in the daily life of ports, the IAPH Secretary-General circulated the IRU news among the IAPH regular members in the region and asked them to take the advantage of taking part in the Bangkok meeting.

IRU (founded in 1948, composed of national associations of truck and coach operators spread over 50 countries with more than 100 member organizations) serves the interests of both domestic and international road transport operators, adopts standpoints on many aspects of the industry's day-to-day existence, defending them in inter-

national governmental gatherings. It undertakes in-depth studies, of which some of the most recent have been concerned with: means of access to capital available to road transport operators, the comparative energy requirements of road transport and various combined transportation techniques, road transport and energy, the contribution of many international conventions relating to road transport, the IRU is known throughout the world for its management of the TIR customs transit system for goods transport.

Visitors

- On Jul. 3, 1984, Capt. G.T. Monks, O.B.E., Harbour Master, Port Headland Port Authority & Chairman of PSEC's Marine Safety sub-committee, visited the head office and met the head office staff.
- Mr. Choi, Seung-Youl, Director-General, Port Management & Operation Bureau, Korea Maritime and Port Administration, visited the head office, on July 26, 1984, and met Dr. Hajime Sato and his head office staff. During the meeting it was revealed that Mr. Choi was directly charged with the organization of the 15th Conference in Seoul which will be held from 9 to 16 May 1987 and that he and his staff were determined to do their best to make the Seoul Conference meaningful and enjoyable as were the past conferences. Dr. Sato assured, thanking his and KMPA's willingness and eargerness that the head office would be prepared to cooperate with KMPA's effort towards the 1987 Conference.
  On the same day, Mr. Choi observed the Port of Tokyo on board "Shin-Tokyo Maru" with the officials of the Port.

Membership Notes

New Members

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Office Phone: 3 60 60
(Mr. Alban Ellacott, Director General)

IMO Reports by Mr. A.J. Smith

The Fifty-Second Session of the Council

The Council held its fifty-second meeting from 11–15 June 1984 under the Chairmanship of Mr. W.A. O'Neil (Canada).

The session was attended by thirty-one representatives from Member States, seventeen IMO Members invited under Rule 4 of the Rules of Procedure, and eighteen observers from inter-governmental and non-governmental organizations.

Remembering that the Council is responsible for the organization and structure of IMO and the direction of its affairs on behalf of 125 Member States, and 1 Associate Member (Hong Kong), it is not surprising that a large amount of business is transacted in a full agenda. In so far as only four working days are made available for Council discussions it will be evident that agenda items, some of which have a particular interest to IAPH members, have to be dealt with effectively but quickly. It is a tribute to the professionalism and skills of IMO staff and the dedication of members of IMO's Committees and Sub-Committees that the high quality of their work, apparent from the documentation before Council, simplifies Council's task considerably and enables the time-table to be met.

In dealing on this occasion with what might be called "operational" as distinct from "domestic" matters the format used by Council is to receive detailed reports on progress made with the work programmes of the Maritime Safety Committee; the Marine Environment Protection Committee; the (8th) Consultative Meeting of the Contracting Parties to the 1972 London Dumping Convention; and the International Conference on Liability and Compensation for Damage in connection with the Carriage of Certain Substances by Sea.

Those aspects of the work programmes thought to be of interest to ports will already have been reported to IAPH at the time of the meetings. What remains therefore is to indicate the extent to which their work and recommendations were approved at this meeting of Council.

Report of the Maritime Safety Committee

The report on the 49th session of the Maritime Safety Committee was accepted. Amongst matters noted were the Committee's determination to review its work methods and its long-term work plan at the 50th session in November 1984; to consider action which might be taken, including the organization of a seminar, on proposals dealing with piracy and armed robbery against ships; to examine the question of identification numbers of ships as a means of combatting maritime fraud and piracy; and the Committees preparatory work for the two conferences on SOLAS and on the readoption of the Load Line Convention to be held in 1986 and its intention to intensify its consideration of this subject at the 50th session.

Report of the Marine Environment Protection Committee

The report of the 19th Session of the Marine Environment Committee was accepted, noting, in particular, that 28 States having 68.39% of the world's merchant shipping tonnage, had now ratified or accepted Annexes I and II of MARPOL 73/78.

Council also approved in principle the convening of an inter-sessional working group on the implementation of Annex II of MARPOL 73/78.

Report on the Outcome of the Eighth Consultative Meeting of Contracting Parties to the 1972 London Dumping Convention

Council noted that 53 States were now Contracting Parties to the London Dumping Convention.

Matters to which Council's attention was drawn in the report of the 8th Consultative Meeting of Contracting Parties, of possible interest to ports, included the adoption of Guidelines for the application of Annex III to the Convention dealing with criteria governing the issue of general and special permits for the disposal of wastes at sea; and the adoption of a working plan for the development of criteria for the allocation of substances in Annexes I and II.

As a first step in the plan there should be clarification of the purpose and concepts of Annexes I and II. An ad hoc working group will meet from 18–20 July 1984 to prepare a paper on the matter for consideration, eventually, at the scheduled 9th Consultative Meeting from 23–27 September 1985.

Report on the HNS Convention

Council also noted the report on the outcome of the International Conference on Liability and Compensation for Damage in connection with the carriage of certain substances by sea, details of which have already been reported to IAPH. A decision was left over to the next Council meeting however for such further action as might be deemed appropriate by IMO to arrange and prepare a new and more widely acceptable draft for submission to a diplomatic conference to be convened in the future.

International Maritime Prize

The Council decided to award the International Maritime Prize to Mr. H.R. Bardarson.

Next Council Meeting

The Council decided that its fifty-third regular session should take place from 12–16 November 1984.

The Committee on Technical Co-operation

The Committee on Technical Co-operation held its twenty-fourth session on Tuesday, 12 June 1984, with Mr. A.Os (Norway) as Chairman.

The session was attended by thirty-one representatives from Member States and four observers from intergovernmental and non-governmental organizations, including IAPH.

The matters discussed included;

i) IMO's Technical Co-operation Programme

Particular reference was made to IMO's maritime training activities and its extremely comprehensive programme of fellowships. These had been very much appreciated by developing countries.

Delegates then referred to the wide variety of training and technical co-operation activities being carried out in their respective countries. A special tribute was paid by IMO to UNDP for their continuing support.

The delegate of India referred in particular to the very useful assistance provided to his country in ship-repair and ship-building, and to the national hydrographic school which was now giving training to others from outside India.

The delegates of Chile and Mexico were particularly grateful for assistance received in marine pollution.

ii) Report on the progress of the establishment of the World Maritime University

The academic building and the hostel building were now complete. The city of Malmo (Sweden) had spent a substantial amount on the latter. The present student enrolment was now 136 from 59 developing countries – evenly distributed, but Africa having the largest number of students.

Some visiting professors who are on the roster of the University had agreed to offer their services free of charge.

The main problem remained financial support. With a full population of students of 140 to 150, the annual recurring expenditure required a sum of $4 million. The total assured annual income was only $2.25 million. There was therefore still a shortfall of $1.75 million. There would continue to be a financial problem in the 1985 session.

iii) Progress Report on activities of regional and inter-regional advisers

Emphasis continues to be placed on the role of regional and inter-regional advisers in promoting the implementation of IMO Conventions and Recommendations. They have also contributed to the encouragement of increased membership of the Organization, the training of personnel from developing countries, and provided expert assistance and advice in implementing IMO Conventions and Recommendations.

PORT OF LOS ANGELES

Welcome to Los Angeles ! Meaning of the City Seal

The lion of Leon and the Castle of Castile are from the Arms of Spain and represent Los Angeles under Spanish control – 1542 ~ 1821.

The Eagle holding a serpent is from the Arms of Mexico and represents the period of Mexican sovereignty – 1822 ~ 1846.

The Bear Flag typifies the California Republic of 1846.

The Stars and Stripes indicate the present status of this city in an American States.

The sprays of Olive, Grape and Orange suggest the location of Los Angeles as a city set in a garden. The beaded circle surrounding the shield represents Rosary suggesting the part played by the Mission Padres in founding the city.

Seatec V
Practical Dredging

- Primary *(or capital)* Dredging
  a) Contracted or in-house? The relative merits
  b) Preparation and issuing of tender documents
  c) Selection of contractors
  d) Equipment selection and mobilisation
  e) Co-ordination and superintendance of contractors
  f) Operational experience – case histories
- Maintenance Dredging
  a) Contracted or in-house? The relative merits
  b) Costing and price control of maintenance dredging
  c) Equipment selection and mobilisation
  d) Maintenance and supervision of contracted performance levels
  e) Case histories
- Establishment of local joint-ventures with foreign dredging contractors
  a) For capital dredging projects
  b) For maintenance dredging
  c) Case histories
- Pre-dredging Surveys and Studies
  a) Site investigations and surveys
  b) Hydraulic studies
- Dredger Design and Construction
  a) Simplicity or state of the art? A constructive appraisal
  b) A dredger for all jobs or specialised designs? Criteria for the selection and specification of dredger types
  c) Dredging equipment specification and procurement
- Practical Dredging Management
  a) Optimising equipment use through management systems
  b) Optimising use through planned maintenance programmes
  c) Dredger maintenance and repair
  d) Equipment maintenance & repair, Manufacturers spares & service

Portec II
Practical Port Management and Cargo Handling

- Planning ports and cargo handling facilities to match trade demands.
  Determinants and outline factors. Criteria for selection of "model" plan.
- Planning and implementation of management structure to match port facilities.
  Planning, organisation, training and operations.
- Management economics and finance.
  Principals and practice of port economics and operational finance.
- Port Operations
  a) Operations for general cargo, interface with shippers and shipping companies.
  b) Traffic management.
  c) Documentation and processing: overcoming *"information pollution".*
  d) Transhipment procedures. Implementation of the Through Bill.
  e) Customs procedures: integrating statutory requirements with efficiency of freight documentation.
  f) Port user liason promotion.
  g) Training for efficient port operations.
- Cargo Handling – master or servant of port operations?
  a) Making modern cargo handling systems compatible with the social necessity of large labour forces.
  b) Evaluation of cargo handling systems and criteria for equipment selection and procurement.
  c) Maintenance systems for maximised equipment utilization.
  d) Maintenance training programmes.
  e) Training for optimum use of cargo handling systems.

Seatec V and Portec II

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- Summaries of papers within the subject guidelines are requested to be received by Septemder 1, 1984.
- Summaries to be maximum 250 words.
- All papers to be objective and the authors own work, previously unpublished.
- The papers to be in English, the Conference language.
- Fee payable by Authors is US$200 which includes pre-printed Conference Papers, attendance at any conference session, technical visit, conference lunch and social function.
- Authors of selected papers will be advised by October 1, 1984.
- Full text of papers, maximum 3,000 words + illustrations, to be submitted by December 1, 1984.
- All travel and accommodation in connection with the conference to be met by Authors.

JAKARTA CONVENTION HALL, INDONESIA, MARCH 26 – 29, 1985.

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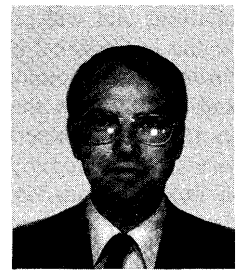
ILO and Its Concern for Port Labour Questions

By Bjorn Klerck Nilssen
Chief, Maritime Branch
International Labour Office



"Far reaching changes is methods of handling cargo in ports are taking place and are expected to become more widespread in the next few years . . . ". "Any action which can assist in getting goods handled more expeditiously and at a lower cost in ports will be of the greatest assistance to economic development in many parts of the world . . . ". These are the first paragraphs appearing in the introductory chapter of an ILO study published in 1969 on "Technical and Social Changes in the World's Ports". This study, of which approximately 3,000 copies were sold and distributed throughout the world, describes the new trends and developments in cargo handling as foreseen at that point of time and the effects this would have on world port labour, the organization of work in ports, the cost of cargo handling, the turnaround of ships and on social conditions in the world port industry. It considers mainly the evolution in the conditions of employment for coping effectively with the new trends in cargo handling expected to take place in subsequent years after its publication. In this context a special chapter is devoted to the training of port personnel as an all embracing activity for laying the basis for a high standard of self reliance and responsibility of each person working in the port industry.

The question of technical and social changes in the world's ports and their effects on job opportunities for port labour was also discussed at an ILO technical meeting held in Rotterdam, the Netherlands in 1969. It was discussed further by the International Labour Conference in 1973 which adopted a Convention and a supplementary Recommendation concerning the social repercussions of new methods of cargo handling in docks. These instruments set out standards for national authorities to improve the working conditions of their respective port labour force and to solve redundancy problems resulting from new cargo handling methods, it being born in mind, however, that port performance will improve due to capital investments being made to adapt ports to these modern developments. These instruments call, among others, for appropriate safety, health, welfare and vocational training being applied to the port labour force. Since 1969 the ILO's technical assistance programme in the port field has been directed mainly towards assisting governments in establishing port training centres. Such assistance has been given to Singapore (1969), Peru (1975) and to the Philippines (1976). In Peru, however, the ILO assisted in the assessment of training needs, the selection of instructors and fellowships abroad, and in the design of the project document which served as a basis for the execution of this project by the Government of the Netherlands. From 1980 until 1984, a UNDP/ILO project in the field of port management and training was undertaken in Turkey. Project activities included the training of trainers, preparation of training curricula, fellowship programmes and the organization of three seminars for senior and middle port management which were held in close cooperation with UNCTAD. At present, the ILO is assisting the Governments of Costa Rica and Mauritius to strengthen and establish port training centres with a view to introducing and further developing permanent training schemes for port personnel.

During the past few years a number of short term missions have also been carried out at the request of governments for the purpose of giving technical advice on specific port matters. Such advice has been given on labour legislation for port workers (Cameroon 1981), problems existing in various sectors of the harbours authority including specific recommendations and project proposals to assist in the solution of these problems (Tanzania 1981), assessment of training needs for port workers (Ivory Coast 1981), training requirements for various ports (India 1982), requirements for establishing a cargo handling corporation (Mauritius 1983), new labour arrangements to be considered on account of developments in modern cargo handling techniques (Cyprus 1983), improvement of dock safety regulations taking into account new working methods which have been introduced since the time these regulations were adopted (Malta 1983), new labour arrangements to be considered on account of redundancy problems originated by the development of cargo being shipped by container (Peru 1984) and measures to be taken for establishing a port training centre (Paraguay 1984).

In 1979, an ILO sub-regional port consultant was stationed in Trinidad to provide advice on port operations, manpower development and training to port authorities and port workers' organizations of the Caribbean region. Similar technical assistance is being provided to the Asian countries by the ILO Regional Adviser and the Associate expert in maritime activities stationed in Bangkok. Services are also available for the African and Central and Latin American regions.

The assistance that may be provided by the ILO's technical cooperation programme in the field of training port personnel may entail the assessment of training needs, the training of instructors, fellowship programmes and curricula development complemented with the necessary audio visual aids. Activities in the field of port training

are also carried out in coordination with the ILO International Centre for Advanced Technical and Vocational Training.

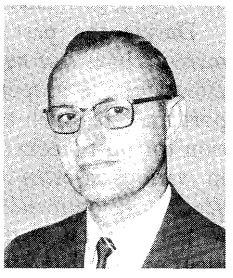
The design, purchasing, shipment and installation of necessary equipment for establishing a port training centre, as well as its organization and management, are fields of technical assistance that the ILO may provide.

The importance for all industries to develop a core of well-trained supervisors is widely recognized. Based on an analysis of supervisory training programmes throughout the world, the ILO has completed a series of 34 modules for supervisory training. These modules have been subjected to rigorous testing and, in close collaboration with the ILO Regional Advisor for Maritime Activities stationed in Bangkok, work has started to adapt them for the training of port supervisors in India. The ILO has also recently sent out a questionnaire to a large number of port authorities in order to obtain their views and their interest in collaborating in the further adaptation of these modules for the training of their supervisors.

Since the publication of the ILO Study in 1969 on "Technical and Social Changes in the World's Ports", great progress has taken place in the containerization of ports. A study is, therefore, now being undertaken by the ILO on the "Development of New Cargo Handling Techniques and Their Implication for Employment and Skills in the World Port Industry". This study, which is being prepared in collaboration with Professor Couper – Head of the Maritime Department of the University of UWIST – Cardiff – will analyze present cargo handling methods and their influence on port labour redundancy, their effect on the organization of work in ports, labour management relations and will give particular attention, among others, to the professional profile of port labour today and in the future. It will commence where the 1969 ILO Study ended and should allow the reader – when published by the ILO in 1985 – to experience a comparison of what was considered valid in 1969 against present reality regarding port labour questions vis-a-vis the process of introduction and development of modern cargo handling in the world port industry.

Automation of the Data Flow in and between Ports

By Mr. R.L.M. Vleugels
Director-General
Port of Antwerp
Chairman of EVHA



The eighties are to become the era of the ever wider application of electronics in data communication.

In modern ports the most advanced technological means are at hand to maximize the turnround of ships and to forward cargo within the shortest time limits.

However, it is experienced regularly that the data flow lays behind the cargo movement which causes delays, disorganization, congestion and poor output of ships' and port operation.

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.

A number of European ports, aware of the necessity of a common approach of the problem, joined efforts. With substantial support of the Commission of the European Communities they established EVHA, Europese Vereniging voor Haveninformatica (European Association for Data Processing in Ports). This Association was founded (1979) by Antwerp (seat of the organization), Bremen, Bremerhaven, Copenhagen, Cork, Genoa, Hamburg, Le Havre, Rotterdam and the British Ports Association on behalf of the UK ports.

At a later stage the ports 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 common 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.

Design of the pilot network

The pilot network was designed by E.V.H.A. as a means of demonstrating the concepts of electronic data interchange. It was also used to evaluate the usefulness of the data being sent and to reveal any practical problems which might occur in the collection and distribution of information within Ports. Since the study would only run for a limited period and had a relatively short time to become operational, it was necessary to select a simple application which would, nevertheless, be realistic. It was, therefore, decided to exchange information on vessel departures but also to supplement this with descriptive data on the ship, using information supplied by Lloyds Shipping Information Services. In addition, the number of participating ports had to be sufficient to give a realistic picture but be few enough to facilitate control and coordination. 9 ports: Clydeport, Antwerp, Bremen, Bremerhaven, Copenhagen, Genoa, Hamburg, Le Havre and Rotterdam – agreed to participate by supplying manpower to enter data and interprete the output.

The work of establishing the network, specifying the system's requirements and monitoring the operation of the

Pilot Network was carried out by a study team of E.V.H.A. using the services of a consortium of European software and systems organizations led by a Danish company. I/s Datacentralen a/f 1959. A star network was devised with the central equipment being located in Copenhagen and connection to it being effected through the switched international telephone and telex network.

Between October '81 and October '82 11,000 vessel movements were handled and over 40,000 messages transmitted.

Towards the end of the study – in August 1982 – a questionnaire was circulated to all users and care was taken to ensure that the answers were given by the people who had actually carried out the work.

From this investigation the necessary conclusions could be drawn for further developments.

It was very encouraging to learn that no significant problems were found in operating the network.

A dangerous substances study

It was unanimously felt in the EVHA Ports that it would considerably increase the safety of the port, its people and the environment if detailed and structured information concerning dangerous substances coming into the port area, remaining there for a certain time and finally leaving that area would be available to the competent authority and emergency services in due time. Therefore a special team was set up in order to study the matter in the context of an envisaged Data Exchange System between ports.

The task of the team was:

- To explore, analyse and report on the extent to which the complexities of handling dangerous substances impact on the efficiency and safety of the ports, their environment and on its administrative tasks. This included the control and monitoring of the movement and stowage of dangerous substances within the Ports Authorities' areas as well as interfacing with inland and sea operators in conformity with agreed international standards.
- To examine existing and potential computer-based solutions for handling within the ports data on dangerous substances; linking different systems within different environments whilst assessing the impact and cost effectiveness of the proposed solutions and securing the availability of an interface with other bodies.

A questionnaire was sent out to 80 ports within the EEC. A 75% response became available (60 ports).

The basic findings of the response evaluation were:

a) Generally ports require the same kind of information concerning dangerous substances before arrival of such goods in the port area. The items of information required were in line with existing international (IMO) recommendations.
b) Information is used to maintain port safety and assist emergency forces.
c) Practically no use was made of data-processing in this field; 37% of the ports that answered to the questionnaire however saw a requirement to make use of data-links and data-banks for immediate availability of information on dangerous substances being in or coming into the port area and for emergency treatment, specialist advice and/or assistance. These ports received about 70% of all the vessels engaged in dangerous substances traffic.

The final network study objectives

The study is an extension of the experiences gained in the pilot network study and in the examination of the problems related to transmission of information on hazardous substances. It must allow to make an assessment of the need for a network and, in the event, to determine the optimum management structure and operation.

The optimal aim is to establish a computer based network for the exchange of information between European Ports initially; it will have regard to and, hopefully, meet the widest range of port-related activity including, but not exclusive to:

1. Port operations;
2. Customs/immigration;
3. Emergency services;
4. Shipping agents/companies;
5. Freight forwarders;
6. Chambers of commerce;
7. Environmental organizations;
8. Vessel traffic services;
9. Governmental organizations;
10. Stevedoring/warehousing and terminal operations
11. Port security;
12. Shipping intelligence.

On behalf of EVHA the work is carried out using the services of a consortium of four European companies led by MBB/ERNO and further consisting of KAMPSAX, CAPTEC and KLM.

The study has been structured in 5 working-phases:

a) as assessment of the current situation in a representative number of European ports to derive specific user and system requirements (Problem identification);
b) a survey of available technical means and methods suitable to satisfy the identified user needs (technical possibilities).
c) the functional and system level technical specification of a feasible data processing and communication system (system definition);
d) consideration of policy implications on the managerial strategy and how best to manage, fund and organize the development and operation of the system (financial & managerial strategy);
e) specification of the means of achieving a complete turn-key data processing and communication system (final implementation plan).

A full report on each of these phases was submitted to the EVHA Technical Committee and Board of Management in September 1983.

The final system should be sufficiently flexible and open ended to reconcile the requirements regarding a high degree of confidentiality with the need to serve an ever increasing number of end-users.

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.

EVHA is open to any cooperation with other national and international bodies and associations because it believes that the efficiency and the optimal application of the communication network can even better be secured when

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The Role of Ports in the Prevention of Maritime Fraud

By ICC International Maritime Bureau

(Paper presented to the Fourth Arab Ports Conference, Tunis, March 1984)
(By courtesy of Mr. Eric F. Ellen, Director, ICC International Maritime Bureau)

The development of port security and policing has, quite naturally, been chiefly concerned with the physical protection of the port installation and the cargo passing through it. The crime that has been of greatest concern to those responsible for port security is undoubtedly that of the straight forward physical theft of cargo, and it is to the resolution of this problem that port security forces have devoted their greatest energies. The problem of maritime fraud has received considerably less attention, and it is undoubtedly true to say that few ports have given any consideration as to what part they might play in the prevention of crime of this kind.

One must first appreciate the nature of maritime fraud before deciding on methods of prevention or procedures of identification and arrest of those responsible.

One of the best expositions of maritime fraud is contained in the report, "Review and Analysis of Possible Measures to Minimize the Occurrence of Maritime Fraud and Piracy", which was prepared by UNCTAD with the assistance of the International Maritime Bureau.

Maritime Fraud is essentially a regional crime and follows the economic characteristics of an area. For example, when there is recession and uncertainty in shipping the deliberate sinking of, or setting fire to ships becomes prevalent. Where there is prosperity and persons are becoming first time buyers or traders, there follows a spate of "documentary frauds" against these buyers.

Deviations of vessels and charter party failures also have clearly identifiable trends.

From the above descriptions, one would believe that maritime fraud can be easily classified. This, unfortunately, is not the case. Each day there is either a new fraud invented or a distinct variation to those previously committed appears.

Those that are normally associated with ports are:—

1. The presentation of false documentation to the port authority for the collection of cargo.
2. The issue of false shorthanding certificates by corrupt port officials.
3. The deliberate mis-description of goods to be exported; whether by content, measurement, or weight. (This comes under the general description of cube-cutting)
4. The exporting by consignors of "rubbish" as an alternative to the goods manifested.
5. The deliberate and illegal discharge of cargo at a port other than the port to which the cargo is consigned.
6. The illegal manipulation of valves at oil terminals or the abuse of documents to defraud the terminal of oil.
7. The illegal and dangerous use by ships of their crude oil cargo for the ships bunkers.

In order to prevent, one must first have a thorough knowledge of the types of abuses that are taking place. This knowledge is not something which can be learned overnight. It therefore follows that there has to be a structured educational process and the creation of awareness before effective measures can be taken.

There are other problems, such as the abandoning of containers by lessors as the result of bankruptcy which may or may not be fraudulent, and in some cases the escape of a ship under civil arrest at a port in order to escape the consequences of the action being taken by aggrieved parties.

The response to each and every problem is different and depends to a great extent on the type of policing at the port in question.

In order to act effectively, the person in charge of the law enforcement process at the port must have the ability to communicate with all or most of the following organizations:—

1. Interpol
   26 Rue Armengaud
   92210 Saint-Cloud
   France
2. International Association of Airport & Seaport Police
   Maritime House
   1 Linton Road, Barking, Essex
   UK
3. International Maritime Bureau
   Maritime House
   1 Linton Road, Barking, Essex
   UK

and in some cases:—

4. International Association of Ports and Harbors
   Kotohira Kaikan Building
   2-8, Toranomon 1-Chome
   Minato-ku, Tokyo 105
   Japan

Interpol will advance requests for action. The I.A.A.S.P. is an Association of Senior Law Enforcement Officers and issues regular bulletins and a Year Book on port security problems. The I.M.B. is an organization supported by the International Maritime Organization, set up specifically to deal with the technical problems of maritime fraud.

The I.A.P.H. is an Association of Port Authorities who are also concerned with the problems of port security and maritime fraud.

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implemented on a worldwide scale.

It is clear that, at some point in a not too distant future, this important ECC initiative will have to fit into and supplement a much wider concept of port telematic information management to replace the centuries old documentary system which still fills numerous public and private offices with innumerable pieces of official and commercial paper. *(HINTERLAND)*

Future Harbour Structures

— The Case of Sweden —

By Bengt Holmgren and Morgan Williamson
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Sweden

Since World War II, commerce and industry have undergone major changes, primarily in terms of increased large-scale production and specialization and, consequently, internationalization. This process of change has also been clearly reflected in changes in the transportation system. The increasing importance of transportation has meant that businesses have become increasingly aware of the necessity for careful planning of their transportation, which has resulted in a more holistic conception of the relationship between production and transportation. In the past, each individual means of transportation was often considered in isolation, whereas today the entire transportation network is naturally considered a unit which can be examined in terms of the individual parts of the whole, the various aspects of transportation and product handling.

This holistic conception has also begun to be reflected in society's notion of the transportation system. There has been continual change in the role played by the harbour in this course of development. Previously the focal point of local operations, today the harbour has become an increasingly specialized phenomenon. As a result of this development, a harbour now serves a much larger area than previously, sometimes even reaching beyond the borders of the country where it is located, and the number of harbours has decreased.

Seen in this light, the changes of the harbour in general and of individual harbours becomes an extremely interesting problem. Will the harbour of the future be able to retain the central role played by the harbour of today in Swedish commerce and industry? What were the determining factors for harbours of the past, and what will they be for the harbour of the future? How is Swedish harbour structure likely to develop by the year 2000? These are some of the questions this project has attempted to answer.

Extensive efforts have been made, in various contexts, to examine aspects of the current Swedish harbour system and to attempt to outline a system for the future. Often these efforts have been more or less explicitly focused on consolidating, closing down, or altering the structure of existing harbours.

Although the material available for decision-making has increased, very few concrete proposals have been carried out, not least because of the political difficulty of executing decisions which, for example, would cause one or more harbours to be closed down. A parallel can easily be drawn between such decisions and the storms of protests which often arise when the closing down of a railway network is proposed. These protests are not always 100 per cent objective. Rather they are often clearly based on community feeling.

The development of commerce and industry and their patterns of centralization and decentralization are among the decisive factors for the future structuring of the harbour system. One central aspect of this development in Swedish industry today is the increasingly highly processed nature of the goods produced which, in turn, leads to a decreased dependence on raw materials. In the long run this will mean further concentration of industry, particularly to Southern and mid-Sweden.

As a result, the large domestic markets for our harbours will move south, and the importance of Northern Sweden will decrease. Thus it can be seen that the future changes in commerce and industry will favor the harbours on the southern and western coasts of Sweden, particularly in light of the increased internationalization of commerce and industry which is underway.

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To identify fraudsters is difficult. Their profile is not spectacular and the frauds are not easy to investigate without some prior information or intelligence. There, however, are some practical measures that can be introduced which include:—

1. The appointment, in each port, of an Intelligence Officer with special responsibilities for liaising with local and international organizations, including port management, police and security forces, the International Maritime Bureau, port users and his counterpart in other ports.
2. The weighing of containers coming into the port. This relatively simple measure would help to eliminate many cases of fraud involving shipping of substituted low value goods or scrap.
3. Ensuring that the chief of the port police has the right to report directly to the port Chairman, particularly where there is evidence of corruption within the port.
4. Ensuring that those responsible for security in the port have a thorough knowledge of the operational systems of the port; this is of particular importance in the case of oil terminals, where a certain degree of technical knowledge is essential.
5. Educating port police and security forces in all aspects of maritime fraud, with particular emphasis on the creation of an international perspective.
6. Taking an active interest in cases where vessels become subject to judicial arrest whilst in the port, with possible involvement where necessary, particularly in respect of ships documents.

It must be emphasized that the first priority in any programme of maritime fraud prevention must lie in the education and training of port and security personnel, coupled with the creation of an efficient intelligence system.

Once this foundation has been established, specific problems of fraud which relate to a particular port can be easily identified, and suitable countermeasures initiated.

Between the mid-seventies and early eighties total exports from Sweden dropped by approximately 25%, from 62 million tons to 47 million tons, mostly owing to the decline in the export of iron ore. During this period, imports fell from 50 million tons to 43 million tons, or by just below 15%.

The redistribution among means of transportation is naturally of great interest in this context (see figure 1), as it has been clearly notable for all Swedish foreign trade. There are statistics for all types of traffic, both short and long distance. A study of the period from 1950 to 1980 indicates that shipping decreased, while railway transports remained generally unchanged and road transports increased. It should be noted that these figures include much transported goods such as iron ore and oil, but that seen in terms of a long-term trend, they substantiate the argument below, which also indicates major shifts in regional transportation, where all means of transportation are in stiff competition with one another.

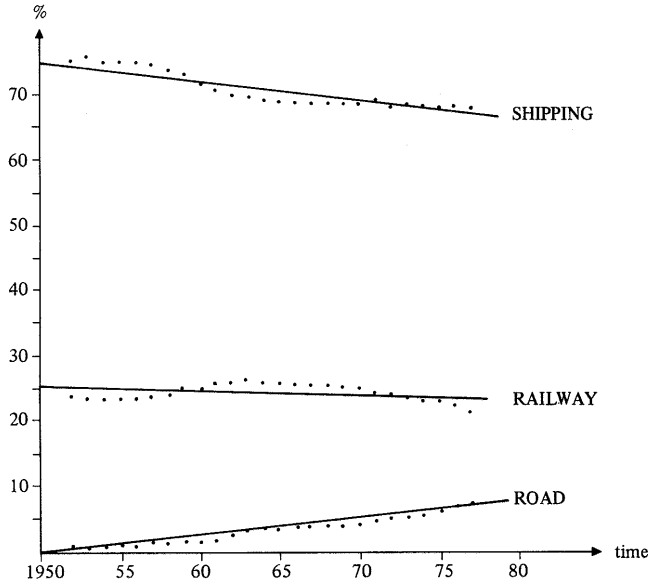

Figure 1 Long-range trend in the redistribution among means of transportation in Swedish foreign trade.

It has been asserted in many contexts that there is a connection between the means of transportation used and the relative value of the product. The possibility that there is such a connection is particularly interesting in consideration of harbours, since it would imply that conventional shipping would decrease with time, owing to the increasing value of products. Table 1 shows the product values for Swedish foreign trade for a number of years. One of the outstanding facts which can be seen in the table is the increase in product value per kilo for the most highly-processed goods. It is in these product groups that the share of land transports has increased during the corresponding period. This is especially true of product groups such as fresh fruit, ore and scrap metal, chemical products, machines and various types of processed goods.

Of course a number of factors affect a company's choice of means of transportation, such as sensitivity, regularity, safety, etc. In order to obtain more facts in this area, our project included a questionnaire survey issued to some 40 large industries in mid-Sweden. They were asked about their view of factors determining their choice of means of transportation, and how their choice has changed over the last decade, i.e. throughout the 1970s.

Table 1 Product values (deflated) for Swedish foreign trade. SEK/kg.

Year	Import	Export
1960	0,58	0,42
1965	0,66	0,48
1970	0,57	0,53
1975	0,67	0,71
1976	0,68	0,64
1977	0,67	0,70
1978	0,70	0,71
1979	0,71	0,70
1980	0,75	0,75
1981	0,76	0,83
1982	0,83	0,92

It can generally be said that the companies surveyed followed the general trends which have taken place in the transportation system quite well, and because of their geographical location these companies can be assumed to have had some freedom of choice.

Ten companies reported no change, while nineteen (more than half) reported a change to road transport. And what factors determined this? The companies were asked to freely rank various alternatives, the most important of which are presented in table 2. It can be seen that the expense/price and the time factor were ranked highest. Service and safety were also given high priority. It is interesting to note that companies with highly-values products had a slightly different ranking order: speed, risk of damage and expense/price.

Table 2 Factors determining the choice of means of transportation. Ranking

Reason	Companies ranking the reason as no.			
	1	2	3	4
Expense/price	9	8	4	1
Speed	10	5	4	2
Service	2	5	3	3
Safety	2	3	1	–
Risk of damage	3	2	1	–
Volumes	2	1	–	–
Technical equipment	1	3	2	1
Flexibility	2	1	1	–
Rule-systems	–	1	1	1
Location	1	1	2	–
Other	3	2	–	–
TOTAL	35	32	19	8

The role of the harbour has changed greatly with time. Whereas harbours initially had a wide variety of transportation options, the development has moved toward differentiation and specialization. Consequently, each harbour now serves a much larger area than previously, sometimes even reaching beyond the borders of the country. This development, in addition to the fact that land transport has become increasingly less expensive and gained in competitive power, has led to a decrease in the total number of

existing harbours.

As can be seen in table 3, the status of the various harbours in relation to one another has also changed. The greatest changes have taken place far down in the hierachy, while the largest harbours have remained reasonably stable during our study period. These changes are attributable to the relatively large differences in development for different product groups. Mass produce has not changed greatly during the study period, while wholesale-retail goods have increased. Oil and petroleum products have shown a clear tendency to decrease.

The changes in the total turnover of goods between 1965 and 1981 was relatively small. As indicated above, there have been relatively great changes in the position of the individual harbours in the harbour system. On the whole, the largest and smallest harbours lost shares between 1965 and 1981, while the middle range harbours gained correspondingly. Thus, during the period in question, the "winners" would appear to be those harbours in the interval between the tenth and twenty-fifth largest in size (see figure 2).

There is an unambiguous trend with regard to the marked redistribution of goods in the harbours in the various sections of the Swedish coastline. The nothernmost Swedish coast thus decreased from 22% in 1959 to 13% in 1981. Similarly, the east coast and Lake Mälaren decreased from 39% to 25%. The south coast increased slightly, from approximately 18% to 21%, and the west coast and Lake Vänern increased greatly, from 21% to 42%, i.e. an approximately 100% increase over a period of approximately 20 years. It can thus be seen that over a period of slightly more than 20 years, the share of the turnover of goods held by the north and east coasts and Lake Mälaren decreased from approximately 60% to approximately 40%, while the south and west coasts and Lake Vänern increased from approximately 40% to approximately 60% (figure 3).

These changes are primarily attributable to increased oil and petroleum product shares for the west coast, and the corresponding decrease for the north and east coasts, and to a simultaneous decrease in the share of mass produced goods held by these coastal sections.

The financial situation is bad for many harbours, and they depend on (municipal) subsidies for their survival. These will probably be increasingly difficult to obtain in the future, and the demands on the harbour to be financially profitable will rise.

One reason which speaks strongly in favor of continued support, is that harbours are often considered to be important to the social structure, that is as direct and indirect

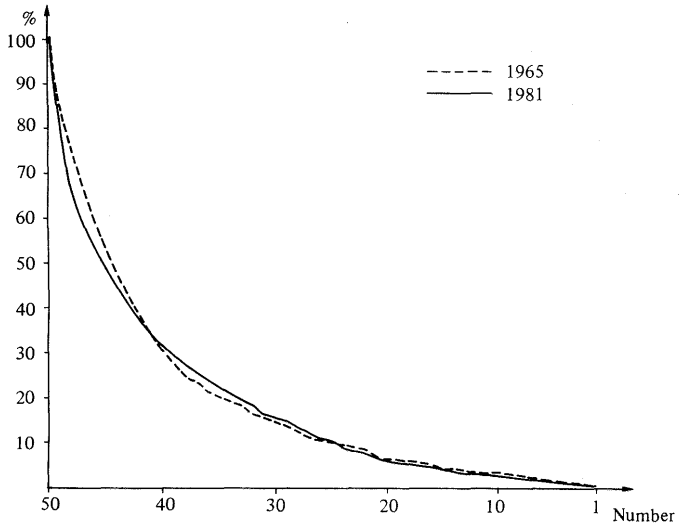

Figure 2 Relative distribution (cumulative) of the total turnover of goods for the 50 largest harbours 1965 and 1981.

Table 3 The fifty largest harbours 1981, 1979, 1975, 1969 and 1965. 1000 tons.

1981	1979	1975	1969	1965
Göteborg	20 208 Göteborg	21 674 Göteborg	20 400 Göteborg	22 578 Göteborg	11 850
Brofjorden	14 013 Brofjorden	9 669 Luleå	7 685 Luleå	8 513 Stockholm	6 162
Helsingborg	7 880 Helsingborg	7 977 Helsingborg	6 704 Stockholm	6 453 Luleå	5 758
Stockholm	6 006 Luleå	6 665 Stockholm	5 552 Helsingborg	5 418 Helsingborg	5 599
Luleå	4 526 Stockholm	5 885 Malmö	4 438 Malmö	4 909 Oxelösund	3 925
Malmö	4 286 Oxelösund	5 147 Brofjorden	4 251 Oxelösund	4 496 Malmö	3 827
Trelleborg	3 976 Malmö	4 325 Gävle	4 220 Gävle	3 403 Gävle	3 407
Gävle	3 061 Trelleborg	4 208 Trelleborg	4 072 Norrköping	3 197 Trelleborg	3 375
Oxelösund	3 028 Norrköping	3 694 Norrköping	3 771 Nynäshamn	3 076 Norrköping	2 548
Norrköping	2 814 Nynäshamn	3 473 Oxelösund	3 711 Västerås	2 504 Nynäshamn	2 424
Sundsvall	2 165 Gävle	3 424 Nynäshamn	3 362 Sundsvall	2 483 Sundsvall	2 139
Nynäshamn	2 142 Sundsvall	2 754 Sundsvall	2 521 Trelleborg	2 413 Västerås	1 541
Slite	1 831 Karlshamn	2 375 Västerås	1 891 Karlshamn	1 459 Skelleftoå	1 165
Västerås	1 779 Västerås	2 155 Karlshamn	1 886 Skelleftoå	1 265 Karlshamn	1 070
Karlshamn	1 741 Stenungsund	2 044 Stenungsund	1 771 Stenungsund	1 208 Landskrona	945
Halmstad	1 556 Uddevalla	2 022 Uddevalla	1 598 Uddevalla	1 207 Umeå	861
Skelleftoå	1 554 Halmstad	2 004 Umeå	1 287 Umeå	1 118 Slite	827
Uddevalla	1 553 Skelleftoå	1 503 Landskrona	1 283 Landskrona	1 076 Örnsköldsvik	786
Stenungsund	1 266 Umeå	1 375 Slite	1 280 Slite	972 Uddevalla	786
Umeå	1 169 Landskrona	1 351 Halmstad	1 066 Halmstad	969 Halmstad	736
Karlstad	1 104 Ystad	1 149 Karlstad	990 Örnsköldsvik	860 Karlstad	713
Ystad	1 056 Köping	1 085 Umeå	905 Karlstad	839 Kalmar	676
Wallhamn	1 048 Varberg	1 042 Köping	903 Köping	725 Köping	639
Köping	1 017 Karlstad	1 040 Varberg	821 Kalmar	712 Ångermanälven	599
Varberg	1 009 Slite	986 Ystad	744 Söderhamn	565 Oskarshamn	475
Landskrona	977 Husum	707 Örnsköldsvik	628 Kristinehamn	547 Kristinehamn	447
Husum	773 Oskarshamn	707 Kalmar	581 Hargshamn	500 Husum	431
Örnsköldsvik	733 Wallhamn	690 Oskarshamn	551 Varberg	491 Piteå	426
Piteå	714 Piteå	624 Husum	544 Husum	487 Stora Vika	416
Oskarshamn	641 Kalmar	608 Wallhamn	533 Oskarshamn	487 Lidköping	302
Visby	512 Örnsköldsvik	598 Piteå	522 Hallstavik	438 Varberg	359
Kalmar	488 Söderhamn	553 Lidköping	516 Ångermanälven	422 Söderhamn	355
Roslagshamnar	473 Lidköping	529 Söderhamn	492 Åhus	369 Otterbäcken	348
Hallstavik	458 Visby	492 Karlskrona	444 Ystad	369 Stenungsund	343
Falkenberg	454 Falkenberg	455 Hallstavik	397 Roslagshamnar	367 Åhus	297
Åhus	431 Roslagshamnar	455 Åhus	397 Lidköping	366 Visby	293
Köpmanholmen	382 Åhus	435 KristineHamn	392 Wallhamn	365 Hargshamn	289
Lidköping	370 Kristinehamn	406 Visby	386 Karlskrona	357 Degerhamn	263
Kristinehamn	361 Sölvesborg	405 Sölvesborg	384 Piteå	356 Sölvesborg	254
Söderhamn	347 Norrsundet	380 Falkenberg	361 Stora Vika	338 Ystad	250
Sölvesborg	334 Hallstavik	373 Norrsundet	361 Otterbäcken	315 Höganäs	248
Båstad-Torekov	326 Södertälje	359 Trollhättan	335 Visby	307 Södertälje	244
Södertälje	324 Hudiksvall	354 Södertälje	329 Sölvesborg	298 Roslagshamnar	232
Mittersön	278 Stora Vika	330 Roslagshamnar	327 Degerhamn	294 Karlskrona	231
Norrsundet	277 Ångermanälven	327 Hargshamn	321 Södertälje	293 Hallstavik	230
Iggesund	238 Köpmanholmen	258 Ångermanälven	286 Iggesund	258 Vallvik	208
Ångermanälven	231 Iggesund	247 Strå	274 Falkenberg	245 Köpmanholmen	193
Strå	218 Västervik	231 Degerhamn	268 Hudiksvall	226 Västervik	165
Otterbäcken	211 Strå	231 Hudiksvall	246 Köpmanholmen	211 Falkenberg	158
Hargshamn	203 Degerhamn	213 Stora Vika	235 Norrsundet	210 Norrsundet	158

providers of employment opportunities. A number of additional points can be gleaned from our examination of the finances of the municipalities and the stevedoring companies. Not all these observations can be proven in terms of figures, but contain some measure of the authors' subjective opinions.

Harbours with a large proportion of ferried goods appear to function relatively well and to be economically viable, even if the general conditions for the harbour are not particularly good. We have not been able to establish an explanation for this phenomenon, but many of the interested parties hold this opinion. It is assumed, on fairly good grounds, that ferry traffic is quite profitable and that in many cases it subsidises other, less profitable operations. The stevedoring companies also appear to function well, and almost all of them report that they are operating at a profit.

Another part of the substudy of the financial situation of the harbours was an examination of the development of investment costs in relation to the turnover of goods in the harbour. There were found to be some differences in the reports from the various harbours, and this means that they should be interpreted with caution, but some interesting tendencies can definitely be seen. Harbours with a relatively good volume of goods are in a financial position to be able to afford technical development (investments) over the course of time, which makes them able to remain effective harbours with retained competitive power. Harbours with a turnover of goods volume over 1.5 million tons per year appear to have a good chance of existing "on their own strength." There are clearly exceptions situated under the 1.5 million ton limit, but the range of cost level between SEK 3 per ton and SEK 12.50 per ton is certainly very great. This can be seen in the light of the figures for the largest harbours, which are between SEK 3 and 4 per ton in investments.

It has been established above that the turnover of goods in Swedish harbours has undergone great changes. These are also reflected in the line structures of the shipping companies, and their frequencies of calling at the various harbours. Within this project a study has been made of these variables for ten large harbours.

In 1970 a total of approximately 8 400 calls were made at the ten harbours. In 1980 the figure had fallen to approximately 6 200. The harbour of Gothenburg dominated throughout the 1970s, accounting for between 45% and 50% of the calls. Other major harbours include Helsingborg, where the share of calls was nearly doubled during the 1970s, with an increase from 10% to 18%. A slight recession was noted for Malmö, while the number of calls at the harbour of Stockholm fell dramatically, from 16% to 6%.

On the whole, the number of calls fell by just over 25% during the 1970s. Over time the change was evenly distributed, but there were great differences among the harbours. The number of calls only increased at two harbours, Helsingborg and Västeras, during the 1970s. It is worth mentioning that the general agreement between the change in the number of shipping companies and the number of calls per year was relatively good, with the exeption of the harbours of Norrköping and Oskarshamn. It can also be noted that the stagnation took place in conventional traffic, while there were great increases in both ro/ro and lo/lo traffic.

In order to examine the view of harbour development

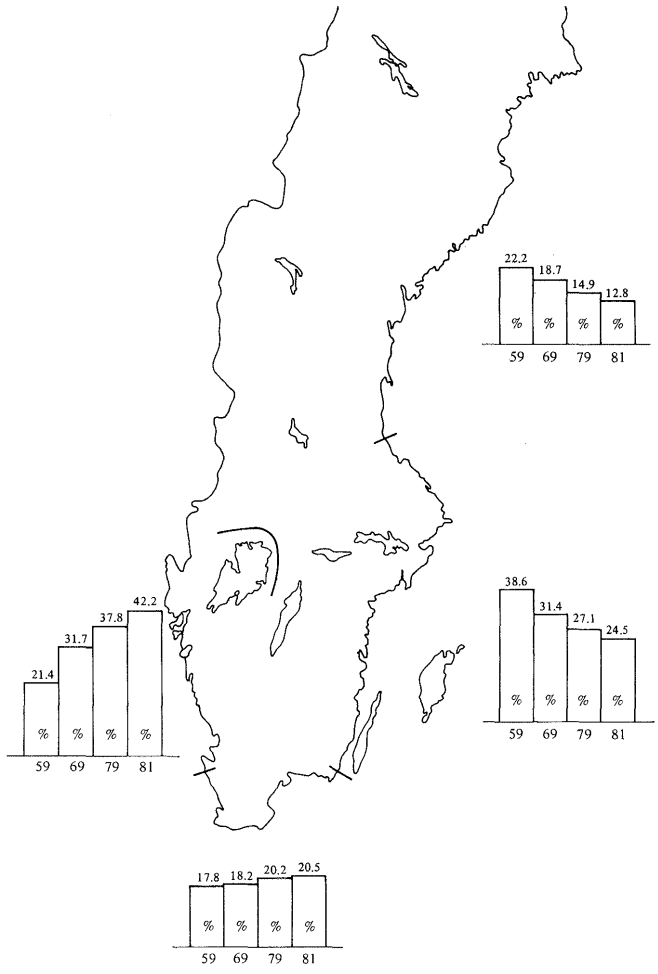

Figure 3 Relative distribution of the total turnover of goods in the 50 greatest harbours by coast-sections.

among various decision-makers, a number of interviews were made. These were supplemented with a questionnaire survey issued to 192 decision-makers whose jobs were in or related to harbour activities. These individuals were asked to reply to a large number of questions regarding their assessment of the significance of various factors for future harbour development. A few points will be discussed below.

Shipping equipment and warehouse capacity are two of the most important assets for the future possibilities of expansion in a harbour. These factors play a more decisive role than the total expenses and fees. The location of the harbour is, of course, also an important prerequisite for future developments. It has been so in the past, and is expected to increase in importance as competition grows.

Of the three main product groups, the decision-makers consider mass-produced goods to have the greatest expansion potential. This should be seen in light of the fact that forecasters anticipate that this product group will stagnate or decrease slightly, as a whole. Therefore, competition among harbours can be expected to increase. Wholesale and retail goods is a product group where the competition from other means of transportation is great and, according to plans, oil will decrease, which explains the low figures reported for these product groups.

The concentration of the harbour system and the shift toward the west and south coasts which have already begun

are expected to continue. However, there appears to be only limited confidence in the idea of regional harbours, or other similar forms of co-operation.

The report goes on to develop three potential future alternatives for development through 1990 and 2000. These alternatives are based on experience gleaned from the interviews and survey questionnaires, and the trends and background material.

The harbours are geographically divided into four sections, the harbours on the north coast, the east coast and Lake Mälaren, the south coast and the west coast and Lake Vänern.

Scenario I is based on a follow-up of current trends, in accordance with the anticipated development of foreign trade. (One of the cornerstones of our work with these scenarios is a future assessment of the development of foreign trade made within our project.) Generally, this alternative implies relatively moderate changes, the greatest of which is calculated to be for the west coast harbours, because of the considerable decrease in oil and petroleum products which is anticipated. On the whole, this alternative would mean an increase of just a few per cent for the northern harbours, a basically status quo situation for the harbours on the east coast and in Lake Mälaren, relatively great growth for the harbours on the south coast and a relatively great decline for the harbours on the west coast.

Scenario II is based partly on the idea of development in the harbours/harbour sections found in the questionnaire survey to decision-makers and partly on the forecast made in scenario I. However, in this alternative growth is regionally adjusted. Generally, this alternative is marked by relatively slight changes. Seen by share, the northern harbours decrease by a few percentage points, as do the harbours on the east coast. There is basically a status quo situation for the west coast. The greatest changes are for the south coast harbours, which increases by 5 per cent by the year 2000.

Scenario III is a "land transport oriented" alternative. This orientation may be related either to increased ferry traffic (for both truck and railroad ferries) or to the development of bridges to the continent late in the period. The scenario is based on certain small quantities of goods being transferred from mass produced goods to wholesale-retail goods and ferried goods. In addition, a generally greater increase in wholesale-retail goods and ferried goods is expected. A third condition in some redistribution of wholesale-retail goods from the north and east coast harbours to the south and west coast harbours.

Development in accordance with this alternative would mean a smaller total decline in the amounts of goods during the 1980, followed by a status quo. The north and east coast harbours would loose relatively great shares, while the west coast harbours would only increase slightly. The "winners," then, would be the south coast harbours which, in this alternative, would increase by an approximately 40% share.

Finally, the relative changes for the harbours in the various coastal sections are shown in Table 4.

A large amount of material on harbour development is presented and analysed in the study discussed above. Each factor is like one piece in the puzzle, and each factor has affected and will go on affecting the Swedish harbour structure. In conclusion, we would like to make a brief presentation of the major conclusions we can draw from our study:

Table 4 Future alternatives for development through 1990 and 2000. Percent.

	Coast-sections											
	North			East			South			West		
	1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000
Scenario I	13	13	14	25	25	25	21	24	28	42	37	34
Scenario II	13	11	10	25	24	23	21	23	25	42	42	42
Scenario III	13	9	8	25	22	20	21	26	29	42	44	44

- Harbour policies and harbour planning to date have had very little effect on actual harbour development, owing, i.e., to the lack of means of control. This situation is not expected to change in the foreseeable future.
- The quantities of goods in the Swedish harbours have stagnated. Harbours with a combination of mass produced goods, petroleum products, wholesale-retail goods and ferried goods have managed well, while harbours with an uneven distribution of goods have generally fared less well. Harbours located on the north and east coasts generally indicate a negative development of goods, while development has been positive for the west and south coast harbours.
- The general trend toward higher product values has meant that an increasingly smaller share of foreign trade is shipped by sea. Over the last decade, railroad transport shares and, to an even greater extent, road transport shares, have increased.
- There have been great changes in shipping company and line structures. During the 1970s the number of calls at the large Swedish harbours decreased by over 25%. The share of conventional traffic dropped from 80% to 50%. Traffic within Scandinavia and to Europe decreased most.
- The financial situation of the harbours appears to be deteriorating gradually. Great investments in relation to turnover have increased costs. The largest harbours and those with ferry traffic appear to have managed best.
- A survey questionnaire carried out among goods owners indicates that shipping by sea has considerable disadvantages with regard to the transportation chain routines, regularity and the time factor. These factors speak in favor of road transport.
- Most interested parties within the harbour sector and the transportation field in general assess the future competitive power of shipping by sea to be relatively poor.
- There has been a general concentration of the harbour system which will probably continue and lead to the development of fewer harbours in the future.
- It is essential that the harbours make greater efforts to "meet the market." This can be done primarily in terms of investments in transport equipment. Yet a warning should be issued against overinvestment in harbour facilities, etc.
- One of the most interesting questions for the 1980s and 1990s will be the possibility of co-ordinating the harbour administrations and the stevedore companies, possibly in the form of independent companies. This possibility has been assessed to be one of the major means of future competitive power.
- There appears to be only limited interest in more con-

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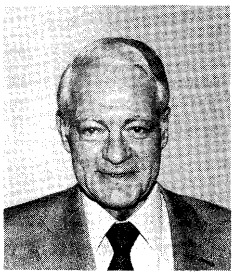
Port of Copenhagen's Port Council

By Erik Hesselbjerg
Lord Lieutenant,
City of Copenhagen
Chairman,
Port of Copenhagen Authority



The management wished to a larger extent to ensure a mutual exchange of information between the port administration and the users of the port.

The intention being to create a advising council where both principal matters as well as more down to earth themes could be discussed.

In order to formalize this exchange of information we proposed to establish a body with representatives form customers and users of the port.

These thoughts and ideas led to the establishment of the Port of Copenhagen's Port Council.

By establishing this council we have created a platform, which to a large extent will enable us to increase the service and efficiency of the port.

The 19 members of the council are appointed by 16 organizations and the first meetings of the council have already led to recommendations which have been of great value to the port administration.

Below we give you the rules and general lines for the Port of Copenhagen's Port Council:

General Lines for the Port of Copenhagen's Port Council

1. The Port Council is established as a consultative organ for the Copenhagen port administration.
2. The purposes of the Port Council are:
   a) to contribute towards strengthening and enlarging the confidence in and utilization of the Port of Copenhagen,
   b) to work as consultative organ for the port administration in all questions of general and mutual interest as regards subjects of importance for the development etc. of the port,

(Continued from page 19)

crete forms of co-operation among harbours in the form of "regional harbours." However, there is a greater interest in more informal types of co-operation, although this is also an important question for future competitive power.

- The role of the harbour is going to change. From dealing mostly with administration and handling of shipped goods, they will be investing more in becoming an integrated part of the chain of transportation.
- The tasks assigned to the harbours will be more diversified. There will be increased investment in other non-traditional harbour functions, such as warehousing, repackaging of goods, putting goods in order, etc. This will make the harbours better able to compete with operations "outside" the harbours.
- Future assessments of quantities of goods indicate greatly decreased quantities of oil and petroleum products, stagnating or slightly decreased quantities of mass produced goods and slightly increased quantities of wholesale-retail goods.
- Various future forecasts (scenarios) unilaterally indicate that the north and east coast harbours will be the greatest future "losers," while the south and west coast harbours will be the "winners."
- Around-the-world-lines and/or less influence for Swedish shipping companies in transoceanic direct lines would mean an increase in land transports. If there is feeder traffic by sea it will only be advantageous to a small number of relatively large harbours, and it will be disadvantageous to Gothenburg's harbour.
- There are clear indications of an accentuated transfer to land transport, i.e., as a consequence of the increase in more highly-refined products. This type of development will be to the advantage of the south coast harbours.
- In the discussion above of the factors underlying a change (concentration) of the harbour system, the idea of new technology (types of ships, transport equipment, etc.) has been implicit, although it has received no specific treatment. However, there is no evidence that there will be technical changes of decisive significance for the changes in harbour structure.
- A large number of factors have indicated that development will be toward concentration of harbours to south and west Sweden. The economic realities in combination with the lack of goods will probably necessitate discussions about closing down a number of harbours. The greatest danger is for narrowly oriented harbours in north or east Sweden. If, in addition, these harbours are operating at a loss – possibly owing to far too great investments having been made in the past – then their possibilities of survival are that much less.
- Harbours with a differentiated turnover of goods of over 1.5 million tons per year would appear to have stable opportunities for development.
- Harbours which lose goods are not necessarily exposed to the threat of being closed down, on the condition that they can adapt to their remaining traffic or to catering for particular market segments.

Concentration of harbour activities in accordance with the points discussed above may have a number of consequences for other aspects of the transportation system:

- The National Swedish Administration of Shipping and Navigation may re-organize its resources, since there will be fewer shipping lanes to maintain. However, it should be noted that the traffic-dependent costs are relatively small, and that most of the costs are fixed.
- Restructuring of the harbour system may lead to a "load" on certain parts of the railroad network, while other portions of the network (the portions which previously "fed" the harbours) may be used less.
- A redistribution of goods from shipping to road transport increases the pressure on the roads, particularly on the often already heavily-trafficked roads in south and mid-Sweden.

c) to ensure a mutual exchange of information between the port administration and the users of the port.

3. The Port Council is to consist of 19 members, appointed by the following organizations:

Danish Shipowners' Association	1
The Shipowners' Association of 1895	1
Danish Shippers' Council	2
Danish Association of Freight Forwarders	1
Association of Leaseholders in Danish Ports	1
The Danish Shipbrokers' Association	2
Copenhagen Association of Brokers	1
Copenhagen Port Employers' Association	1
Danish Trades Union Association	2
Danish State Railways	1
Danish Road Haulage Organization	1
Danish Petroleum Industry Association	1
Association of Danish Stevedores	1
Association of Danish Fishermen	1
Denmark's Yachting Association	1
Copenhagen Port Administration	1

An appointed member is to have connection with the Port of Copenhagen either as a customer or as a user.
Should a member resign, the organization in question will see that a new member is appointed.
The members are appointed for a period of 6 years (corresponding to the Harbour Board's time of office), the first time until January 1, 1986.
The General Manager, the Assistant General Manager and the Director of the Copenhagen Free Port & Stevedoring Company Ltd. partake in the Council meetings. Besides the Chairman of the Harbour Board Free Port Company can participate.

4. The organizations of the Port Council elect among themselves a Chairman and a Deputy Chairman.
The Port Council may set up committees to discuss subjects of special interest.

5. The Port Council calls at least 2 annual meetings.
Meetings are called at at least a fortnight's notice. An agenda for the meeting – drawn up by the Chairman – is forwarded at the same time.
Extraordinary meetings may be called by the Chairman or at the request of at least 3 members jointly, – if possible at the same notice as mentioned above.
Minutes containing a short version of the various points of view expressed are to be sent to all members after each meeting.
Recommendations from the Port Council to the Harbour Board are to contain information about which organization approve of the recommendations – possibly have a diverging opinion.
The agenda is to contain the following fixed items:
a) Briefing by the General Manager
b) Information from the organizations represented regarding facts of interest to the port and its users.
c) Other business
The port administration appoints a secretary to the Port Council, and the General Manager may call any of his staff members to join the meetings of the Port Council.

Both the board and the management have found it extremely valuable to be able to work in close contact with the council members and we hope that both the port and the users will benefit from this in the future.

Hamburg Port Authority's Traffic Safety Scheme

By Captain Erhart Paschburg
Port Superintendent
Port of Hamburg

The Port of Hamburg is operated by the Free and Hanseatic City of Hamburg in co-operation with the city's private business community. Ship movements within the port are regarded basically as private transport, but it is the fundamental duty of the state to ensure public order and safety, and to protect the environment. Precautionary measures against general hazards cannot be regarded as a merely private or individual matter. Responsibility for exercising control in this area indisputably lies with the state. The Port Authority's traffic safety scheme is the basis for the section of Hamburg's public order regulations which deal with shipping.

The Port Authority's traffic safety scheme is derived from its general mandate – to ensure the safety and smooth flow of shipping traffic, and to prevent hazards and environmental damage arising through shipping activity. In terms of everyday practice, this means that the safety, order and flow of public shipping traffic must be maintained restored, or improved by means of increased supervision, regulation and control.

If there is a danger of flooding, or if a serious accident occurs in the port area which involves or affects shipping traffic, the Port Authority will take action in accordance with an emergency plan which is continually revised and updated. In the event of an emergency this plan ensures not only the availability of modern, efficient technology, but also that competent personnel can be at the scene immediately.

In other words, the aim of the traffic safety scheme is to ensure the smooth flow of traffic and prevent damage to the environment, to reduce the risk of collision or other accident in the port, and to make sure that suitably equipped and organized man-power is available if an accident does occur.

Ideally, as the body responsible for maintaining order, the Port Authority should know the exact position and activity of every ship and craft in its area at any given moment.

This is largely the case with stationary traffic, but with moving traffic it is possible only to an extent which cannot be clearly defined. The main objective is to ascertain all sources of disturbance at an early stage and then to take preventive action to control or eliminate them.

The Port of Hamburg's traffic safety scheme has a "passive" and an "active" component. The passive com-

ponent embraces all the practical measures which serve to ensure the orderly flow of shipping traffic within the port. These include recommendations for port planning and extension, and for demarcation of the navigation channel with beacons and shipping signs.

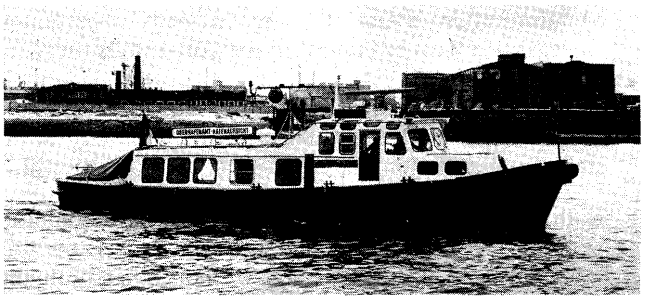
The active component includes the provision of up-to-date information on navigational conditions, shipping-advise via radio on the basis of data obtained from the port's radar network, and the enforcement of regulations (though this is carried out only under exceptional circumstances).

The traffic safety scheme is based on a number of **laws and regulations,** including:

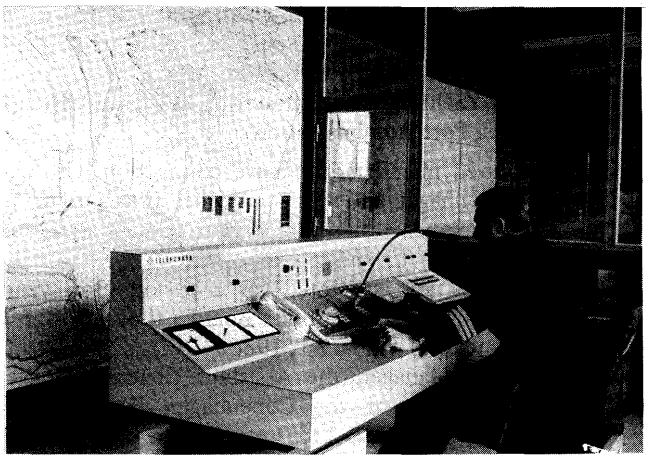
- the Harbor Traffic and Shipping Law
- the Harbor Traffic Code
- the German Regulations for Preventing Collisions on Fairways
- the International Regulations for Preventing Collisions at Sea
- the Law on Harbor Pilotage
- the Harbor Licence Regulations
- the Law relating to Harbor Craft
- the Federal Law on Emissions
- the Law on Public Order and Safety
- and stipulations included in the International Convention for Safety of Life at Sea.

The extreme rarity of damage to the environment caused by shipping traffic, and of traffic situations classified as "dangerous" – not to mention actual accidents – bears witness to the clear formulation and authority of these laws and regulations.

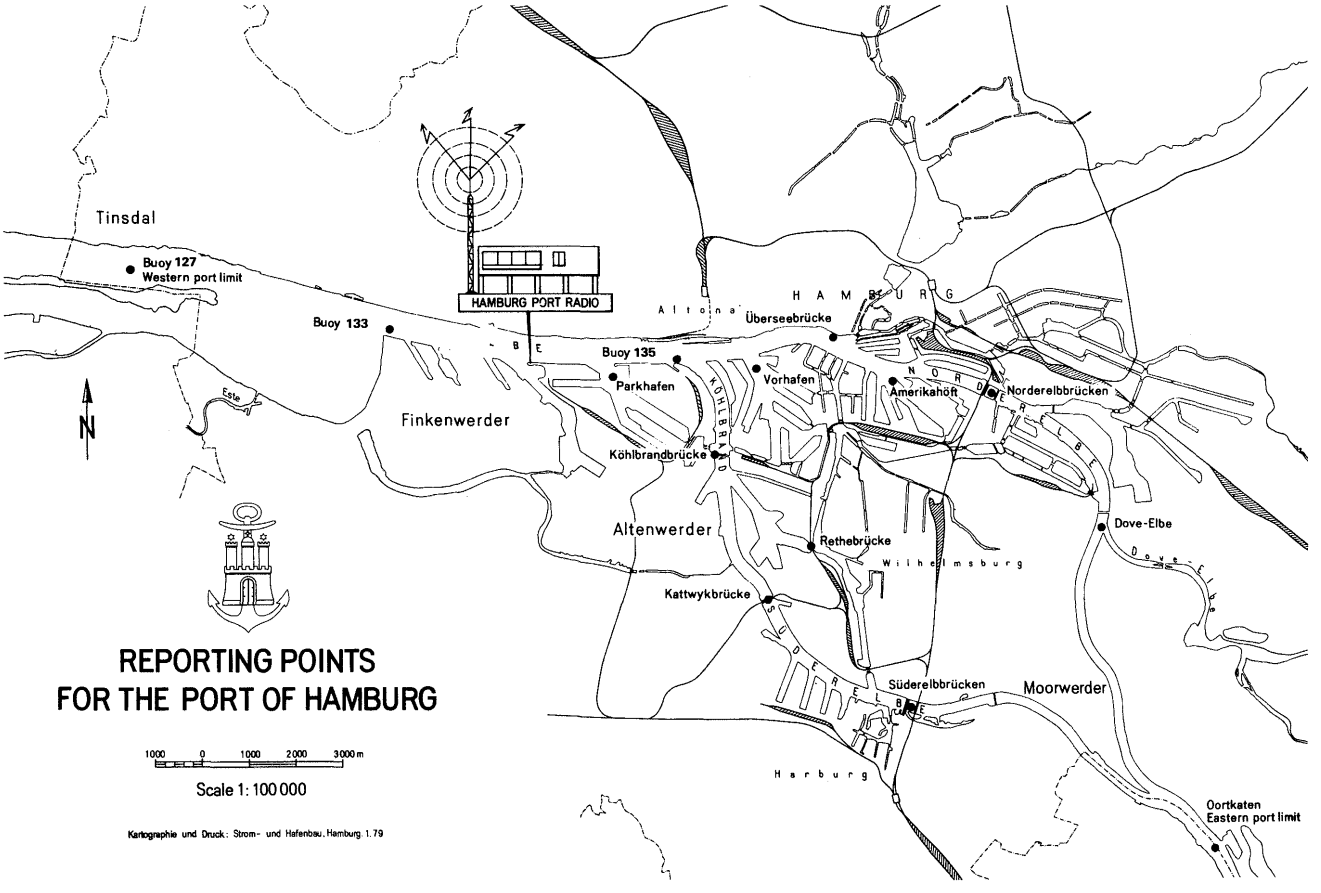
The port's traffic safety scheme is also based on an **area of operation and responsibility,** i.e. the Port of Hamburg and most adjacent areas, as well as all structures, wharfage,



The "Carl A. Zemlin" – one of the inspection launches continually on patrol



The Port Authority's traffic control centre with radio control console and chart showing positions of berthed vessels



jetties, landing – installations and other facilities used for the handling of cargo.

The third factor in the strategy is a range of **material facilities**, i.e.

- a port operations office with port-administration-radio station
- a port radar control centre with a shore-based VHF-radio station
- a traffic control center with a shore-based VHF-radio station
- a co-ordination centre for emergencies
- six Port Authority launches equipped with port administration/VHF-ship radio stations
- three official cars with Port administration-radio systems
- a special department for fundamental matters concerning the shipping traffic administration.
- a special department for transport safety, port safety, and environmental protection.

The final and possibly most important feature of the scheme is a **staff of qualified personnel** – a team of 65 men and women under the direction of the Port Superintendent, including 21 foreign trade masters (AG Certificate) and at least 25 holders of the nautical AKW Certificate ("Mate Only on Coastal Ships").

Supported by this staff, the Port Superintendent makes authoritative decisions on the maintenance of order in the name of the state. In many cases these are "ad hoc" decisions affecting all the vessels using the port – from the smallest motor boat to supertankers and large container ships. They can involve considerable financial and operational risks for ship-owners or for the port itself.

Our guiding principle is that safety and economy are equally important, but safety must take precedence in the event of doubt.

To sum up, it can be said that the Port Authority – as the body responsible for the organization of shipping traffic – has a traffic safety scheme which ensures that the port and its installations provide an extremely high degree of safety for sport-boats, harbor, inland and maritime vessels, as well as protection for the environment.

The inspection launch "Hafenkapitan" on patrol

The "Seemannshoft" nautical centre – housed in a building secure against even the highest of tides

Report on the 50th Conference of the Harbours Association of New Zealand

By the Auckland Harbour Board

The Port of Auckland, New Zealand was host to the 50th Conference of the Harbours Association of New Zealand from 7 to 9 March 1984, attended by about 100 representatives of New Zealand and Australian port authorities and related organisations. The International Association of Ports and Harbors was represented by the Secretary-General, Dr Hajime Sato, of Tokyo, Japan.

Speakers included two well-known and often controversial shipping leaders, Mr T.V. Rosenfeld of Belgium, Chairman of ABC Containerlines and Australian Sir Peter Abeles, Chairman of the Union Shipping Group. They formed a panel with Mr H.L. Julian, Chairman of the New Zealand Shipping Corporation Limited and the Auckland Harbour Board to discuss shipping trends.

Sir Peter Abeles emphasised the need for well trained individuals in the shipping industry. "I don't think you have to worry about what ships you will have in the future" he said. "Plain businessmen with strong policy are the future of successful shipping."

On the question of whether it was better to be a conference operator or an independent operator, Sir Peter said that having had experience of both it was his view that the question was immaterial. "What really matters is the attitude of the operators, whether they be within the conference or outside it," he said.

Only people mattered because assets, whether mobile or establishments in ports, would never make a successful shipping operation on their own. "Whether you are owned by a Government or not or whether you are within a conference or not, I do believe that the future of shipping depends on well-trained invididuals."

In a carefully prepared address on Shipping in the 1990s, Mr Rosenfeld said world gross domestic product would grow at between 4 and 4.5% annually with Japan growing most rapidly. The developing world – South East Asia in particular – was likely to maintain a higher rate of growth in the 1990s.

International trade in manufactured goods would continue to increase at a faster rate than trade in primary products and the demand for shipping tonnage was likely to remain less than available capacity.

By the mid-1990s, seaborne trade in the five major bulk commodities could reach 1,500 million tonnes a year, with coal and iron likely to grow more rapidly and grain more slowly than other bulk cargoes.

The surface displacement ship would continue to be economic for large bulk commodity movement, although design speed would fall.

"There will not be a dramatic change away from oil as the main form of marine power and therefore there will remain a large diesel-engined world fleet in the 1990s. A whole range of energy conservation measures in both ship design and operation will provide a credible overall energy saving."

The container ship, typically less than 2,000 TEU capacity, would dominate general cargo trade in both developed and developing countries. In a limited number of trades, there would be a resurgence of interest in bulk carrying systems which might provide opportunities for further economies of scale.

The traditional separation of liner trade could be overcome by land bridges, triangular trading and round-the-world trading and therefore liner markets would be more effectively integrated into global dry cargo shipping.

"Ships will serve fewer ports directly to maximise sea time. Flexible ships with break-bulk or ro-ro capacity will replace the conventional general cargo carrier."

Mr Rosenfeld said the phasing out of open registry shipping seemed unlikely as it was possible that the scope of such operations would be extended to embrace low-cost OECD countries.

Mr Julian spoke as Chairman of the New Zealand Shipping Corporation and referred to the need in the New Zealand Shipping and port industries to reduce manning levels and improve the efficiency of operational procedures.

In dealing with the conference shipping system, Mr Julian said it had survived innumerable attacks throughout 100 years of rapid and accelerating change in trade, technology and equipment. It must therefore have something going for it as a transport system, or it would not have lasted for so long.

In any arrangement between conflicting interests there must be a reasonable balance of benefits to all parties to the arrangement or it would not survive. The New Zealand Shipping Corporation took the view that the conference system, with all of its imperfections, was a necessary and valuable part of New Zealand's economy.

"Without it, New Zealanders, exporters and importers – or at least the smaller and less regular exporters and importers – would be adversely affected."

"The myth of 'conference rip-off' is firmly held in New Zealand by the uninformed public at large and belief in this myth has been fostered by intemperate, grossly exaggerated and misleading attacks on this system."

LPG Handling

"The Handling and Shipping of LPG and Other Bulk Energy Gases" was the title of a paper presented by Mr T. Brown, Engineering Manager, Liquigas Limited, New Zealand.

Mr Brown said the much-maligned oil industry was in fact a major contributor to conservation – energy conservation. It had been calculated that since oil was discovered in 1859 some 1,000 cubic miles of gas had been wasted or burned off because of the difficulty of transporting and handling these petroleum gases from the place of production to the consumer. Over the past 50 years major steps had been made to capture and use propane and butane and over the past 25 years to capture and use methane and ethane.

In world terms in 1978, some 100 million tonnes per annum of methane in the form of LNG was traded over the world's oceans and some 87 million tonnes per annum of LPG was consumed worldwide.

"New Zealand is now entering this field with the start-up of the Liquigas venture to internally distribute some 100,000 tonnes of LPG per annum, but New Zealand has the potential for LNG export."

Mr Brown devoted a section of his paper to safety considerations saying there had been (in New Zealand) much uninformed comment on LPG safety.

"The record does in fact, speak for itself. In the United States of America, for instance, LPG ranks fourth in supplying the country's energy needs. Total sales of LPG in 1980 were some 37 million tonnes. The U.S. market is served by some 360,000 kilometres of cross-country pipeline, 25,000 road and 22,000 rail tankers and 370 sea tankers and barges. There are also 250 primary storage installations with an average storage capability of about 60,000 tonnes and 8,000 smaller bulk storage and distribution centres."

"The fully developed market contemplated by Liquigas for the whole of New Zealand is in the 100,000/200,000 tonnes per annum range, which represents approximately 0.3% to 0.6% of U.S. sales in 1980. While there have been accidents in the U.S.A., when one considers the extent of the system and the number of transfers occurring daily, it is an accident record to be envied rather than pilloried."

Mr Brown said that for the 10-year period 1968 to 1977 for which statistics were available, the United Kingdom had not had an accident causing loss of life to a member of the public at any petrochemical facility, LPG storage being included in this definition.

LPG had been used in the U.K. since the 1930s and there were now 30,000 fixed tank installations. There was no known case of a tank being violently ruptured with the consequential release under pressure of its contents. The U.K. market was currently 10 times larger than the New Zealand market would be at maturity.

There were some 600 liquified gas-carrying ships in the world trading daily. From statistics for the period 1964 to 1970 for tankers of 5,000 cubic metres capacity and greater, 26 incidents occurred concerning the cargo-handling equipment. In no incident was a cargo tank damaged so that cargo would escape and there was no case of cargo fire or explosion recorded.

"From worldwide statistics to hand recorded since 1933, there have been 670 fatalities due to fires or explosions involving all gas liquids, including LPG. During this period worldwide consumption of LPG has probably topped the 1,000 million tonnes mark – that is there has been, on average, one fatality for every 1.5 million tonnes of liquified gas used, and this covering a period when safety standards were in the course of generation and in heavily populated markets where at least some of the very early pipelines and tanks are still in use.

"In New Zealand we expect to sell about 5 million tonnes of LPG in a 30-year project life. At the very worst, ignoring the effects of the latest technology and safety

standards in use today and assuming 50% of the total liquid gas accidents were attributed to LPG, this historical data suggests there could be one and a-half fatal injuries in that time in the whole of the New Zealand LPG industry.

"The LPG safety record is no accident," Mr Brown said. "It is achieved by recognising the properties of the material being handled and designing and operating facilities to accommodate these properties."

Automated Data Exchange

Mr W.F. Hunt, Senior Consultant, Price Waterhouse Ltd, Auckland, presented a paper on Automatic Data Exchange for New Zealand Ports.

After outlining developments throughout the world, Mr Hunt said that within individual ports there were many examples of the development of computer-based systems from those of the normal commercial type to the fully automated container handling system.

On the question of automated data exchange between ports, the simple suggestion would be to wait until individual port developments had progressed further before looking at their intercommunication. The result, however, would be numerous individual plans and implementations which would become harder and harder to knit together.

Mr Hunt raised the possibility of a decentralised database of information on ship and cargo movements for use by all of New Zealand's Harbour Boards. Technical difficulties in computer-to-computer interfacing could now be overcome by use of a Packet Switching facility allowing any user to connect to a network which could contain as many computers as there were at New Zealand's ports.

New Zealand, said Mr Hunt, could draw on the knowledge of many other organisations throughout the world. It had been his experience that there was absolute co-operation between the ports of the world, so long as the proprieties of trade interest were observed.

Mr Hunt suggested that the Harbours Association of New Zealand set up a working party to study needs for and costs of an automatic transfer of data between ports in New Zealand.

Exports and Shipping Council

The history and working of the Exports and Shipping Council in New Zealand were outlined by the Council's Chairman, Mr J.D. Fraser who said the Council had since its inception in 1964, undoubtedly made a contribution towards improving the efficiency and economy of the movement of New Zealand's exports and imports.

With its membership of agricultural production and marketing organisations, shipping, transport and port industry representatives the Council was anticipating an active future, particularly in association with a study of shore-based transport costs being undertaken by the Government.

With no statutory powers the Council made a considerable contribution in the interests of New Zealand by way of information, advice and comment based on the wide knowledge and expertise of its representative membership, Mr Fraser said.

Harbour Towage

A well-received paper on the operation and economics of harbour tugs was presented by Captain K.H. Ross, General Manager, Towage and Salvage, Howard Smith Ltd of Sydney, Australia.

Discussing options available to provide cost-effective services Captain Ross said the first step was rationalisation of existing port tug fleets with reductions in fleet numbers where possible. "Ideally the everyday operational tug fleet should comprise no more than two 'super' tugs if these are sufficient to attend traffic and meet tidal constraints, otherwise the fleet has to increase in multiples of two."

Sufficient installed bollard pull was essential and anything less than 100 tons aggregate pull shared between two hulls was an unwise investment, looking 15 years or more ahead.

Although initially the substantial capital investment required to rationalise a port's tug fleet might seem to bring no immediate benefit in the first year or two, if an analysis was made of the alternative of retaining a larger fleet and workforce it would soon become evident that there was a wide divergence in comparative costs in the future and the reduction in workforce overheads alone made such an exercise desirable.

"Otherwise the day of reckoning is merely postponed at even greater cost."

Dealing with the sharing of tugs between adjacent ports, Captain Ross said it was not possible or practical, because of the vagaries of shipping, for tugs to work in adjacent ports unless the steaming distance was within about 10 miles. The exception was if the work was on a supplementary basis and on relatively rare occasions.

"However, it is possible and more economical to either keep a tug unmanned in reserve or share reliefs between ports within reasonable steaming distances."

Captian Ross said tug overhauls should be strictly supervised and completed in the minimum time frame, within a planned, budgeted cost. Other economies, such as bulk buying of machinery packages and carrying of spares on consignment were probably confined more to the large operator.

Ports and their Cities

The final paper at the conference was a joint presentation by two architects, Professor A. Wild, Dean of the School of Architecture, University of Auckland and Mr I.B. Reynolds, principal partner in the Auckland firm of Kingston, Reynolds, Thom and Allardice.

The presentation dealt with harbour/city interface development in the New Zealand ports of Wellington and Auckland. Professor Wild outlined a competition mounted in Wellington by the Wellington Civic Trust in association with the Wellington City Council and the Wellington Harbour Board. The competition sought ideas, first from the public then from architects, on the future development of Wellington's port facilities in relation to the city.

The competition aimed to maintain and encourage the economic and social viability of the city/port interface and sought ideas for the creation of a lively and vital environment for the people living, working or visiting the area.

There were around 100 entries in the public competition and 54 in the competition for architects, including nine from Australia.

"It is fair to say that everyone was thrilled with the results," said Professor Wild. "At the time it crystallised a lot of ideas and raised a lot of local interest. But I believe that its effects are continuing, that important discussions are taking place and important things for Wellington will

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The Coming of Age of Intermodalism:

— Building a Lasting Partnership in Shipping between the United States and Japan —

By the Honorable Alan Green, Jr. Chairman, Federal Maritime Commission U.S.A.

(Remarks before the Pan-Pacific Sister Ports Seminar II, Yokohama, Japan, May 31, 1984)

Let me begin by offering my sincere thanks to the Port of Yokohama for hosting this very important and timely meeting. I am pleased to see the extremely high level of cooperation that exists between the Port of Oakland and the Port of Yokohama, in continuing to discuss problems and opportunities in the conduct of international trade. The nations of Japan and the United States of America, and indeed all nations of the world, have a great stake in maintaining a trading system in which goods and services may be exchanged freely and without unnecessary government interference.

We come together today because we keenly desire to make the system work better and more efficiently. Why? Because there are great benefits to be had in a trading relationship that can grow and evolve with structural changes in the marketplace, and improving economic conditions. These benefits can be experienced by each one of us – as part of the Port of Oakland or the Port of Yokohama, part of the international liner shipping industry, but mostly as consumers in our respective countries. We truly need a system that can deliver these benefits to all.

What gives rise to the strong and special relationship that exists between the United States and Japan? To my way of thinking, it is our shared belief in certain economic principles and in approaches to resolving our differences. In both the United States and Japan, the demand for the goods and services of the other country is extremely high, thus, the impetus for trade is very great. In 1983, for instance, the liner trade between the United States and Japan constituted nearly nine million long tons, more than twice as much as the United States liner trade with any other nation. This amounted to 15 percent of the total liner trade for the United States. However, the relationship depends on a shared belief in the benefits of competition, of free access to markets, and on the virtue of allowing innovation to be implemented to the fullest extent possible. When these beliefs are put into action, both nations – each and every citizen – will reap the benefits.

I would be neglecting reality here, if I failed to also mention the importance of other Asian trading partners to the United States. Some of these, such as Taiwan, Hong Kong, Singapore, South Korea, and Indonesia are among our top liner shipping trading partners. Our trade with some of these countries has been growing by leaps and bounds. It is the entire Pan-Pacific trade, of course, which is the subject of this meeting. In my remarks, though, I'd like to focus on the U.S-Japan relationship as a concrete example of where much progress has been made, but where, unfortunately, some problems remain.

One way that this relationship, as well as the international trading system as a whole can be improved, is to allow intermodalism to continue to flourish in the liner trades between the United States and Japan, and the world's liner trades generally. There have been tremendous advances in technology since the 1960s, and the "container revolution" continues. Even after living with containerized transport for 20 years now, the full spectrum of benefits available through the efficiencies of intermodalism has not yet been fully achieved.

Several of the "irritants" that currently exist in the relationship between the U.S. and Japan on shipping matters are, in fact, in the intermodal area. Consultations are under way between the two governments to resolve some of these problems. That is a very good sign. By reading the Japanese and U.S. press, I perceive a great willingness to work closely together to resolve our differences and to reduce these irritants. The U.S. goal is to allow intermodalism to flourish. This will improve the flow of goods and services between our countries, and reduce the cost of shipping for U.S. and Japanese importers and exporters.

We must accept the fact that markets will evolve. Times and circumstances change and so must our policies. The Shipping Act of 1984 is a perfect example of how this should happen. It may have taken longer than some had wished, but there are others that believe it occurred too quickly. In the end, a very fine product was formed, a product that truly modernizes the approach of the United States Government to regulating international liner shipping.

As President Reagan said in his National Maritime Day proclamation on the subject of the Shipping Act of 1984: ". . . this landmark legislation will provide for more flexible and responsive ocean transportation services, including intermodal service . . . " We are looking for the same type of cooperation that led to the passage of the 1984 Shipping Act, to help resolve the friction present in the U.S./Japan liner shipping relationship. The Shipping Act of 1984 became a reality because interested parties were willing to

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happen as a result. I hope that authorities at other New Zealand ports will find that Wellington's experience was of interest and value to them."

Mr Reynolds described the development of the Port of Auckland since the 1840s. He then referred to the most recent change to the port/city interface, the redevelopment of Downtown Auckland, instigated and promoted by the Auckland Harbour Board.

"That act, in its combination of political will and administrative energy, created what I firmly believe to be the most important physical change undertaken in Auckland since the reclamation of the foreshore itself," he said.

"It has moved the city to the quayside, created a major urban space in Queen Elizabeth II Square, focussed tourist activity in the form of hotels, restaurants and retail centres and added significantly to the city's car-parking facilities. Above all, it has exposed hundreds of Aucklanders to the pleasures of working in direct proximity to the harbour."

sit down and openly discuss the problems they were having with the existing regulatory situation. There was give and take, and in the end, a mutually acceptable compromise was established.

Doing business under the new Shipping Act will require that shippers and carriers develop a new way of thinking. In particular, some concerns relating to the fate of loyalty contracts, as well as mandatory independent action for conferences, have been expressed to the U.S. Government. Perhaps a bit of clarification of these provisions would be useful.

As far as loyalty contracts are concerned, their antitrust immunity has been removed – the new Act states that no carrier may use a loyalty contract, except in conformity with the antitrust laws. The FMC has determined that the use of all loyalty contracts shall be prohibited after September 18, 1984, in other words 90 days after June 18, unless supported by a Business Review Letter issued by the Department of Justice. Regarding the question of independent action, I'm sure you are aware that the new Act has mandated independent action on no more than ten days' notice for all items required to be filed in a conference tariff. The FMC is going to require the independent action provisions to be in place starting June 18.

As a businessman, I have a few thoughts on how conference operators may view these provisions, and how I believe they should approach them. I know that short-term greediness is no route to success. For example, in making use of service and time/volume contracts, conferences will have a powerful tool to stabilize both rates and their own revenues. But this result will be achieved only if they can put together a comprehensive package of rates and services which are both attractive to shippers and reasonably profitable for the conference carriers. A clear understanding of the provisions of the new Shipping Act, combined with long-range and thoughtful planning will be mandatory for the survival of the conference system.

We need also to take a farsighted approach to resolving the irritants that restrict the flourishing of intermodalism in the Japan/U.S. liner trades. The friction that is being created by several situations is truly unnecessary. Let me tell you my views on why frictions have developed in a few of these areas. These areas include restrictions on the use of high-cube containers, and the difficulty for U.S. carriers to obtain warehousing, freight forwarding, trucking and terminal operation licenses. I'd also like to address the implications of the "open access" policy contained in the new Shipping Act, as well as Japan's planning ratification of the UNCTAD Code.

First of all, the restrictions that apply to the use of high-cube containers in Japan are unrealistically stringent. The United States understands that there may be transportation safety and other concerns that require certain limitations. We have no problem with reasonable limitations on the use of high-cube containers, for we ourselves have vehicle height and weight limitations on some U.S. highways. However, reasonable accommodation is possible. Transport of these internationally accepted containers can take place on specified routes or at certain times of the day. Such limitations as Japan currently has in place seem especially ironic because Japan is one of the world's largest producers of 9-foot, 6-inch containers. Unless you manufacture them right at the dock, these containers have to go on Japanese roads at some point in time.

Another example where the government of Japan is placing obstacles in the way of intermodal growth is in the area of licensing restrictions on warehousing, terminal facility operation, and trucking. Government restrictions on the activities of U.S. corporations should be reduced because market forces can regulate more efficiently than governments. If the activities of the United States regulatory system are any indication, it is not wise for the government to unduly restrict entry into markets. The gross inefficiencies that resulted from excessive government intervention in United States domestic surface transportation were rectified with deregulation. In Japan, the system for controlling competition among terminal operators, trucking firms, and warehousing companies has had negative effects on U.S.-flag operators. Whether the limitations are on a formal or informal basis, denial of equal opportunities for all competitors is detrimental to the expansion of intermodalism.

In the United States, we believe that there should be no discrimination on the basis of nationality. For example, there is no discrimination against Japanese companies that wish to operate terminal, trucking or warehousing companies. One thing I can say with certainty is that "unequal" treatment will not be condoned for very long. The United States Congress recently took an action that is a very good indicator of the mood in America. The Congress placed a moratorium on the issuance of truck licenses to Mexican trucking firms. Despite being in an era of truck deregulation, where licensing restrictions have been essentially eliminated, the Congress felt that it must retaliate when the access of U.S. trucking firms to Mexican markets was unduly restricted. There is an element here of reciprocal treatment that cannot and should not be ignored, especially in the world of international liner shipping.

While the phrase "reciprocal treatment" can be used in a positive sense, in these days of growing protectionist activities, this phrase usually has a negative connotation. In the Mexican trucking situation, and in certain section 19 cases before the Federal Maritime Commission, policies are discussed and sometimes implemented that tend to mirror the protectionist or trade restrictive policies of the trading partner. Such mirroring is a simple and effective way to bring attention to the seriousness of the situation. It does, however, represent an escalation of the problem. I trust such an escalation will not be necessary to remedy the existing irritants in the U.S./Japan liner trades.

In this regard, when such irritants exist and an increase in trade friction results, the Federal Maritime Commission may well have a more prominent role in responding to the situation in the future.

You have probably heard about section 13(b) (5) of the new Shipping Act, which greatly expands the Commission's authority to retaliate against impairment of U.S.-flag vessel operator access to the cross trades. The Commission has recently issued an interim rule to implement this new statute. I might point out that one of the factors which the Commission will consider as impairing U.S.-flag carriers' access to cross trades is unfair restrictions on access to intermodal facilities or services. Let's face it: we all recognize that true access to liner shipping trades must include access to port and intermodal facilities; they are an integral part of the shipping business. This is more so today than ever before!

When our new 13(b) (5) authority is taken in conjunc-

tion with that of the unchanged section 19 of the Merchant Marine Act of 1920, the Commission has a powerful arsenal indeed. We realize that these powers may arouse some fear in our trading partners. We certainly do not intend to abuse or misuse this authority. This should have been made clear to you in the Commission's 13(b) (5) rules. Consultations between our governments is an important tool which we all recognize as the smoothest way to resolve shipping as well as other trade disputes. But the FMC powers are there, and the passage and implementation of 13(b) (5) make crystal clear the U.S. Government's intention to ensure that its carriers have access to international markets. To have the ability to compete in today's high technology age, with ever-larger vessels and round-the-world service, such access is essential.

As the UNCTAD Code or its offspring become more prevalent in international liner commerce, it is imperative that non-conference operators be granted the opportunity to continue to compete for cargoes. When the UNCTAD Code's suggested 40/40/20 formula catches on, these non-conference carriers may represent the only healthy competitive alternative to the "government controlled" conferences. The United States does not intend to ratify the Code! Frankly, we are dismayed that our major trading partners of the developed world have decided to ratify the Code, for it represents a most ironic departure from the basic tenets upon which the world's international trading system is based. Be that as it may, if Japan does indeed intend to ratify the Code, it is imperative that your nation do so with reservations in order to protect the role of non-conference carriers in the world's liner shipping trades. Non-conference lines should be given an equal opportunity to compete with conferences for commercial cargoes. This principle must not be forgotten in the heat of the "UNCTAD Battle." Equally important is the concept that governments should not be permitted to allocate an unduly large portion of the trade using non-market devices.

In a section 19 case currently pending before the FMC, we have an example of a situation where it has been alleged that a particular country – the Philippines – has tried to implement the 40/40/20 cargo sharing concept of the UNCTAD Code to the entire U.S.-Philippines trade. However, if the reports I have received are accurate, the Commission may not have to make the long-awaited and crucial decision on this matter. I am speaking, of course, of reports that the Philippine Government has withdrawn Memorandum Order 3 as it applies to the U.S./Philippines trades. I trust this is, in fact, the case. I can say, however, that these sorts of allegations, when made to the Commission under section 19 or 13(b) (5) in the future, will be looked at very carefully.

Now, please don't get me wrong. I am not as glum as I might sound. There are many positive signs that the existing friction between the United States and Japan can be alleviated if mutual efforts are made. With the passage of the 1984 Shipping Act, America's liner shipping regulatory system has truly recognized the age of intermodalism. It may have been a long time in coming, but conferences now possess clear authority to offer intermodal rates. There is a much reduced and considerably less burdensome role for the government in regulating international liner shipping. There is now greater leeway for commercial entities to bring creativity and innovation to bear in the international

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Port of Melbourne

(Extracts from "Annual Report and Review of Operations 1982–83, Port of Melbourne Authority")

Chairman's review (extract)

Following the record year achieved in 1981–82, the results for the 1982–83 financial year have been most disappointing resulting in an operating surplus of $3.22 million as against $12.96 million last year. Although revenue increased by $3.6 million unfortunately expenditure rose by $13.4 million and with finance and heavy abnormal charges associated with previous years, the overall result was a large deficit of $40.2 million, a result that bears no comparison with the operating performance of the Port for this past year. The recession and disastrous drought were the main contributing factors to trade through the Port being the lowest for five years.

Undoubtedly, the highlight of the year was the completion of the World Trade Centre in April at a total cost of approximately $95 million. The response from the trading community has been encouraging and rewarding as 69% of the lettable space has been committed. In addition, many exhibitions are being held in the Galleria and it is apparent that there is a shortage of prestige exhibition space in the City area. It should be mentioned that it will be some time before a reasonable cash flow results from the World Trade Centre; however, it is expected that the complex will be fully paid-off in approximately 20 years.

During the year, we saw the completion of No.5 Webb Dock and the official opening was performed by the Minister of Public Works, the Hon. Jack Simpson. At the ceremony, the Minister announced that legislation had been passed approving the construction of a rail link to Webb Dock, which will be of considerable financial benefit to shippers.

The construction of sophisticated port equipment has become very expensive and in order to contain our capital resources, it was decided to enter into a sale and lease-back arrangement for the two new container cranes at East Swanson Dock.

Two new important administrative decisions were made during the year. It was decided to commission consultants to survey operations of the Authority and to submit a report for consideration. A Trade Branch was also formed comprising the World Trade Centre Division and a Trade Development Division responsible for port marketing, trade facilitation, trade development and promotion of port trade.

These two divisions will work closely together for further trading opportunities.

On 29th June, the Premier, the Hon. John Cain, announced that ministerial responsibility for the ports of Victoria would be transferred to the Minister of Transport, the Hon. Steve Crabb, from 1st July, 1983. The main objective of the Governments is the coordination of all modes of transport on a State-wide basis under the one ministry.

Moving to the World Trade Centre meant the end of 85 years occupancy of Head Office in the Market Street area and in April, the historic Port Authority building (29 Market Street) was sold to the State Electricity Commission of Victoria.

The world economy is showing some signs of a healthy recovery and added to the forecasts of a good season in the Australian rural sector, hopefully we can look forward to an improvement in trade through the Port in the latter part of the next financial year.

A.S. Mayne
Chairman

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shipping marketplace.

I am also encouraged by reports I have heard of the reorganization of Japan's Ministry of Transport. In creating a cargo distribution bureau, I am confident that an enhanced priority will be given to the growth of intermodalism in Japan. To me this is truly reassuring. The Federal Maritime Commission reorganized itself almost two years ago in anticipation of new shipping legislation. This was done so the agency could become more efficient and relieve unnecessary burdens on the shipping industry. I can only hope that M.O.T.'s reorganization is helpful in improving the growth of intermodalism and does not add to any delay in addressing the irritants which exist between the United States and Japan. The situation must not be allowed to deteriorate any further, for fear of irreparably damaging the special trading relationship between our two countries.

I am encouraged by the consultations that are going on between the two governments. From what I have heard, these matters are being discussed with frankness and in an open fashion. Such talks lead to a better understanding of the problem, and it has always been a feeling of mine that understanding the problem is half of the journey to finding a solution. So let's all keep an open mind and find solution which are beneficial to all.

The Year's Highlights

Records of more than 4500 individual investors holding Inscribed Stock in 267 current Port Authority loans were placed on computer during the year making it possible to pay interest into bank accounts by magnetic tape. The system, developed by PMA and contract staff, took six months to implement on the Authority's computer.

Number 5 Webb Dock was officially opened by the Minister for Public Works (the Hon. J.H. Simpson) in December 1982. The new 315 metre long deep water berth and its 5.8 hectare paved container marshalling area effectively doubles the Dock's overseas container capacity to a throughput of more than 100,000 containers a year.

The State Government in December 1982 passed legislation authorising the construction of a rail link to Webb Dock at an estimated cost of $20 million. Work is expected to commence late in 1983.

Construction work on the five buildings in the World Trade Centre complex was finished in December 1982. The total project, including the river-front walk and internal car parks, was completed on 15 April 1983.

The former Port Authority building located in Market Street, Melbourne, was sold to the State Electricity Commission of Victoria. The new owners took possession in April 1983.

A Trade Branch, to be responsible for trade research and development and the active marketing of the Port's facilities and services, was established during the year.

A proposal to build a hotel, conference and exhibition complex adjacent to the World Trade Centre was announced in December 1982, and is now under consideration by the State Government.

Achieving a discharge rate of up to 3,000 tonnes per shift, a shipment of 25,600 tonnes of drought relief wheat from Western Australia was cleared from the Port area in five days after the ship's arrival at the end of November 1982.

Three new single-lift 35 tonne capacity container cranes, purchased at a total cost of $12 million, were commissioned in July and August 1982. This brought the total number of container cranes in the Port to 12, six of which are owned by the Port Authority.

A 12-year multi-currency interest rate loan of $US13.2 million, arranged with the Mitsui Trust Finance (Hong Kong) Limited, was signed in March 1983. The loan is to be used to finance part of the World Trade Centre.

Revenue statement (historic cost)

for the year ended 30th June 1983

	1982-83 $000's	1981-82 $000's
Operating Revenue		
Charges on Ships	7,873	8,581
Charges on Goods	37,156	34,618
Charges for Port Services	4,228	3,819
Rent and Licence Fees	7,773	6,305
Interest Received	2,275	2,353
Other Revenue	70	75
	59,375	55,751
Operating Expenses		
Services	17,213	12,700
Administration	5,481	5,222
Maintenance	14,786	12,682
Depreciation	10,379	9,719
Other Expenses	2,296	1,433
	50,155	41,756
Contribution to Consolidated Fund	6,000	1,034
	56,155	42,790
Operating Surplus before Abnormal Items	3,220	12,961
Abnormal Items		
Additional Superannuation	10,815	–
Extra Depreciation due to re-assessment of useful lives of assets	19,711	–
	30,526	–
Operating Surplus (Deficit) after Abnormal Items but before Finance Charges	(27,306)	12,961
Finance Charges		
Loans & Deferred Credit Expenses	208	472
Interest Expense	15,395	8,611
Foreign Exchange Losses	1,119	–
	16,722	9,083
Operating Surplus (Deficit) after Finance Charges but before Extraordinary Items	(44,028)	3,878
Extraordinary Items	3,972	–
Operating Surplus (Deficit) after Extraordinary Items but before Non-Operating Items	(40,056)	3,878
Non-Operating Revenue		
Interest & Discount on Sinking Fund Investments	–	386
Non-Operating Expense		
Loss on Disposal of Assets	139	208
	139	178
	(40,195)	4,056
Net Surplus (Deficit) for Year		
Retained Surplus at beginning of Year	43,459	37,908
Transfer from–Sinking Fund	2,026	1,881
–Depreciation Adjustment Reserve	19,464	–
	64,949	39,789
Total available for Appropriation	24,754	43,845
Transfer to Sinking Fund	–	386
Retained Surplus	$24,754	$43,459

Balance sheet

as at 30th June 1983

	1983 $000's	1982 $000's
Equity		
Retained Surplus	24,754	43,459
General Reserve	15,037	15,037
Depreciation Adjustment Reserve	–	19,464
Sinking Fund	–	2,026
Asset Revaluation Reserve	–	130,344
	$39,791	$210,330
Represented by		
Current Assets		
Cash at Bank and on Hand	32	174
Investments	17,948	16,943
Debtors and Prepayments	6,043	5,693
Stores	3,151	4,061
	27,174	26,871
Non-Current Assets		
Fixed Assets at Written down Historic Cost	239,033	150,421
Fixed Assets (At Valuation)	–	130,344
Work in Progress	21,850	111,660
Advances for Housing	592	571
	261,475	392,996
Deferred Expenses		
Foreign Exchange Losses	9,210	–
Total Assets	297,859	419,867
Less		
Current Liabilities		
Bank Overdraft	1,275	1,149
Sundry Creditors & Accrued Liabilities	10,146	12,064
Deferred Contract Payments	8,240	5,790
Short Term Borrowings	17,939	11,694
	37,600	30,697
Other Liabilities & Provisions		
Superannuation Fund	6,884	5,759
Provisions	31,379	17,759
Long Term Borrowings	182,205	155,322
	220,468	178,840
Total Liabilities	258,068	209,537
Net Assets	$39,791	$210,330

Associated British Ports

Pre-Tax Profit advances to £14.5 million Total Dividend of 8.5p

Associated British Ports Holdings PLC, Britain's largest ports business, recently announced a pre-tax profit of £14.5 million for the year to end-December 1983 – the first full year as a public company – compared with £5.5 million in 1982 (approximately £8.9 million in 1982 after taking account of changes in financial structure at the time of privatisation early in 1983).

The profit is struck after the payment of some 2 million in voluntary severance costs, but before the extra-ordinary credit of £8.6 million net of tax described in the attached results.

The Directors are recommending a final dividend of 5.5p, which with the interim dividend of 3p paid in November 1983 makes a total of 8.5p net per Ordinary Share in respect of 1983. The final dividend will be paid on 29th May to shareholders registered on 1st May. A total dividend of not less than 7p per Share was foreshadowed in the Offer for Sale at the time of privatisation.

Mr. Keith Stuart, Chairman, said: "The outstanding event of 1983 was the privatisation of the Company, including a major involvement of employees as shareholders. Privatisation has brought greater commercial freedom, allowing fuller use of our assets and expertise.

"Towards the end of 1983 there were welcome signs of an improvement in overall trading conditions although some sectors such as steel remained depressed."

The volume of business through the 19 ABP ports was 83 million tonnes, 6 million tonnes up on 1982 and the highest tonnage since 1976. Container and roll on/roll off traffic reached a new record level and there was increased activity from the offshore energy industries.

On the current year, Mr. Stuart said: "The overall level of business in the early months of 1984 has been satisfactory, but the present dispute within the coal industry is resulting in reduced coal exports through our ports. The impact of the coal industry's problems on our business will depend primarily on how long the dispute continues.

"Otherwise, the outlook for the year as a whole offers prospects of a further expansion in the Company's business. Over the longer term, developments during the past year have strengthened and broadened the Company's potential for growth."

The Company is extending the Employee Share Scheme by means of a further offer of shares. Employees will receive one free share for every share for which they subscribe at the market price.

Associated British Ports Holding PLC

Preliminary Announcement of Results for the year to 31 December 1983

	1983 £m	1982 £m
Turnover	*154.4	152.3
Operating Profit (before exceptional items)	* 16.5	15.1
Exceptional Items	(1.9)	(3.6)
Operating Profit	* 14.6	11.5
Investment Income	2.4	1.1
Interest Payable	(2.5)	(7.1)
Profit on Ordinary Activities before Taxation	14.5	5.5
Taxation	(4.9)	0.3
Profit on Ordinary Activities after Taxation	9.6	5.8
Extraordinary items (net of taxation)	Cr. 8.6	–
Profit attributable to Shareholders	18.2	5.8
Dividends Paid and Proposed	(3.4)	–
Retained Profit transferred to Reserves	14.8	5.8
Earnings per share	23.9p	

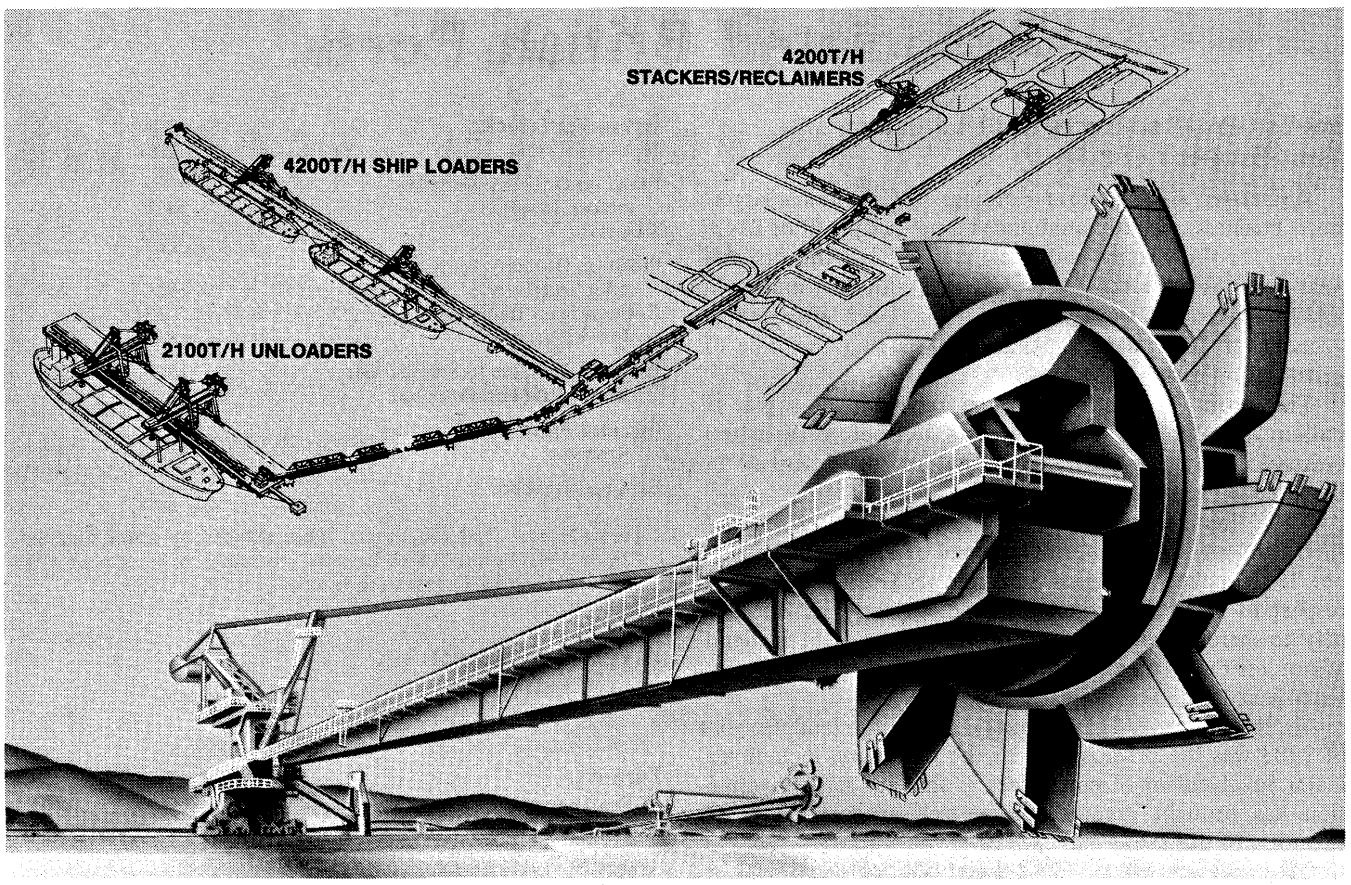
* Turnover and Operating profit were reduced by approximately £2m in 1983 by the revised terms of a commercial agreement with the British Steel Corporation in respect of Port Talbot.

Port Group Resutls

	1983 £m	1982 £m
Turnover		
Southampton	49.6	44.2
Humber Ports	50.3	52.4
South Wales Ports	35.8	36.7
Other Ports	18.6	18.4
Total	154.3	151.7
Exceptional items	0.1	0.6
	154.4	152.3
Operating profit		
Southampton	2.5	–
Humber Ports	7.0	6.6
South Wales Ports	2.9	4.1
Other Ports	4.1	4.4
Total	16.5	15.1
Exceptional items	(1.9)	(3.6)
	14.6	11.5

Current Cost Profit and Loss Account

	1983 £m	1982 £m
Operating profit (historical cost basis)	14.6	11.5
Less current cost operating adjustments:		
Depreciation	9.9	8.9
Monetary working capital	0.8	1.0
	(10.7)	(9.9)
Current cost operating profit	3.9	1.6
Gearing adjustment	0.1	–
Interest payable less investment income	(0.1)	(6.0)
Current cost profit/(loss) before taxation	3.9	(4.4)
Taxation	(4.9)	0.3
Current cost loss before extraordinary items	(1.0)	(4.1)
Extraordinary items (net of taxation)	8.6	–
Current cost profit/(loss) attributable to shareholders	7.6	(4.1)
Current cost (loss) per share	(2.5p)	



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But Hitachi's involvement didn't stop, or start with the manufacture of this equipment. Their experts supplied needed advice at every stage, from feasibility studies to layout planning to construction and maintenance.

In addition to Hitachi's depth of experience in bulk materials handling, this steel-maker was aided by Hitachi's great width of expertise in many fields, especially that of microelectronics and computers.

For example, by integrating a computer into almost every operation in this facility, Hitachi engineers were able to improve inventory management, maximize operating efficiency, even program maintenance schedules!

The total story.

As impressive as this large-scale working model of mecha-tronics is, it's just one example of how Hitachi is working to advance existing technologies and at the same time pioneer new ones.

Hitachi tries to apply this same "Total Technology" thoroughness to every one of their 20,000-plus projects and products. And it seems to be successful. More and more people are calling on Hitachi.

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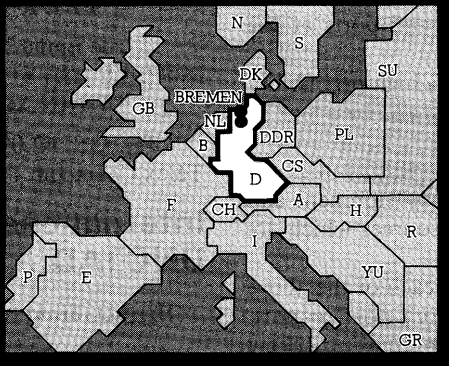

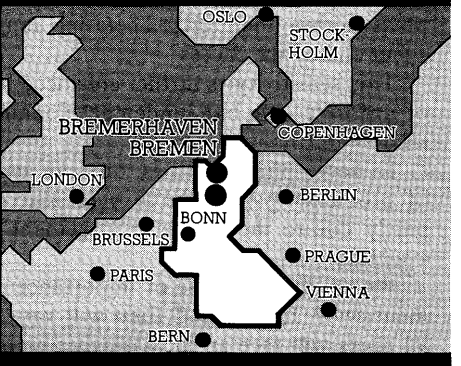

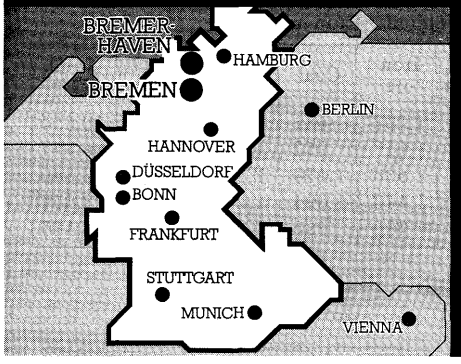

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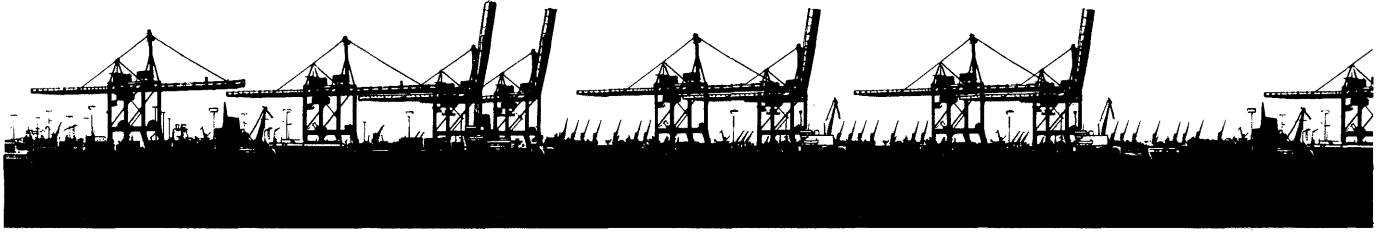


International maritime information: World port news:

Symposium "The North/South Dialogue between ports" organized by APEC/UNCTAD/IPER

World Trade Centre, Le Havre, 23 – 25 October 1984

"It is obvious that in these final years of the XXth Century, ports are once again at the crossroads of technological change. This raises many issues, the more so as they have always been a sensitive nodal point in the global transport chain.

Indeed, ports do not operate in isolation but are strongly influenced not only by actions and decisions from their users and national and international authorities but also by ports within their own operating range and ports at the other end of the routes.

This sensitivity is further enhanced by a high probability of unforeseeable but sudden developments and by a lack of reliable information.

In developing countries, one can add to this a multitude of problems, partly due to their state of development and partly due to the limited management resources which are available.

Whatever the degree of importance of each of the above mentioned factors and they will vary from port to port, all ports will face an increasingly complex situation calling for demanding and far-reaching decisions which will have to be made in the light of the new interdependence between ports.

Hence, port managers would certainly benefit from a broad exchange of views on likely traffic developments, expected evolutions in ship technology, improved operational procedures, solutions to investment issues and a more adequate organizational framework.

The proposed symposium on < **The North/South dialogue between ports** > aims at providing the forum for such an exchange of views. To this purpose eminent personalities from the maritime industry will present their analysis of the present situation and their expectations for the future. They will aim at formulating constructive ideas and proposals to assist port managers in defining ways to improve the dialogue and cooperation between ports and hence achieve better efficiency in the whole transport chain".

Working language
English and French (simultaneous translation provided)
Registration fee : 3.100 FF.
meals (3 lunches, 2 dinners) : 650 FF.
Registration : Apply to :

IPER	APEC
1, rue Emile-Zola 76090 LE HAVRE CEDEX FRANCE	Van Schoonbekeplein 6 B 2000 Antwerpen BELGIQUE/BELGIUM
Tél. (35) 42.09.23 Télex Chamcom 190091 F	Tél. (3) 234.16.34/234.37.48 Télex APEC 73092 B

International seaborne trade: UNCTAD

(Extracts from "Review of Maritime Transport, 1983")

World seaborne trade by types of cargo, 1970 and 1980 – 1983
(Billions of ton-miles)

Year	Crude oil	Oil product	Iron ore	Coal	Grain	Other cargo	Total trade
1970	5,597	890	1,093	481	475	2,118	10,654
1980	8,385	1,020	1,613	952	1,087	3,720	16,777
1981	7,371	1,000	1,508	1,120	1,131	3,710	15,840
1982	5,412	1,070	1,443	1,094	1,120	3,560	13,699
1983	5,200	1,050	1,400	960	1,080	3,490	13,180

Development of International seaborne trade, 1970 and 1980 – 1982
(Goods loaded)

Tanker cargo			Dry cargo				Total (all goods)	
			Total		Of which : main bulk commodities			
Year	Millions of tons	Percentage increase/ decrease over previous year	Millions of tons	Percentage increase/ decrease over previous year	Millions of tons	Percentage increase/ decrease over previous year	Millions of tons	Percentage increase/ decrease over previous year
1970	1,440	13	1,165	13	488	16	2,605	13
1980	1,871	–6.6	1,833	3.3	796	4.5	3,704	–2.0
1981	1,693	–9.5	1,866	1.8	806	1.3	3,559	–3.9
1982 (est)	1,480	–12.6	1,793	–3.9	759	–5.8	3,273	–8.0

Container port traffic of developing and territories, 1981 and 1982

Country or territory	Container traffic 1982 (TEUs)	Container traffic 1981 (TEUs)	Percentage change 1981/1982
Hong Kong	1,659,943	1,559,819	6.4
Singapore	1,116,288	1,064,504	4.9
Saudi Arabia	1,048,892	914,316	14.7
Republic of Korea	786,653	743,968	5.7
Philippines	640,845	552,898	15.9
United Arab Emirates	411,380	405,861	1.4
Nigeria	286,412	308,259	-7.1
Kuwait	285,576	223,226	27.9
Thailand	259,424	241,500	7.4
Brazil	259,181	223,118	16.1
Malaysia	223,180	204,644	9.1
India	214,496	202,410	6.0
Cyprus	180,172	143,117	25.9
Indonesia	158,352	135,102	17.2
Ivory Coast	157,276	168,111	-6.4
Jamaica	147,751	183,680	-19.6
China	146,281	91,238	60.3
Egypt	142,589	138,719	2.8
Panama	135,711	130,192	4.2
Pakistan	124,229	89,512	38.8
Trinidad and Tobago	117,775	77,018	52.9
Mexico	117,568	100,091	17.5
Bahrain	112,005	121,621	-7.9
Jordan	105,498	76,844	37.3
Sri Lanka	103,244	57,808	78.6
Argentina	102,000	152,230	-33.0
Honduras	78,299	71,027	10.2
Chile	74,470	105,362	-29.3
Yugoslavia	68,701	71,741	-42.0
Morocco	68,368	59,735	14.5
Papua New Guinea	63,294	51,654	22.5
Western Samoa	61,710	43,320	42.5
Kenya	56,638	44,036	28.6
Cameroon	49,931	45,403	10.0
Bahamas	47,022	45,070	4.3
Costa Rica	46,820	8,049	481.7
Oman	44,112	28,908	52.6
Peru	39,038	28,301	37.9
Guatemala	36,486	34,472	5.8
Haiti	34,351	32,582	5.4
Togo	34,004	31,990	6.3
Ecuador	31,847	25,662	24.1
Romania	30,463	31,410	-3.0
Others reported	464,672	437,671	6.2
Total reported	10,372,947	9,506,199	9.2
World total reported	42,238,321	40,575,756	4.1

1984 International Water Symposia/ Louisiana World Exposition: New Orleans

Symposium I: July 10 – 11, 1984
"Rivers and River Management"
Symposium II: July 12 – 13, 1984
"Water to Sustain Agriculture and Industry"
Symposium III: September 11 – 12, 1984
"Water for Human Consumption"
Symposium IV: September 13 – 14, 1984
"New and Innovative Concepts for meeting Our Water Needs"
Symposium V: October 10 – 13, 1984
"World Water Watch"

The first 2 of 5 water symposiums (Rivers and River Management and Water to Sustain Agriculture and Industry) were held recently in New Orleans under the sponsorship of the Louisiana World Exposition. Shown left to right are Major General John Wall, Director Civil Works, U.S. Army, Corps of Engineers; Herbert Haar, Assistant Executive Port Director, Port of New Orleans; Sir Frank Price, Chairman of the British Waterways Board; Congresswomen Lindy Boggs of Louisiana; Lt. General (Retd.) Jack Morris, President of the National Waterways Foundation; Mr. Robert De Paepe, President of the Permanent International Association of Navigation Congresses from Belgium; and Mr. Hans Peter Seidel, Director of the Rhine-Main-Danube Waterway Project from Munich, Germany.

St. Lawrence Seaway celebrates its quarter century

This year, the twenty-fifth anniversary of the completion of the St. Lawrence Seaway, will be marked by a series of events pointing to the importance of the waterway in the Canadian transportation system.

It was in April 1959 that the first large ocean ships began plying the St. Lawrence Seaway, a deep waterway extending some 3,800 kilometres from the Atlantic Ocean to the head of the Great Lakes.

Construction of the St. Lawrence Seaway called for the mobilization of enormous capital by both sides of the American-Canadian partnership; operating and maintaining it calls for a multi-million dollar annual budget. Nevertheless, the Seaway has amply demonstrated its significance to Canada's economic prosperity. During the 1983 navigation season, an estimated 50 million tonnes of cargo moved through the system.

Grain alone comprises about half the total annual tonnage, with some 30 million tonnes of grain passing through the Seaway each year. The port of Montreal alone annually receives an average of 3.5 million tonnes of grain through the Seaway, making the port a brisk competitor in the export market.

Work began in 1954

Canada initiated the project in 1951 by passing the St. Lawrence Seaway Authority Act, which authorized construction of navigation facilities on the Canadian side of the river between Montreal and Lake Ontario, as well as on the Welland Canal. It gave the United States government the

impetus to follow suit, and construction began in 1954.

Less than five years later the great river route we know today was opened, allowing 222-metre long vessels with an eight-metre draught to reach the Great Lakes.

Seven locks, stepping from Montreal to Lake Ontario, together with eight locks along the Welland Canal, make this great waterway navigable. Four bridges had to be raised for the project, while dredging the Beauhamois Canal alone removed more mud and earth than construction of the Panama and Suez canals combined.

Through the Seaway, which last year carried its billion tonne of cargo, ships can reach waters that are the highest (183 metres above the sea level in Lake Superior) and furthest from the sea (3,770 kilometres from the Atlantic). *(Canada Weekly)*

A $25 million extension to Fairview Cove Terminal: Port of Halifax

Ports Canada approval of a $25 million extension to Fairview Cove Container Terminals, was announced recently in Halifax by Federal Minister of Transport Lloyd Axworthy.

Work is expected to begin on the 1,080-foot berth in the spring of this year, and it is scheduled to be ready for operation within 18 months of the start of construction.

The extension will double the terminal's present capacity, enabling it to handle two Generation III container vessels simultaneously. ACL's third generation vessels made their debut at Fairview Cove in late March with the maiden call of "Atlantic Companion".

The Fairview Cove site is leased by Ceres Corporation who operate the container terminal and supply the terminal equipment.

Port officials are optimistic that Halifax's position on the Great Circle route utilized by many of the "big ships" will attract new shipping lines to the Port. The advantages of extra berthing space are significant in that regard.

Container traffic up by 56%: Port of Halifax

Container traffic through the Port of Halifax took an unprecedented jump in the first quarter of 1984; up 56 per cent over the first quarter of 1983, at 500,000 tonnes.

Bulk cargo also increased; up 11.9 per cent from last year's first quarter figures. Break bulk, totalling 118,500 tonnes was up 30 per cent and total general cargo, including containers rose 49 per cent over the 1983 period. Refined oil shipments increased by more than 40 per cent over the same period in 1983 to 1,158,600 tonnes. Total cargo through the Port rose from last year to this year by 17.1 per cent – 4.8 million tonnes over 4.1 million tonnes.

Halifax – Dartmouth Port Development Commission Executive Director Gary Blaikie noted that the significant increase in container tonnage as well as other traffic, was led by a rise in imports, but export shipments were also up sharply.

"These figures bode well for returning the Port to at least its pre-recessionary level of activity, and hopefully even setting a new high water mark in this year", he said.

Port of Montreal sets a new mark in containerized traffic

The Port of Montreal handled 3,753,088 tonnes of containerized cargo in 1983. This constitutes a record for the port, the previous having been set in 1981 at 3,500,901 tonnes.

With that, Montreal gained on Baltimore, second only to New York among the North Atlantic container ports of the Eastern seaboard.

Montreal remains the top container port in Canada with 52% of the domestic market, and our share of the eastern market climbed from 56% to 60%. The Port of Montreal's 1983 performance in containerized cargo surpassed that of all east coast ports on the continent.

These exceptional results stem directly from the economic recovery and the combined efforts of the Port of Montreal and its colleagues in the shipping industry.

Public access to river encouraged: North Fraser Harbour

The role played in the community by the North Fraser is changing.

It is still an industrial resource, and that will likely always be its primary role. But it is also quickly becoming a recreational and environmental resource.

"The public wants more access to the resource", says Port Manager George Colquhoun, "They see it as more than just a harbour for industry and shipping".

A number of public recreation areas have been developed along the North Fraser in recent years through the co-operation of private companies, the municipalities and the Commission. More are likely.

It is the Commission's policy that the public should have more access to the river that has encouraged it to initiate its foreshore improvement program.

The Commission itself is setting an example of the type of improvements it would like to see. The grounds around its new administration offices (designed and engineered by Public Works Canada) on Sea Island are attractively landscaped and provide direct access to the river.

"We wanted to show people what can be done along the river", said Mr. Colquhoun. "The landscaping ties in; it looks natural".

The offices, opened last year, sit at the tip of Sea Island where the Middle Arm of the Fraser splits from the North Arm . . . the site where the old Grauer Store once stood. A plaque marks the historic significance of the location.

There are two public viewing areas on the site, one overlooking a working sawmill, the other the North and Middle Arms with their ever-busy parade of work and pleasure vessels.

The three municipalities bordering the North Fraser – Richmond, Burnaby and Vancouver – have ongoing programs and plans for expanded public access along the banks with amenities such as picnic areas, walkways and trails. *(Port Report)*

The year 1983 in retrospect: Port of Quebec

While the Port of Quebec experienced a decline of approximately two million tons in cargo handled in 1983, several major public and private sector investments will contribute to reversing the trend, particularly in the shipment of bulk commodities.

The aggregate tonnage of the world dry bulk trade, including iron ore, coal and grains, fell by more than 20 million tons last year, reflecting in a decline of 1 million tons of grain and 200,000 tons of mineral concentrates at the Port of Quebec.

Among the major dry bulk commodities, only coal managed to buck the trend, as Canada Steamship Lines successfully carried out its first complete ship to ship transfers of coal at the Port of Quebec in May 1983.

The highlight of the year in the dry bulk trade was the announcement of a 14.5 million $ investment to renovate Annex 1, the oldest section of the grain elevator operated by Bunge of Canada Ltd., and to build more rapid receiving facilities for grain transported by rail. The project also provides for the construction of facilities for self-unloading vessels, to be completed for the opening of the 1984 shipping season on the St. Lawrence Seaway.

Liquid bulk cargoes declined by 500,000 tons in 1983, although at year's end shipments were on the rise. Ultramar Canada Inc. completed a 295 million dollar investment at its St. Romuald refinery last August, increasing its flexibility to produce the full range of petroleum products and more than doubling its capacity to make gasoline. The project will have a long-term stabilizing effect on the company's marine activities.

General cargo was a bright spot in port 1983 tonnage statistics with shipments of lumber remaining strong and the tonnage of dairy products increasing by 50%. *(Port of Quebec)*

Impact studies meet requirements of Environmental Assessment Review Board: Port of Quebec

Two studies recently published by the Port of Quebec detailing the environmental, sociological and economic impact of a 42,5 hectare expansion of its facilities at Beauport meet the requirements of the Federal Environmental Assessment Review Board, now examining the project.

That confirmation is an important step for the Port of Quebec in its request for the definition of an environmentally acceptable perimeter for development at its Beauport deep-water facility.

The project presented by the Port of Quebec calls for the zoning of 42,5 hectares of the Beauport flats as "designated for port development", with additional sites for new port users to be constructed in three phases according to demand. It consists of an extension of existing installations from pier 54 (Beauport) to the east in the form of a peninsula in deep water (18 meters) beyond the shoreline at low tide.

When construction has been completed, the project will add 793 m. of wharf frontage and 34 hectares of space for port activities to existing facilities. The new site will be bordered by a green belt 60 to 90 meters wide, totalling 4 hectares, in addition to a beach covering an area of 4,5 hectares at low tide.

The area known as the Beauport Flats, extending along the north shore of the St. Lawrence River east from the St. Charles River Estuary, is an exceptional site for port development. It also offers considerable potential for waterfront recreational activities in the heart of an urbanized area and is an excellent wildlife habitat.

The proposed development will offer a beach and recreational area to the public and will not encroach upon the ecologically sensitive intertidal area along the shoreline.

Once the perimeter for development at Beauport has been defined, the Port of Quebec will benefit from greater operational flexibility, with a "bank" of prime additional port sites available to shippers. *(Port of Quebec)*

Local control enhances port operation: Prince Rupert, Ports Canada

The board of Directors of the new Prince Rupert Port Corporation is confident that local control will be a positive influence on future port related development.

Port of Prince Rupert was officially granted local port corporation status as of June 1st 1984. Federal Transport Minister Lloyd Axworthy earlier announced the appointment of W. Joseph Scott as chairman of the board of directors, Donald A. Silversides as vice-chairman, Rhoda Whitherly, John T. Payne and Michael Florian as directors.

Under the provisions of the 1983 ports legislation, the government received and accepted a recommendation from Ports Canada to incorporate the Port of Prince Rupert. The port corporation now has the necessary authority in property management, contracting and tendering, setting of rates, personnel and other areas to administer the port on a day-to-day basis.

For Joe Scott, the formation of the LPC is the culmination of 20 years effort in promoting both port development at Prince Rupert and local control over waterfront land use. In a way, he has come full circle.

"We've got what we started out to get in 1964 – and it can only be a change for the better", says Mr. Scott. "The Port will now have authority to negotiate how our waterfront is developed.

The formation of the LPC comes at a time of unprecedent growth. Last year the Port handled a record 3.1 million tonnes and over the next five years annual throughput is expected to grow to 13 million tonnes. *(Currents)*

Potash Terminal adds to Saint John, N. B., future

The future looks rosy for the Port of Saint John these days. Pink-tinted potash ore being mined at the nearby Penobsquis Mine by Potash Company of America and shipped through the new $40 million automated potash terminal and loading dock holds promise of greatly increased tonnage through the Port.

New Brunswick Natural Resources Minister Gerald Merrithew believes the value of mineral production in New Brunswick could exceed $1 billion by 1990. And Peter H. Atkinson, Operations Manager of the Penobsquis Mine, says the market for potash is definitely on the upswing after a year of very little economic growth.

Ninety percent of potash produced is used in manufacturing fertilizer. It is also used in manufacture of potassium salt and certain soaps and detergents. Salt, which is a by-product of the mining process at Penobsquis, is also shipped through the Port of Saint John.

PCA officials expect most of their product to be shipped to the U.S. but some will be sent directly overseas, including the Japanese and Malaysian markets.

The $210 million mine in Sussex county began producing ore in the late fall of 1983 and the first shipments were loaded at Saint John early this year, at the Barracks Point Potash Terminal.

The Barracks Point Terminal, undertaken jointly by the Port of Saint John and the Potash Corp. of America, is completely computer-controlled and capable of a flow of almost 3,000 metric tons an hour when it operates at peak capacity.

Ore arrives in Saint John from the mines by rail and is transferred to the storage sheds. The loading system, which cost $20 million and took more than 10 months to build, is a computerized one, which is operated by one man in a control cab, backed by three heavy equipment operators who feed potash into the system, three maintenance people and three supervisors. At full capacity, under the old loading system, potash was loaded at the rate of 200 tonnes an hour.

Potash Company of America and the Port of Saint John have been working together since 1972, when the first exploratory mine shaft was sunk, to build and operate the modern facility which stands at Barracks Point. With the planned arrival of at least two ships a month during the latter part of this year, loading 3 grades of ore for shipment to the overseas market, that partnership is now being fully realized.

Hugh McLellan, Chairman of the Saint John Port Development Commission, noted: "This is perhaps the finest example of true economic development, We knew there was something "good" beneath the province and began digging. The results . . . a major boon for our industry, our people, our port and our economy".

U. S. Port Traffic

Mainly due to a dip in tanker imports, import/export cargoes handled at U.S. ports this past December dropped below November levels, but nevertheless outpaced comparative 1982 volumes for the fourth consecutive month. What the record indicates is that, allowing for declines in coal exports and tanker movements, the port business in 1983 was rebounding vigorously from the 1982 low and approaching 1981 levels. The three-year pattern, by cargo category, is shown below.

U.S. Waterborne Exports and Imports 1981 – 1983
(Millions of Short Tons)

	1983	1982	1981
Exports			
Tanker	33.9	59.2	68.4
Dry Cargo	330.4	333.9	346.0
TOTALS	364.3	393.1	414.4
Imports			
Tanker	254.5	270.6	336.2
Dry Cargo	117.4	113.5	142.3
TOTALS	371.9	384.1	478.5
Total Dry Cargo	447.8	447.4	488.3
Coal Exports	–76.9	–105.2	–110.2
NET	370.9	342.2	378.1

The national and regional picture is detailed in the following table:

U.S. Waterborne Foreign Commerce
(Short tons)

	DEC. '83	DEC. '82	1983	1982
United States	60,490,500	60,100,000	736,123,000	777,277,000
North Atlantic	15,042,000	17,406,000	201,142,500	232,908,000
South Atlantic	4,849,500	4,978,000	57,166,000	59,801,000
Gulf	24,206,500	25,356,000	304,906,500	334,615,000
South Pacific	5,000,500	3,924,000	59,500,500	56,159,500
North Pacific	5,587,000	4,648,000	63,123,000	55,088,500
Great Lakes	5,854,000	3,698,500	48,378,500	49,073,000

(APPA ADVISORY)

Port productivity to be studied

The U.S. National Academy of Sciences has approved a study to be done by its Marine Board with guidance from a panel of 10 to 12 outside experts – **"A Comparative Assessment of Technology Utilization and Productivity at Selected U.S. and Foreign Ports" which statement of work is as follows:**

"It is proposed that the Marine Board of the National Academy of Sciences' National Research Council undertake an objective and comprehensive study of technology utilization and operational productivity at selected United States and foreign ports and marine terminals.

The principal objectives of this study are to determine whether the Nation's port and marine terminal industry is utilizing the best of available technology in equipment and systems; whether that industry is cost-effective and operating at productivity levels at least equivalent to those of its foreign port competitors; and whether there are other factors which make that industry uncompetitive and restrain productivity.

This assessment shall include all aspects of port and terminal services such as cargo receipt/delivery, cargo storage/marshalling, cargo tracking/monitoring, ship load/discharge, ship provisioning/servicing and ship arrival/departure activities/functions. Technologies to be examined shall include materials handling, electronic information, port management and vessel traffic systems, marine terminal design among others. The productivity of capital, labor, and energy resources employed in the performance of port services shall be the principal measurement of relative efficiency.

Additionally, this assessment shall identify the impacts current U.S. port practices and use of technology have on the orderly flow of U.S. waterborne foreign commerce.

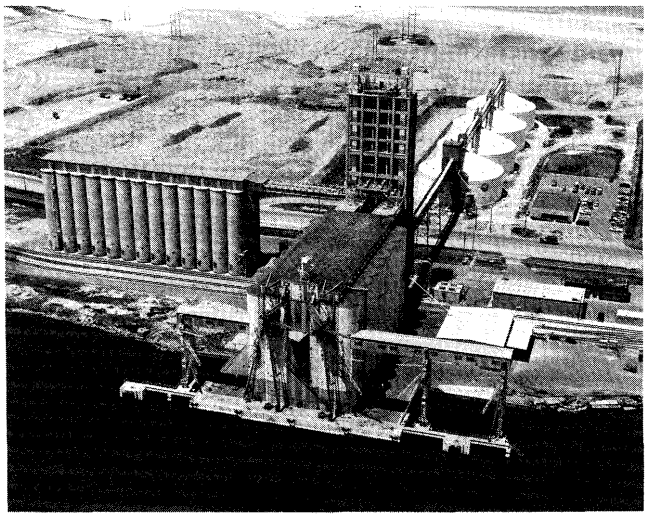
It also shall determine:
1. the relative positions of U.S. and foreign ports in the use of state of the art cargo handling technology;
2. if any correlation exists between U.S. port practices, advanced technology utilization, productivity, and the diversion of U.S. origin and destination cargoes to other North American ports; and
3. the impact of U.S. port costs and practices on U.S. import/export trade.

It is further proposed that this work address only general cargo (break bulk, container, ro-ro, etc.) operations, with particular emphasis on international common carrier liner services. This work shall focus on relative port efficiencies at selected ports in North America, Western Europe, and the Pacific Rim.

The final reports are to clearly document the findings of the study group, supported by objective data and facts assembled during the work. Recommendations are to be formulated and presented to assist U.S. government, management and labor to improve the productivity and competitiveness of U.S. ports and marine terminals in order to increase the export of U.S. ports and to increase business and employment opportunities in the port, terminal, shipping and export industries".

(National Association of Stevedores Newsletter)

A marked improvement in the Public Grain Elevator: Port of Corpus Christi



The Public Grain Elevator of the Port of Corpus Christi has greatly improved its vessel handling capabilities. Recent improvements include large capacity spouts with air draft of up to 70 feet and a newly dredged water draft of 40 feet at the dock.

In early 1986 the Corpus Christi Inner Harbor Ship Channel will be deepened to 45 feet and the Public Grain Elevator berth will be able to load vessels to 45 feet of draft.

Ship loading capacity is 2,000 tons (80,000 bushels) per hour and two 75 car unit trains can be unloaded at the Elevator in a regular work shift.

In addition, the Elevator has a bagging operation capable of up to 900 plus tons per day.

Georgia Foreign Trade Conference

The eighteenth edition of the highly regarded Georgia Foreign Trade Conference has been set for October 9 – 11, 1984. This year's event will once again be held at the Sheraton Savannah Resort and Country Club.

General Chairman Mike Leech of W.G. Carroll Company reports that the general theme "International Commerce '84 – Evolution or Revolution?" has been selected. Among the topics to be included in the four panel sessions are "Mega-Carriers – Crossing the Modal Lines", "The Shipping Act of 1984", and "The Economics of Load Centers".

An addition to this year's schedule will be Wednesday afternoon workshops. These will be designed to provide a nuts and bolts look at issues of importance to shipping and transport interests. The small group setting afforded by the workshop format will enable registrants to become more involved in the exchange of professional information.

Deep draft record set at Miami

On the morning of June 20th the Maersk Line vessel "Lexa" entered the Port of Miami and steamed to its berth at the Lummus Island container facility with her draft markers showing 37 feet 7 inches.

Sailing from the Far East directly to Miami, the heavily laden ship was the first vessel to take advantage of the recertification of the Port of Miami's draft to 38 feet.

In its continuing effort to keep pace with the ever increasing demands of the shipping industry, for deep draft container facilities, the Port of Miami is proceeding with its dredging program and is expected to be recertified to a new record depth of 40 feet by the end of August 1984.

As a result of this effort the Port of Miami becomes the only port in Florida or the entire South Atlantic shipping region with a container crane facility offering a draft of 40 feet thus continuing its role as a "World Class" port for "World Class" shipping.

Problems of "Superports" Analyzed: Port of Oakland

A national plan and program would be required to develop a regional, deep-draft, multi-purpose seaport to serve as the nucleus for an integrated system of U.S. North Atlantic Ports, an International Conference on Ports of the Future, meeting in Philadelphia, Pa., was told by James J. O'Brien, deputy director of the Port of Oakland.

"The scale of such a project as being discussed at this symposium", O'Brien said, "is so great, and the need for coordination and cooperation among the parties involved is so critical, as to suggest that nothing short of a national plan and program will accomplish the desired objectives.

"Such a plan would be inconsistent with the history of port development in the United States to date", he said. "However, perhaps the case can be made that such a project is justified by overriding national and international interests".

Discussion at the three-day meeting at Franklin Plaza centered on problems and prospects inherent in the development of the "Firstport Project", a concept for con-

structing an island port in Delaware Bay that would serve as the major loading center and hub of an integrated port development program on the East Coast.

O'Brien examined world trade routes and predicted that there would continue to be increases in traffic between North America and Asia, and Europe and Asia, that might justify the superport concept.

"Trade between North America and Asia has the option of moving either via the Panama Canal or by mini-landbridge and micro-bridge services through West Coast Ports, with substituted service provided by American railroads or trucking companies", he said.

"The trade route between Europe and Asia has a variety of options available," he noted. "These include all-water service via the Suez Canal, the Trans-Siberian landbridge between Japan and Europe, the landbridge via the United States, the parallel landbridge via the Canadian rail system, and the Mexican landbridge over the Isthmus of Tehuantepec.

"Although landbridge services between Asia and the United States have made significant penetration into the all-water service over the past few years, that growth rate appears to have stabilized", he said. "However, as shipping lines proceed with plans to replace existing vessels with a lesser number of larger vessels, those lines providing the all-water service must reevaluate their alternatives. Also, political considerations which could effect key canals and commercial relationships between the countries involved can play a significant role in the choice of alternatives to be used. Having service via the spectrum of alternatives would appear to be a prudent course for international shipping and cargo interests".

But O'Brien said the United States mainland offers the safest link in serving the Far East/East-Gulf Coast, European/U.S. West Coast trade, and the European/Far East traffic.

The Panama Canal, Suez Canal, Isthmus of Tehuantepec landbridge, and the trans-Siberian landbridge are all subject to "potentially unstable political forces", he declared.

Port of Oakland approves $54-million budget for 1984-85

The Oakland Board of Port Commissioners has approved an operating budget for the 1984 – 1985 fiscal year, which begins July 1, of some $54 million, an increase of $6 million over last year.

Almost all the increase in revenue is due to additional income from the Port's Marine Terminals Division ($3 million) and from Oakland International Airport ($2.7 million).

But, Executive Director Walter A. Abernathy warned that if the Jarvis initiative on the November ballot is approved by the voters, "all enterprise agencies in California will be in deep trouble".

The initiative, authored by Howard Jarvis, co-author of the Proposition 13 initiative that sharply limited property taxes in California, would restrict the ability of agencies like port authorities and airports to increase fees charged for airplanes landing at airports, or ships using marine terminals.

The budget does not contain salary adjustments for port employees. Usually, the Port follows the city's lead on salary schedules.

But it does include a $5.3 million payment to the City of Oakland.

The Port pays the city for such services as police and fire protection, personnel processing, finance, and data processing services. That amounts to some $446,400 a year.

The Port also pays the city an in lieu tax of some $545,000 so that property under its jurisdiction pays the same property taxes as property on the secured role.

Finally, the Port is paying the city $4,153,332 in this year's budget to repay Harbor Bonds that have long since been retired.

The increase in revenues for Oakland International Airport reflects an enormous increase – 65 percent – in the number of flights scheduled at the Airport in the past year. Completion next April of the new passenger terminal also means more revenue.

The increase in Marine Terminal revenues reflects new business attracted to the Port of Oakland during the current year, both in cargo and shipping.

The third revenue-producing division of the Port – Properties – projects an $800,000 increase, due in large measure to a boost in rentals at Embarcadero Cove, a rate increase for tenants, and an anticipated payment from Jack London Square International, the firm chosen to be developer of the first expansion project for Jack London Square.

The budget includes an increase of only seven new Port employees for the coming year.

Portland made container growth happen

Container volumes at the Port of Portland during the first quarter of 1984 are continuing to increase even from last year's record-breaking levels.

During the first months of 1984, records have been broken for container handling in all areas – including overall containers, intermodal containers destined for the Midwest and barged containers originating from the upriver region.

It is a success story which would not have been possible had it not been for an investment in facility expansion completed at the Port's Terminal 6 little more than two years ago.

The $20 million self-financed expansion increased the Port's container capabilities by almost one-third. It was completed at a time of world economic recession and some questioned the Port's need for expansion.

No one is questioning that need now.

"Had it not been for the expansion", says Port Marine Director Peter Norwood, "the terminal would not have been able to handle the current levels of business".

Norwood goes on to point out the Port's Marine Terminal Master Plan projects cargo volumes could triple by the end of the century. He explains keeping ahead of the growth is the essential goal for realizing that potential.

"We can't sit back and wait for the facilities to reach capacity, or we can't keep pace with our customers' needs", he says. "We've got to plan today for what we expect in the future. Terminal 6 is a good example of correctly predict-

ing the need and taking appropriate actions to be ready".

Norwood says the major beneficiary of the Terminal 6 success story is the region's shippers.

"Dependable, regularly scheduled steamship service is crucial to local shippers looking to target foreign markets. In the past three years, we have directed our resources toward that goal and a steady increase of new steamship services – most carrying containers – is responsible for the surge in business".

During the first quarter of 1984, more than 31,000 TEUs (twenty-foot equivalent units) were moved on and off ships. Even though the upriver locks were closed for repairs during a two-week period, container barge traffic for the quarter involved 5,543 TEUs, and almost 3,000 containers moved in the intermodal program. *(Portside)*

Trucking: Another key to Portland's seaport success

A number of road improvement projects slated for the Portland area, coupled with special operational programs at the marine terminals, are helping the trucking industry keep pace with the changes and growth of Portland's maritime industry.

Portland's location on two major interstate highways gives it a natural advantage as a Pacific Northwest trucking center. In today's port/transportation/distribution industry, trucks are as vital as ships. Motor carriers are the region's connection with the Port facilities and, in turn, with the international marketplace.

More than 100 trucking firms operate in the area.

The volume of truck traffic at the Port's terminals illustrates how important a link they are. At the Port's Terminals 1 and 2, on the average, about 60 trucks call each work day. Terminal 4 volumes averaged about 50 to 60 trucks a day last year. At Terminal 6, the Port's major container complex, more than 300 trucks a day are processed.

Both the economy and deregulation have dealt the trucking industry some major blows in the past few years, but the region's truckers are optimistic a leveling off will come soon. That's the word from John Sullivan, manager of operations for Hub Transportation, a medium-size Portland firm. He explains, with competition as intense as it is, quick turnaround and full utilization of equipment is becoming absolutely crucial. *(Portside)*

Terminal expansion cuts customers' costs: Port of Seattle

By Bruce Johnson

Fifteen small and medium sized ocean carriers and their shipping customers are getting a big break these days on marine terminal cargo handling costs, thanks to the manner in which the Port of Seattle's Terminal 18 complex is being modernized and operated.

Terminal 18, operated by Seattle International Terminal, a subsidiary of Seattle-based Stevedoring Services of America (SSA), is a multi-user facility where operating costs are spread among steamship liner tenants.

Not only are tenants and their customers saving money by sharing terminal expenses, they are achieving cost reductions because of the facility's increasing operational efficiency.

Late this year, the Port will complete a three-year, $38 million modernization and expansion of Terminal 18. The facility will have 75 acres of container storage and apron area, six berths of 800 feet in length and eight 40-ton-capacity, high-profile cranes – four of them new this year.

Upon the project's completion, Terminal 18 will have considerably more ship berthing and container crane capabilities than any other containership terminal on the West Coast.

In terms of container throughput, modernization and expansion of Terminal 18 will give the facility 60 percent more capacity. Already, the terminal annually handles about 120,000 actual number of containers (about 160,000 units of 20-foot equivalency).

Use is heavy at Terminal 18 because of the economical manner in which the facility is designed and operated.

"Medium sized and smaller carriers cannot financially justify having their own terminals", said Richard D. Ford, Port of Seattle executive director. "By having the multi-user terminal, they can get the efficiencies of the very large terminal tenant.

"Five to 10 years from now, that medium sized or smaller fellow may be much bigger and he may want his own terminal", Ford observed.

Another significant aspect of the terminal's operating efficiency is a $3.2 million truck entry facility, presently being built.

The sophisticated gatehouse area will have three truck scales, 12 inbound lanes and overhead electronic direction signs. The signs can be computer programmed daily to match the lanes with traffic loads anticipated by the various terminal tenants.

Other features that are part of the terminal modernization include the conversion of four existing cranes from diesel-electric to all-electric power.

"In electrifying the cranes, we are saving the tenants about $27 per hour in fuel costs", said Walt Ritchie, the Port of Seattle's chief engineer. "We are passing on the savings we receive to the users of the facility".

Further expansion of Terminal 18 is contemplated, according to Ritchie, the Port's chief engineer. In about another three years, the Port plans to extend the Terminal 18 container handling operation into the Terminal 20 breakbulk cargo area to the south, he said.

At that point, the Terminal 18 container handling complex will become an eight-berth, 98-acre facility, Ritchie indicated. *(TRADELINES)*

Tacoma and Kitakyushu establish sister port relationship

In special ceremonies at the Port of Tacoma, a sister port relationship was established recently between the Port of Tacoma and the Port of Kitakyushu. Documents were signed by Jack Fabulich, president of the Port of Tacoma Commission; Larry Killeen, executive director of the Port of Tacoma; Gohei Tani, mayor of Kitakyushu, and Yoshinori Aoki, director of the Kitakyushu Port Authority.

"We are very pleased to have this relationship between our two ports", stated Mr. Killeen. "We can gain a great

deal through the mutual exchange of information and ideas on cargo handling procedures, and by talking about how our two ports plan and build for the future".

According to Mayor Tani, "Nature made Tacoma one of the world's finest harbors. You are making it one of the world's finest ports. We at Kitakyushu strive to follow Tacoma's example so that we can also say that the Port of Kitakyushu is one of the world's finest ports".

The ceremony marked the 25th anniversary of the sister city relationship which has existed between Tacoma and Kitakyushu. The sister city relationship initially existed between Tacoma and Kokura. In 1963, Kokura merged with five other cities to form Kitakyushu. Today, Kitakyushu has a population of over one million people and ranks ninth among Japanese cities.

The Port of Kitakyushu was formed by combining the three neighboring ports of Moji, Kokura, and Dokai, in 1964, and later incorporated Inoura Prefectural Port in 1970. The Port of Kitakyushu was already the west gate of Japan about 1,700 years ago for the trade with the continent and served as anchorage for ships sailing for ancient China as well as those carrying rice and coal to the capital in the feudal times. The Port is linked with more than 180 ports in over 80 countries around the globe by liner routes, and is a port of call for 192 liner services a month. In 1982, the Port of Kitakyushu was visited by a total of 86,689 vessels and handled 86.77 million tons of cargo.

Major exports from Kitakyushu include: steel, general machinery, transport equipment, and electric machinery. Major imports through the Port of Kitakyushu include: petroleum/gas, iron ore, steel, corn/soybeans, coal, lumber, non-ferrous metals, and sugar.

With over $40 million in new terminal construction, the Port of Tacoma is one of the fastest growing ports in the United States. A new two-berth container facility is being built for Tacoma Terminals, Inc., a subsidiary of Sea-Land, the world's largest containership operator. The facility will open in May, 1985. By 1985, it is estimated that the Port of Tacoma will jump from about 69th to 22nd in rankings of world container ports, and will be the sixth largest container port in North America. A World Trade Center is also under construction at the Port. When it opens early in 1985, Tacoma will join 32 other fully operating such Centers located throughout the world.

Sister Port Celebration: Representatives of the Ports of Kitakyushu and Tacoma display a few of the gifts exchanged during the sister port ceremony. Pictured (left to right): Yoshinori Aoki, director of the Kitakyushu Port Authority; Gohei Tani, mayor of Kitakyushu; Larry Killeen, executive director of the Port of Tacoma; and Jack Fabulich, president of the Port of Tacoma Commission.

Antwerp, Europe's most productive containerport

Compared to 1966 in 1982 almost 25 times as much containerized cargo was handled at Antwerp. The number of loaded containers handled was 11 times that of the year 1966, when the first semi-container-vessel calleda at the Scheldt port. The mere period 1978 – 1982 saw an increase of 48% in the number of container units (TEU) handled. For 1983 the total number of TEU is estimated at 1 million. These figures placed Antwerp among the top ten world container ports.

How Antwerp, by planning, investment and consultation between public authorities, the business world and employees' organizations has succeeded in profiting from the container boom and its relations with shipowners, shippers and inland carriers is the subject of a detailed report to which an entire issue of Hinterland is devoted.

"Antwerp, Europe's most productive containerport" is the title of this report which analyses the various trumps which the Scheldt port is able to offer as a container centre and highlights the various aspects of containerization. In this issue is also included a who's who of Antwerp as a container port. This part gives a survey of all ports of destination served from Antwerp by full or semi-container lines and of container railroad and inland transport services; it lists container road transport companies, companies involved in consolidation, stuffing and stripping, container-manufacturing, leasing, repair and storage as well as container surveyors and insurance companies.

The issue 121 of Hinterland containers the most comprehensive rapport ever realized on Antwerp as a container centre. It can be obtained by depositing 200 BF or U.S. 4 $ on postal-check-account 000-0083337-14 of PVBA Publitra, Antwerp, Belgium (all expenses included).

Antwerp reduces harbour dues for container vessels

By developing a new container centre at the Delwaide Dock, Antwerp which ranks amongst the top ten container ports in the world with c. 1,000,000 TEU has safeguarded its future as a container centre. Together with the Installations at the Churchill and Leopold Docks the terminal operators at the Delwaide Dock have sufficient capacity to cope with even the highest traffic peaks.

Referring to the speed of handling, Antwerp's terminal operators guarantee 25 to 30 containers per gantry/hour. Peaks of up to 50 and averages of 38 containers per gantry/hour are regularly achieved. This brings Antwerp in the lead as opposed to its competitors in Europe and makes the Scheldt port rightly to be named Europe's most productive container port.

This productivity goes hand in hand with an aggressive commercial policy by which tariffs applied by cargo handling companies are most competitive, also thanks to the various realignments of the European currencies.

Also the Port Authority contributes to the expansion of Antwerp as a container centre. Thus the Antwerp City Council decided to reduce the tonnage dues for container vessels as from 1st July. For seagoing vessels, registered in Lloyds Register of Shipping as container vessel, ro-ro cargo/container vessel or bulk carrier/container vessel, the tonnage of which exceeds 12,500 GRT/GT a reduction is given of 15% when the container capacity is less than 1,750 TEU. The corresponding reduction of the tonnage dues amounts to 50% for seavessels with a capacity of between 1,750 and 2,300 TEU and 60% for vessels with a container capacity of 2,300 TEU or more.

Traffic of French ports in 1983: Ministry of Transport

Inward and Outward

Ports	Commodities (tonnes)			Passengers
	Petroleum products	Others	Total	
DUNKERQUE	9,342,379	20,814,210	30,156,589	947,720
Calais	80,602	8,333,056	8,413,658	7,828,874
Boulogne sur Mer	50,056	3,218,265	3,268,321	3,998,879
Le Tréport	–	371,034	371,034	–
Dieppe	–	2,109,153	2,109,153	918,538
Fécamp	–	211,928	211,928	–
LE HAVRE	36,981,937	16,544,623	53,526,560	999,994
ROUEN	5,049,465	15,104,240	20,153,705	–
Caen – Ouistreham	86,193	1,934,806	2,020,999	–
Cherbourg	106,460	1,890,228	1,996,688	992,533
Granville	–	117,176	117,176	48,420
Saint – Malo	187,832	1,443,360	1,631,192	702,842
Le Légué (Saint Brieuc)	34,931	287,497	322,428	–
Pontrieux	–	109,240	109,240	–
Roscoff – Bloscon	–	428,537	428,537	299,299
Brest	696,542	1,283,794	1,980,336	243
Qimper – Corniguel	–	138,647	138,647	–
Concarneau	40,903	67,105	108,008	–
Lorient	661,980	1,366,611	2,028,591	–
NANTES – SAINT-NAZAIRE	16,268,219	3,903,113	20,171,332	–
Les Sables d'Olonne	12,256	280,452	292,708	–
La Rochelle – Pallice	1,319,026	2,908,056	4,227,082	2,133
Rochefort	–	154,337	154,337	–
Tonnay – Charente	–	404,523	404,523	–
Royan	–	110,678	110,678	–
BORDEAUX	5,332,240	4,106,927	9,439,167	–
Bayonne	588,675	2,951,718	3,540,393	–
Port Vendres	–	154,485	154,485	156
La Nouvelle	801,110	659,773	1,460,883	441
Sete	4,995,811	2,119,010	7,114,821	121,783
MARSEILLE	64,277,194	22,394,317	86,671,511	1,099,081
Toulon	283,960	83,254	367,214	233,702
Nice – Villefranche	498	643,880	644,378	586,565
Bastia	181,294	973,028	1,154,322	843,899
Ajaccio	170,214	471,216	641,430	459,977
Porto – Vecchio	1,158	112,244	113,402	–
	147,550,935	118,204,521	265,755,456	20,085,079

Overall traffic figures: Port of Dunkerque

In 1983, traffic figures were adversely affected by the deepening of the world wide slump in the steel industry, further falls in demand for hydrocarbons and the increasing share taken by nuclear plants at the expense of coal.

On the other hand good export results and promotion campaigns in favour of the rapid port spelt a new record for regular cross-Channel and deep-sea lines.

Thus, the tonnage not related to crisis striken industries (steel and energy) went up by 30% between 1975 and 1983 while overall traffic was brought back to its level of the year following the oil crisis, after reaching a peak in 1980.

Further more with 937,000 passengers and a 21% growth in traffic, Dunkerque now ranks among France's leading passenger ports.

If one concentrates on the trends over the last two years one can see that the 8.4% drop in traffic (2.7 MT) is accounted for, in a proportion of 47%, by the drop in coal imports and by that in ore imports, in a proportion of 34%. The remainder is attributable to hydrocarbons.

As regards this sector, refining only dropped fractionally, the losses mainly affecting the output of refined products. It would appear therefore that the fall in consumption spelt a reduction in the volume of seatrade while overland traffic towards Eastern France increased.

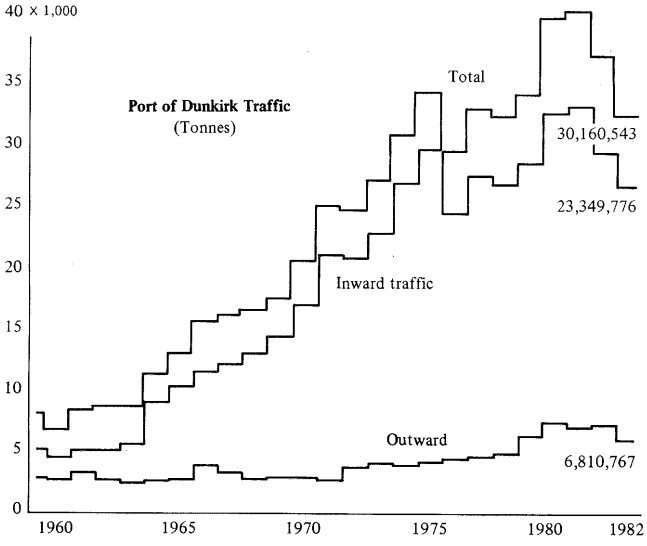
As far as coal is concerned, cutbacks in steel production and a tendency to slim down stocks of raw material, induced a 1.1 MT fall in coal, while the energy supplied by nuclear plants allowed a further 0.3 MT drop in demand.

Ore imports also suffered from the situation in Europe's steel industry.

Regarding general cargo, the regular deepsea lines grew by 8.5% and, with 2.2 MT, beat their own record. These good results are due to imports from the West Coast of Africa and East Africa and exports to the Far East. Cross-Channel traffic did even better since it reached almost 2 MT in 1983, a remarkable result if compared with 1982's 1.5 MT.

Tramping-linked general cargo suffered because of the difficulties experienced by steel product and slag exports as well as the uncertainties prevailing on the sugar market, but grain and coke imports fared very well.

Judging from this analysis one feels entitled to assume that the trends plotted on our chart will not persist and that 1984 will provide some signs of a recovery. *(Annuaire 1984/Activites 1983)*



Maritime cultural centre to be set up in Le Havre

The French government has agreed to participate in setting up a Maritime, Port and World Trade Cultural and Technical Centre in Le Havre. It will be nationwide in scope and will aim at making the largest possible number of people aware both of the necessity of stimulating overseas trade and of the two main means by which it is carried on: ports and shipping.

As France's gateway to the Atlantic, Le Havre has always been deeply involved in international trade and is clearly a most suitable place for a Centre of this kind.

It will be housed on the ground floor of the Le Havre World Trade Centre and in Shed 22 in the port, and will have the triple role of museum, exhibition centre for the World Trade Centre and high-level think-tank and teaching organization.

- The projected Maritime and Port Museum will form part of the Centre and will display items illustrating the history of ports and of the mercantile marine.
- The World Trade Centre section will feature both a permanent exhibition and display of scenarios based on themes connected with world trade, using the most modern audiovisual aids, particularly computer terminals requiring visitor participation.
- In its high-level teaching and think-tank role, the Cultural and Technical Centre will form part of the educational facilities of the Havre area, which already has a number of institutes and schools providing specialist training in shipping, port and world trade affairs.

By combining its own facilities with those already existing in the area, the Centre will be in a position to serve as a study, promotion and research coordination centre for all matters within its scope.

The cost of establishing the Cultural and Technical Centre has been calculated at about 12 1/2 million francs, of which the State will be responsible for roughly 45%, with the remainder shared between the Region, the Department, the City of Le Havre, the Chamber of Commerce and the Port of Le Havre Authority.

The Centre features in the plan negotiated early this year between the Central Government and the Region and should therefore be brought to fruition during the period of the IXth five-year plan, 1984/1989. *(FLASHES)*

Le Havre serves Brazil as her bridgehead in Europe

In 1976 the Brazilian and French governments signed an agreement to set up a Brazilian bridgehead, or commercial/industrial zone, in Le Havre. The official document reads as follows:

≪ In the joint bulletin issued on April 28th 1976 the President of the French Republic and the President of the Federal Republic of Brazil declared, in the section devoted to economic co-operation between the two countries, that the creation of a Brazilian commercial/industrial zone within the confines of the Port of Le Havre was included among the areas in which definite projects were to be negotiated as a matter of priority. Its purpose would be to facilitate the transit, storage, processing and distribution of semi-finished products originating in Brazil.

Considering that a zone of this kind would contribute to closer co-operation between the industries of the two countries, the signatories of the present declaration have agreed:

- to take the necessary steps to bring about the fruition of the project in the port/industry zone in Le Havre, chosen as being a particularly favourable site;
- to refer the project to the competent Authorities in the two countries and draw their attention to the benefits likely to accrue from it;
- to encourage the conclusion of agreements on technical, financial and commercial co-operation and participation between French and Brazilian companies, with a view to achieving tangible results by the end of 1976 for incorporation within the extensive new specialist facilities being developed in the port/industry zone. ≫

In the years since the Brazilian bridgehead was established in Le Havre, traffic between the two countries has increased by 20%, despite the world-wide economic crisis.

More than forty Brazilian companies are at present regularly shipping goods through the Le Havre "bridgehead".

Free warehouses to be set up

The French Board of Customs has recently modified the Customs regulations for the Port of Le Havre to allow for the creation of duty-free warehouses and this increases still further the possibilities offered by the Brazilian bridgehead.

The main advantages are:

- Goods in store remain outside French Customs territory, as if they had remained aboard ship
- No duties or taxes are payable
- Goods may be left in store for long periods (up to 5 years)
- Any kind of product may be stored
- Approval is given to users by the Port Authority direct
- Once approval has been given, users inform the Port Authority of stock movements, but do not have to obtain authorization

(FLASHES)

Upswing in container traffic beating the magic million: Port of Hamburg

Commenting on the development of box traffic in the port during the first half of the year, Helmut F.H. Hansen, General Representative for the Port of Hamburg, stated: "If the present favourable trend continues, then this year we shall be exceeding the magic figure of one million containers, and thus consolidating our position as one of the world's leading ten container handling centres."

A total of 508,692 TEU was loaded and discharged during the first six months of the year, or 13.9 per cent more than in the same period of 1983. The containerised proportion of all general and bagged cargoes handled has already reached 45.9 per cent. "The trend towards through or 'door-to-door' containers has persisted. Whereas ten years ago over one-third of all containers were being stuffed or stripped in the port itself, nowadays the same is true of even less than 15 per cent of the total. So the structural transformation within the same transport system has gathered pace", explained Hansen.

Hamburg could pride itself somewhat, continued Hansen, on achieving a further increase in the quantity of imports and exports to and from the Far East handled in the Elbe Port. Box traffic during the period had grown by 11.7 per cent to 230,000 (total weight: 2.1m tons), and now accounted for almost 45 per cent of these.

"The port business community can be satisfied with these results. After all, they demonstrate that very large investments in this sector, involving further modernization and restructuring of terminals here at a time of worldwide recession, have borne fruit. Yet growth rates on container traffic should not disguise the fact that they mainly reflect

shifts out of conventional general cargoes into a modern transport system rather than any gains in market share. Constant and continuing liberalization in the treatment of cross-border traffic is seriously handicapping German seaports, and is sometimes resulting in a considerable shift in cargo flows to the Western ports. If more severe damage is to be averted, then action needs to be taken rapidly on the demand for equality of treatment for seaborne traffic in the seaports and for traffic across the Green (EC) frontiers – one which is of course backed by Dr. Werner Dollinger, the Federal Minister of Transport", emphasised Hansen in conclusion.

KPA Chairman stresses essence of proper management

Poor quality of port management is a single major cause for most handling problems that face the developing countries. This was said by the Chairman of the Kenya Ports Authority, Mr. S.J. Mbugua, during the opening of Improving Port Performance course at Bandari College.

In a speech read on his behalf by the Managing Director, Mr. J.D. Mturi, Mr. Mbugua lamented that cargo handling productivity in developing countries is often as low as 5 to 10 tonnes per gang-hour. In developed countries this could be up to 15 to 25 tonnes per gang-hour with a daily output of up to 1,000 tonnes per day, compared to 350 to 500 tonnes in developing countries he said.

"Because of this inefficiency in cargo handling, ships have to stay in port longer than they should, waiting for their cargoes to be loaded and discharged," said Mr., Mbugua. He added: "This imposes an enormous financial burden on the ship owners – a burden passed quickly to importers and exporters through higher freight rates. In extreme cases, a port can become completely congested and ships have to queue at anchor wasting tens of thousands of shillings as they wait for a berth".

The unnecessary extra maritime transport costs of cargo that is due to delays is mostly borne by importers and exporters of the developing countries, who can ill afford to pay, Mr. Mbugua observed.

Noting that international trade is the key to the future development and prosperity of developing countries, Mr. Mbugua said over 80% of international trade is transported by sea, or some 4,000 million tonnes of cargo each year. He said that while foreign aid and international loans are important sources of finance for developing countries, foreign exchange earned from international maritime trade is a major factor in their economic development.

"The cost of carrying goods by sea can contribute significantly to the landed value of cargoes and ultimately their price in overseas markets. Many factors play their part in these maritime transport costs such as the size of the ship, the length of voyage, and the value per tonne of the cargo. However, in the break bulk general cargo trades that make up much of the developing countries seaborne trade, up to 75% of the total costs of a voyage are directly or indirectly incurred while the ship is in port," Mr. Mbugua said.

He said that an efficiently run seaport required skilled, trained and experienced managers and supervisors. This is particularly so during a period of rapid technological change, such as occurred during the 1960's and 1970's, he added.

Mr. Mbugua explained that this was the objective of the IPP Project which forms part of a concerted effort being made by UNCTAD's shipping Division to encourage developing countries to give higher priority to maritime training, and to assist local port management Institutions to develop a greater training capability.

Closing the course the Chairman of KCHS, Mr. J. Sambu, whose speech was read on his behalf by the then Managing Director, Mr. C. Wambua, said the port of Mombasa has undergone considerable expansion. The port has spent hundreds of millions of shillings on infrastructure and equipment, so now we possess one of the finest ports in Africa, plus a prestigeous container terminal, he said.

He said the period of expansion 'was at an end' and the immediate future will be one of consolidation by making more efficient use of existing resources.

Mr. Sambu stressed the need at this stage for improved use of cargo handling facilities thus reducing the cost per tonne of cargo handled. "We must improve our efficiency to remain competitive in difficult trading conditions to ensure that Kenya's social progress and economic development are not restricted by inadequate port services," he added.

Mr. Sambu said the preparation and distribution of the IPP course came at an opportune time in the development of Mombasa port. He talked of the necessity of having well trained and highly motivated management and for port workers to be trained on courses of relevance to the problems on the quayside and other areas of the port.

(BANDARI)

Nearly 125 million tonnes of freight passed through port of Rotterdam in first half of 1984

In the first half of 1984 the port of Rotterdam nearly 125 million tonnes of cargo from and into sea-going vessels, an increase by over 8 million tonnes or 7.2% on the same period of 1983.

Growth was scored in all cargo categories, except mineral oil products and "other bulk".

Both bulk goods and general cargo increased on the whole, by 6.2% and 12.4% respectively.

A striking improvement occurred in the crude oil trade, with unloadings over 5 million tonnes up on the same period of last year. Two reasons for the pick-up were increases in refinery throughput and storage and a drop in transit to West Germany.

General cargo handling (lash, roro, containers and other) was over 12% up on the same period of 1983. It must be noted, though, that results in the beginning of 1983 were very poor and that trade in the second quarter of 1984 was down on the very good first quarter.

550 delegates present as "the door-to-door information concept" discussed at Gothenburg's Harbour Day

A one-day conference, "The Gothenburg Harbour Day 1984", recently held at Gothenburg was attended by some

550 participants, mainly shippers representing all lines of Swedish industry, shipping companies, forwarding agents, etc. Present at the meeting were also representatives from the other Scandinavian countries and Finland, and as the theme for the day was "The door-to-door information concept" a large number of EDP experts also took part in the conference.

The chairman of the conference, Mr Per Bjurström, head of the Port of Gothenburg and the Gothenburg Stevedoring Co., said in his introductory speech that this harbour day, which was the eleventh since the beginning in 1974, had been devoted to the communications and information matters connected to the shipping and transport industry as the fast development in this sector is of the utmost interest for those working within shipping, ports and other links in the door-to-door chain.

Several of the speakers at the conference said they wanted a compatibility between data apparatus and systems which are put to use in shipping and affiliated "from door-to-door" links. It was also underlined that an international co-operation between the users in the shipping transport sector was necessary in order to keep abreast with the rapidly growing development in the data field in other transport sectors.

Interesting new co-operation projects were also taken up at the conference – for example a joint effort recently started between HT Data AB (subsidiary to the Gothenburg Stevedoring Co.), Volvo Transport AB and the National Swedish Telecommunications Administration in order to speed up and facilitate the information stream in the door-to-door transport links.

Southampton Freeport will be ready for business in August

Building work has already started on a 31-acre site in the Western Docks which forms Phase 1 of the freeport development.

A 115,000 sq. ft. building at 101 berth is being re-fitted to provide warehousing space, and a 195,000 sq. ft. building at 102 berth is being re-roofed and refurbished to provide office accommodation, manufacturing premises and additional warehousing.

Work is also in hand to provide parking facilities and storage areas, and the security fencing which surround the entire site in accordance with the requirements of HM Customs.

Completion of these works, which will cost over £½ million, is scheduled for mid-July. The freeport will then start operations as soon as the passage of the necessary legislation by Parliament permits.

The freeport which will be run by Southampton Freeport Limited, occupies land rented from Associated British Ports. ABP say that they are liaising with the Freeport company in order to minimise disruption to their tenants in the Western Docks during the construction period.

A bumper trade year for the Port of Brisbane

The Port of Brisbane's trading performances for 1983-84 looks like being an all-time record.

As at the end of May, total trade had reached 9,980,000 MASS tonnes. That's 21 per cent more than the total for the same period in the previous year.

It is certain that by the end of June, the MASS tonnage figure will be in the region of 10,800,000 – the first time that the port has broken the 10 million tonne "barrier".

The result is directly related to a boom grain export season and a burgeoning coal export trade. By May 31, grain exports had reached 1,620,000 tonnes, shipped out in 89 vessels since the season began.

Grain shipments programmed for June indicate that the industry's total exports for 1983-84 will reach about 1,800,000 tonnes – about equal to the port's top export result set in 1979-80. Grain exports in 1982-83 were 767,000 tonnes.

Another success story for the port in the financial year just ending is that of coal.

In 1982-83, this new export industry sold 731,000 tonnes to overseas buyers.

This year – at the end of 11 months – 819,000 tonnes had been exported. By the end of the review period, the amount is expected to reach 900,000 tonnes.

At this stage, the petroleum export figure is up 33 per cent and should maintain the same rate throughout June, resulting in a final export total of about 1,400,000 tonnes.

On the import side of the port's activities, dry bulk cargo is "up" 41 per cent. The trade should finish the year on that level.

Total container traffic is expected to reach about 95,500 t.e.u.'s, down slightly on the 1982-83 result of 99,395 "boxes".

Most of the loss can be attributed to the change in the import of transport equipment from containers to loose cargo.

However, port and shipping observers say that considering the lower "box" count in most ports around the world, and the sluggish international trading climate, Brisbane will register a most reasonable container traffic result for 1983-84. *(BRISBANE PORTRAIT)*

Port expansion work continuing: Hong Kong

Plans are in train for Hong Kong to continue to expand its port and other facilities to satisfy demands between now and the end of the century, Director of Marine Percy Davy said.

Addressing the Institute of Chartered Shipbrokers, Mr Davy said the studies would assess the optimum efficient operation capacities of the existing port facilities, and identify the longterm growth trends in cargo imports and exports, as well as traffic and passenger trade.

Mr Davy said that in 1983, about 11,400 ocean-going vessels entered and left Hong Kong. By 1994 the number would increase by 45 per cent to about 16,500.

"Action is also in hand to retain Hong Kong's status as a port of British registry which in every way will equate to the United Kingdom Registry, and progress is being made towards ensuring a sufficient supply of qualified officers and seamen," Mr Davy said.

Meanwhile, a consultant study commissioned by the Government two years ago on an electronic vessel traffic management system to improve traffic flow and safety at sea would be completed at the end of this month.

If the Government decided to proceed with the system, Mr Davy said, all harbour approach routes would be covered by radar.

He also revealed that amending legislation was being prepared for the introduction of compulsory pilotage within the harbour area. This could be introduced within the next twelve months. *(The Week in Hong Kong)*

Success at Jebel Ali

The Port Authority of Jebel Ali has signed a two-year lease with Dubai Natural Gas Company, Ltd. for a 6,700 square metre plot which includes a private berth for staging products to serve offshore facilities.

This is the fifteenth oil related lease to be signed by the Port Authority. Mr Charles Heath, Director of Marketing for the Port Authority stated, "this lease is another indication that Jebel Ali is becoming the oil centre of Dubai".

In 1983 more than 136,000 tonnes of oil related equipment was handled by the port and more than 1,800 supply vessels and workboats passed through the port.

The Port Authority has had a record breaking quarter. Figures recently released indicate large gains in every area of the port operation.

The first quarter 1983 versus 1984 comparison shown here:

Mr Heath also said, "even with the large gains in tonnage and containers, the most positive indication of a stronger market was the massive increase in Free Trade Zone movement. For the first quarter 1983, 12,316 tons moved through the FTZ. During the same period in 1984 over 155,000 tons moved showing a 1,260% increase.

We believe this was achieved due to increased re-export trade by our industrial tenants and the success of the many long term storage agreements that have been signed with several multinational firms using Jebel Ali as their Middle East distribution centre".

The port expansion programme is on schedule with the third 41-ton Mitsubishi crane due to be operational the end of July. The recently opened 10,000 ton cold store is operating better than expected with many foodstuff importers taking advantage of its modern facilities. The Industrial Zone continues to attract interest from all parts of the world and is currently ahead of projected growth with 27 leases now signed and several pending."

	1983	*1984*	*% Change*
Container TEU's	28,723	39,200	+ 37%
Container Moves	22,277	30,437	+ 37%
General Cargo	32,866	49,826	+ 52%
Tonnage in Containers	201,657	322,928	+ 60%
Bulk Cargo	139,064	400,178	+ 288%
Petroleum Products	330,505	434,170	+ 31%
Total Cargo Tonnage	704,092	1,207,102	+ 71%

(GULF NEWS)

18 new cranes for Shuaiba Port

Deputy Director General of Shuaiba Port Authority, Captain Abdul Rahman Mohammed Al Nibari has announced that 18 cranes have now been installed at the container terminal.

The cranes are Finnish built and were assembled at Shuaiba. Each can lift 41 tonnes and although ready for use have not yet been in operation.

The Shuaiba administration is training crews for the cranes, preference being given to Kuwaiti and Arab crewmen.

Captain Nibari claimed that when the cranes are operational the port's annual capacity will be 250,000 containers. *(GULK NEWS)*

Port Kelang handles higher tonnage

Although the Malaysian economy recovered only moderately in 1983, Port Kelang achieved a new tonnage record of 11,533,585 tonnes during the year.

This figure is more than nine percent over the 1982 throughput of 10,544,363 tonnes. The increase is reflected mainly in the imports of bulk sugar, maize, wheat and petroleum and in exports such as latex and palm oil in bulk.

Exports accounted for 40 percent of the port's overall throughput. Compared with the 1982 tonnage, exports increased seven percent, from 4,303,218 tonnes to 4,617,787 tonnes. The principal exports were palm oil, timber, rubber and plywood (in that order).

Containerised Cargo:

Containerised cargo totalled 3,046,331 tonnes and accounted for 26 percent of total throughput and nearly 37 percent of containerisable cargo.

The tonnage for 1982 was 2,522,637 tonnes (24 percent of total throughput) and accounted for 34 percent of containerisable cargo.

In terms of TEU, there was an increase of 23 percent, from 157,231 TEUs to 193,460 TEUs. Containerised exports totalled 1,143,749 tonnes (38 percent of total containerised tonnage) whilst containerised imports accounted for 62 percent or 1,902,582 tonnes.

The container handling rate continued to improve, from a gross rate of 15 boxes and net rate of 19 in 1982 to 19 and 25 respectively last year.

Development Projects:

During 1983 five major projects were completed. These were the container office, three general cargo berths of 640 metres in length and a transit shed, fresh water tank system for fire fighting at North Port and South Port, a dangerous goods godown and dredging of the North Channel.

The Port will be completing two on-going development projects during 1984. These are the reclamation of Pulau Lumut and dredging of the South Channel at a cost of DLRS37 million (inclusive of dredging the North Channel) and the dry bulk godown.

In addition, tenders have been received for the construction of a new fire station and plans for an administrative office for the South Port are on the drawing boards.

In 1984, the Port expects better results than those

recorded in 1983 as all indications point to a strengthening of the Malaysian economy. *(WARTA LPK)*

The Port Pilots: Port Kelang

Pilotage is compulsory within Port Kelang's waters. There are approximately 14,000 ship movements a year in and out of the North and South Channels, the main approaches to the port and with so many movements within relatively narrow waters safety is of paramount importance. The selection of pilots and their training is therefore a very important task.

Pilots are recruited from those with any one of the following qualifications (in this order of preference):
- competency as master of foreign going ship.
- competency as first mate of foreign going ship
- competency as second mate of foreign going ship
- competency as master of home trade ship.

In addition, preference is given to those who possess pilotage experience.

On appointment, a pilot has to undergo further practical training and also written examination as prescribed by the port's Pilotage Committee to qualify as a port pilot.

Before 1972 pilotage in Port Kelang was provided by the Selangor Pilots Association, a private company. When the port took over the pilotage service all but six of the pilots who were well past their retirement age were absorbed by the Authority. *(WARTA LPK)*

$3.2 million redevelopment underway: Wellington Harbour

The $3.2 million redevelopment of Aotea Quay, which will greatly improve facilities for multi-purpose and quarter ramp roll-on vessels visiting the port, is well underway.

The work, which mainly involves the upgrading of storage areas, will provide greater efficiency for these vessels, as well as improve operational conditions for conventional and bulk carriers.

Harbour Board Chief Engineer, Mr Karl Renner, says the project is the most extensive undertaken by the Board since the creation of the Container Terminal at Thorndon Quay.

"It is certainly a significant capital investment."

With the redevelopment, Mr Renner says it is hoped more multi-purpose and quarter ramp roll-on vessels will be attracted to Wellington.

A major part of the redevelopment involves work behind berths four and five of the Quay.

The creation of a 1.7 hectare back-up area with unimpeded access to berths four and five will mean cargo is handled at right angles to vessels. This will enable heavy unit loads to be marshalled, loaded and discharged faster – a key factor in the redevelopment plan.

Turn-around times for ships will be faster and consequently a greater volume of cargo will be able to pass through the port – an advantage to both shipping companies and the Board. *(BEACON)*

KPT being modernized to enhance handling capacity

"Karachi Port will be fully equipped with a modern oil terminal and containerization facilities at a total estimated cost of 250 million dollars under the current Sixth Five Year Plan." Chairman, Karachi Port Trust, Rear Admiral M.I. Arshad, H.I. (M), S. Bt., said on 14th February, 1984.

He told a radio press conference that the container terminal costing about 130 million to 150 million U.S. dollars would be completed in five to seven years from the starting date. He said that the financial economic and technical feasibility reports of the project had been submitted to the Government, and hoped that the work would start soon.

The fully integrated container terminal, initially consisting of two berths, would be added. The Mauripur Road would be widened to meet the heavy container traffic.

The KPT Chairman said that the two old berths of the port would be replaced to make room for the liquid products terminal. This project would cost between 75 million to 100 million U.S. dollars and enable tankers with a 40-feet draught to enter the port.

With the completion of the two projects Karachi would become an ultra-modern port to be compared even with the Japanese port, he added.

Rear Admiral Arshad said that a computer had been installed at Karachi Port to facilitate containerization. He added that at present 80 percent of the general cargo was sent in containers and so installation of computerized container handling facilities was necessary.

He said that the KPT Training Centre had been up graded to a staff college to train personnel in managerial and technical skills required to improve the port's performance. The training level of the KPT Staff College was of international standards.

The KPT Chief said that steps would be taken to check pollution at the port. Apart from legal measures, modern equipment would be imported to handle pollution problems.

He mentioned the over-all improvement in the working of the port and said that the visiting Carmohan Line officials had also expressed their satisfaction in this regard. He said that previously Pakistan had to pay about 100 million dollars in freight surcharge because of the congestion and delayed berthing at Karachi Port. Now this valuable foreign exchange was being saved as the waiting period at the port had virtually be eliminated, and there was absolutely no shipping or cargo congestion.

He praised the efforts of the KPT management and employees in achieving this happy state of affairs.

About the financial matters, Rear Admiral Arshad said that Karachi Port was self-sufficient and could undertake its own development projects out of reserve funds.

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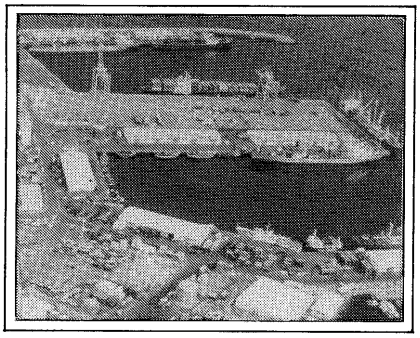

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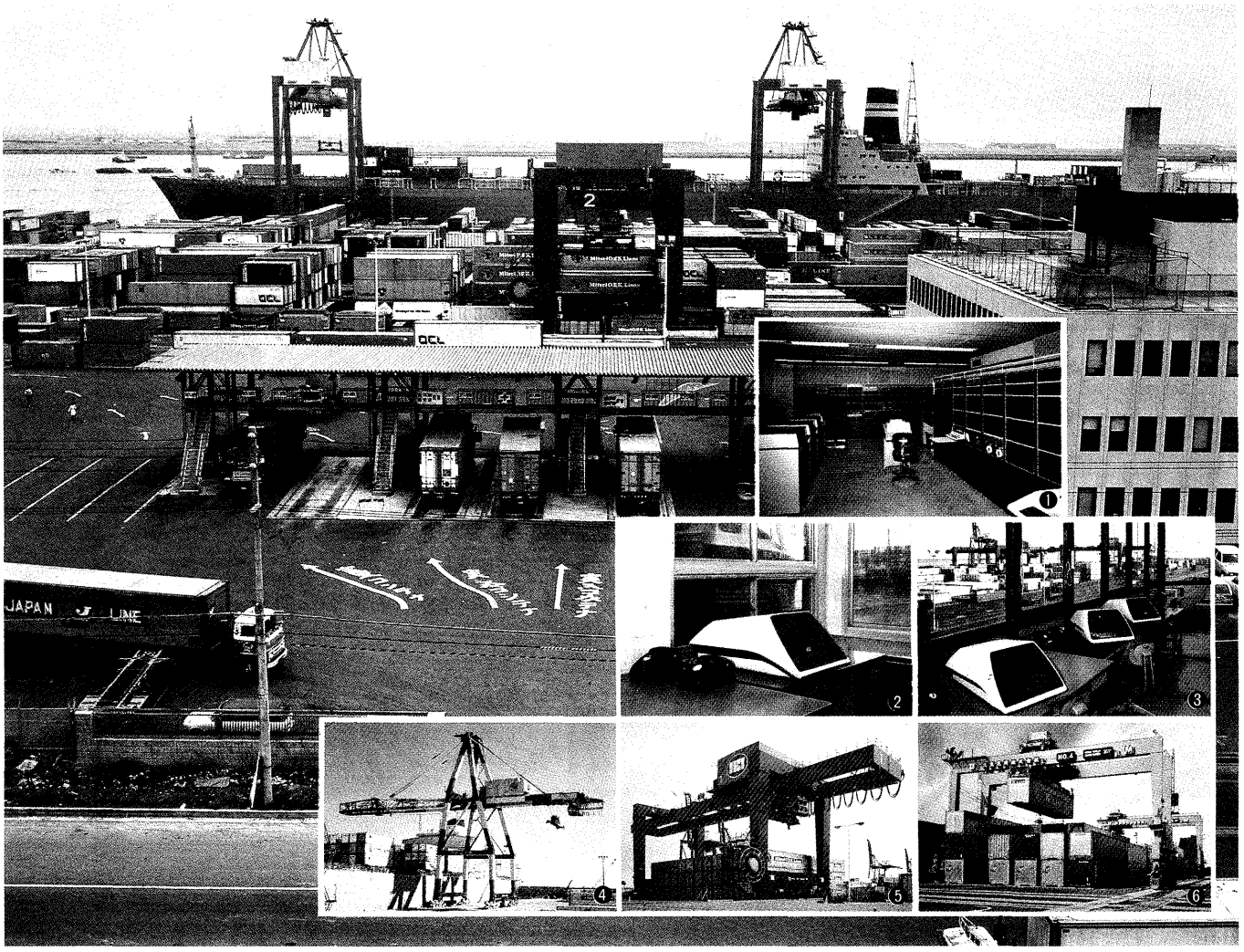

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